

GLOBAL ATLANTIC FINANCIAL LIMITED

(AN INDIRECT SUBSIDIARY OF

GLOBAL ATLANTIC FINANCIAL GROUP LIMITED)

CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 2019, 2018 AND 2017

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Report of independent registered public accounting firm

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of Global Atlantic Financial Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Global Atlantic Financial Limited and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of income, comprehensive income (loss), redeemable non-controlling interests and equity, and cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the relevant ethical requirements relating to our audit, which include standards of the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct.

We conducted our audits of these consolidated financial statements in accordance with the auditing standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

February 28, 2020

We have served as the Company's auditor since 2016.

Primaturhowe Coopers LLP

Consolidated Balance Sheets

As of December 31,	2019	2018
(\$ in millions, except share data)		
Assets		
Investments:		
Fixed maturity securities, available-for-sale, at fair value (amortized cost: \$46,626 and \$42,016, respectively; variable interest entities: \$1,236 and \$503, respectively; and related party: \$179 and \$115, respectively)	\$ 49,765	\$ 42,107
Fixed maturity securities, trading, at fair value (amortized cost: \$922 and \$813, respectively)	984	797
Equity securities at fair value (cost: \$54 and \$181, respectively)	58	183
Mortgage and other loan receivables (portion at fair value: \$259 and \$195, respectively; variable interest entities: \$1,044 and \$249, respectively; and related party: \$238 and \$107, respectively)	13,506	10,144
Policy loans	711	624
Derivative assets	823	208
Funds withheld receivable at interest (portion at fair value: \$389 and \$346, respectively; related party: \$27 and \$28, respectively)	2,428	2,451
Other investments (portion at fair value: \$537 and \$482, respectively; variable interest entities: \$5,097 and \$3,995, respectively; and related party: \$145 and \$159, respectively)	5,847	4,635
Total investments	74,122	61,149
Cash and cash equivalents (variable interest entities: \$191 and \$88, respectively)	2,458	1,253
Accrued investment income (variable interest entities: \$41 and \$23, respectively)	544	467
Reinsurance recoverable (portion at fair value: \$1,316 and \$1,249, respectively; related party: \$2 and \$2, respectively)	4,189	4,175
Deferred policy acquisition costs	1,704	1,891
Value of business acquired	424	668
Other assets (variable interest entities: \$62 and \$3, respectively; related party: \$35 and \$-, respectively)	611	493
Separate account assets	5,504	5,144
Total assets	\$ 89,556	\$ 75,240
		(continued)

Consolidated Balance Sheets

As of December 31,	2019	2018
(\$ in millions, except share data)		
Liabilities		
Policyholder liabilities:		
Future policyholder benefits (portion at fair value: \$1,259 and \$1,192, respectively; related party: \$2,489 and \$2,572, respectively)	\$ 5,744	\$ 4,568
Outstanding claims (portion at fair value: \$17 and \$18, respectively)	179	204
Contractholder deposit funds and other policyholder liabilities (portion at fair value: \$2,767 and \$1,771, respectively; related party: \$4,911 and \$5,599, respectively)	66,321	57,345
Total policyholder liabilities	72,244	62,117
Debt	1,105	901
Tax payable to former parent company	90	98
Collateral on derivative instruments	724	138
Funds withheld payable at interest (portion at fair value: \$61 and \$21, respectively)	2,144	2,132
Accrued expenses and other liabilities (portion at fair value: \$79 and \$27, respectively; variable interest entities: \$181 and \$106, respectively; and related party: \$19 and \$17, respectively)	1,187	826
Reinsurance liabilities (portion at fair value: \$5 and \$-, respectively; related party: \$71 and \$77, respectively)	304	395
Separate account liabilities	5,504	5,144
Total liabilities	\$ 83,302	\$ 71,751
Commitments and contingencies (Note 21)		
Redeemable non-controlling interests (Note 15)	\$ 94	\$ _
Equity		
Common stock, \$1 par value, 100,000,000 shares authorized, 304 shares issued and		
outstanding, respectively	\$ _	\$ _
Additional paid-in capital	1,662	1,658
Retained earnings	2,451	1,818
Accumulated other comprehensive income (loss)	1,912	(57)
Total shareholder's equity	6,025	3,419
Non-controlling interests	135	70
Total equity	6,160	3,489
Total liabilities, redeemable non-controlling interests and equity	\$ 89,556	\$ 75,240

Consolidated Statements of Income

For the years ended December 31,	2019		2018	2017	
(\$ in millions, except per share data)					
Revenues					
Premiums (related party: \$37, \$2,642, and \$-, respectively)	\$	1,292	\$	1,510	\$ 56
Policy fees (related party: \$16, \$10, and \$-, respectively)		1,223		1,249	1,230
Net investment income (related party investment income: \$32, \$60, and \$54, respectively; related party investment expense: \$13, \$12, and \$13, respectively)		2,923		2,469	2,010
Net investment gains (losses):					
Other-than-temporary impairment on available-for-sale fixed maturity securities		_		(5)	(14)
Net investment gains (losses) (related party: \$(2), \$5, and \$(2), respectively)		576		(279)	438
Total net investment gains (losses)		576		(284)	424
Other income		58		58	34
Total revenues		6,072		5,002	3,754
Benefits and expenses					
Policy benefits and claims (related party: \$298, \$2,800, and \$-, respectively)		4,521		3,659	2,338
Amortization of policy acquisition costs		287		257	255
Interest expense		67		57	54
Insurance expenses (related party: \$7, \$7, and \$-, respectively)		106		98	84
General and administrative expenses (related party: \$10, \$6, and \$-, respectively)		488		505	471
Total benefits and expenses		5,469		4,576	3,202
Income before income taxes		603		426	552
Income tax expense (benefit)		39		44	(17)
Net income		564		382	569
Less: net loss attributable to non-controlling interests and redeemable non-controlling interests		(69)		(52)	(26)
Net income attributable to Global Atlantic Financial Limited shareholder	\$	633	\$	434	\$ 595
Earnings per share:					
Basic	\$	2,082,237	\$	1,427,632	\$ 1,957,237
Diluted	\$	2,082,237	\$	1,427,632	\$ 1,957,237

Consolidated Statements of Comprehensive Income (Loss)

or the years ended December 31,		2019	2018	2017	
(\$ in millions)					
Net income	\$	564	\$ 382	\$	569
Other comprehensive income (loss), before tax:					
Unrealized gains (losses) on securities and other investments for the period		3,220	(1,851)		1,900
Less: reclassification adjustment for gains included in net income		89	60		163
Unrealized gains (losses) on available-for-sale securities and other investments		3,131	(1,911)		1,737
Unrealized losses on hedging instruments		(2)	_		_
Net effect of unrealized (losses) gains on policyholder balances		(714)	403		(411)
Other comprehensive income (loss), before tax		2,415	(1,508)		1,326
Income tax (expense) benefit related to other comprehensive income (loss)		(446)	308		(448)
Other comprehensive income (loss) before non-controlling interests and redeemable non-controlling interests, net of tax		1,969	(1,200)		878
Comprehensive income (loss)		2,533	(818)		1,447
Less: total comprehensive loss attributable to non-controlling interests and redeemable non-controlling interests:					
Net loss		(69)	(52)		(26)
Total comprehensive loss attributable to non-controlling interests and redeemable non-controlling interests		(69)	(52)		(26)
Comprehensive income (loss) attributable to Global Atlantic Financial Limited shareholder	\$	2,602	\$ (766)	\$	1,473

Consolidated Statements of Redeemable Non-Controlling Interests and Equity

	Redeemable non- controlling interests	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss) income	Total shareholder's equity	Non- controlling interests	Total equity
(\$ in millions)								
Balance as of December 31, 2016	\$ -	\$ —	\$ 1,646	\$ 971	\$ 81	\$ 2,698	\$ -	\$ 2,698
Cumulative effect adjustment from adoption of accounting changes	_	_	_	2	_	2	_	2
Net income	_	_	_	595	_	595	(26)	569
Other comprehensive income	_	_	_	_	878	878	_	878
Effect of change in tax rate on accumulated other comprehensive income	_	_	_	(185)	185	_	_	_
Equity-based compensation	_	_	1	_	_	1	_	1
Capital contributions	_	_	9	_	_	9	_	9
Non-cash contributions from non- controlling interests and redeemable non- controlling interests	_	_	_	_	_	_	24	24
Change in equity of non-controlling interests and redeemable non-controlling interests	_	_	_	_	_	_	56	56
Balance as of December 31, 2017		_	1,656	1,383	1,144	4,183	54	4,237
Cumulative effect adjustment from adoption of accounting changes	_	_	_	1	(1)	_	_	_
Net income	_	_	_	434	_	434	(52)	382
Other comprehensive loss	_	_	_	_	(1,200)	(1,200)	_	(1,200)
Equity-based compensation	_	-	2	_	_	2	_	2
Capital contributions from non-controlling interests	_	_	_	_	_	_	61	61
Distributions to non-controlling interests and redeemable non-controlling interests	_	_	_	_	_	_	(7)	(7)
Change in equity of non-controlling interests and redeemable non-controlling interests	_	_	_	_	_	_	14	14
Balance as of December 31, 2018	\$	\$ _	\$ 1,658	\$ 1,818	\$ (57)	\$ 3,419	\$ 70	\$ 3,489

See accompanying notes to the consolidated financial statements

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Consolidated Statements of Redeemable Non-Controlling Interests and Equity

	CO	leemable non- ntrolling terests	nmon ock	р	ditional aid-in apital	Retained earnings	COI	ccumulated other mprehensive oss) income	sl	Total nareholder's equity	Non- ontrolling interests	Tota	al equity
(\$ in millions)													
Net income	\$	(21)	\$ _	\$	_	\$ 633	\$	_	\$	633	\$ (48)	\$	585
Other comprehensive income		_	_		_	_		1,969		1,969	_		1,969
Equity-based compensation		_	_		4	_		_		4	_		4
Capital contributions from non-controlling interests and redeemable non-controlling interests		103	_		_	_		_		_	_		_
Distributions to non-controlling interests and redeemable non-controlling interests		(2)	_		_	_		_		_	(7)		(7)
Change in equity of non-controlling interests and redeemable non-controlling interests		14	_		_	_		_		_	120		120
Balance as of December 31, 2019	\$	94	\$ _	\$	1,662	\$ 2,451	\$	1,912	\$	6,025	\$ 135	\$	6,160

Consolidated Statements of Cash Flows

For the years ended December 31,	2019	2018	2017
(\$ in millions)			
Cash flows from operating activities			
Net income	\$ 564	\$ 382	\$ 569
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Changes in fair value of equity securities and other investments	(22)	(18)	_
Changes in fair value of trading fixed maturity securities	(78)	16	_
Net investment (gains) losses (related party: \$4, \$7, and \$-, respectively)	26	(322)	(230)
Change in fair value of derivatives and other derivative-related activity	430	630	237
Net accretion and amortization (related party: \$2, \$2, and \$-, respectively)	85	(59)	(188)
Interest credited to policyholder account balances less policy fees	1,353	1,251	1,051
Deferred income tax benefit	(61)	(37)	(48)
Changes in operating assets and liabilities:			
Reinsurance transactions and acquisitions, net of cash provided (used) (related party: \$-, \$379, and \$-, respectively)	527	399	_
Change in premiums, notes receivable and reinsurance recoverable, net of reinsurance premiums payable	(15)	271	64
Change in deferred policy acquisition costs	(525)	(426)	(354)
Change in accrued investment income	(53)	(69)	(48)
Change in policyholder liabilities and accruals, net	415	(309)	193
Other operating activities, net (related party: \$(1), \$(1), and \$15, respectively)	(122)	278	217
Net cash provided by operating activities	2,524	1,987	1,463
Cash flows from investing activities			
Proceeds from disposals of available-for-sale fixed maturity securities	13,424	10,661	9,296
Proceeds from maturities of available-for-sale fixed maturity securities	748	557	175
Proceeds from disposals of trading fixed maturity securities	610	402	_
Proceeds from maturities of trading fixed maturity securities	52	_	_
Proceeds from disposals of equity securities	1,077	763	906
Proceeds from mortgage and other loan receivables sold, matured or collected (related party: \$155, \$–, and \$–, respectively)	4,088	2,001	734
Proceeds from disposals of other investments (related party: $\$3$, $\$6$, and $\$-$, respectively)	882	951	756
Purchase of available-for-sale fixed maturity securities	(15,470)	(12,171)	(11,364)
Purchase of trading fixed maturity securities	(713)	(444)	_
Purchase of equity securities	(959)	(745)	(988)
Purchase of mortgage and other loan receivables (related party: \$282, \$105, and \$-, respectively)	(7,440)	(5,646)	(2,746)
Purchase of other investments (related party: \$820, \$241, and \$271, respectively)	(1,564)	(3,815)	(1,734)
Other investing activities, net	(29)	89	65
Net cash used in investing activities	\$ (5,294)	\$ (7,397)	\$ (4,900)
			(continued)

Consolidated Statements of Cash Flows

For the years ended December 31,	2019	2018	2017
(\$ in millions)			
Cash flows from financing activities			
Settlement of repurchase agreements	\$ (1,040)	\$ (1,921)	\$ (347)
Proceeds from issuance of repurchase agreements	1,040	1,922	234
Reinsurance transactions, net of cash provided (used) (related party: \$-, \$1,076, and \$-, respectively)	370	1,060	_
Additions to contractholder deposit funds	12,316	10,032	8,026
Withdrawals from contractholder deposit funds	(8,902)	(5,848)	(4,501)
Issuance of long-term debt	625	100	_
Payment of debt principal and origination fees	(411)	(4)	(7)
Payment of tax payable to former parent company	(8)	(3)	(6)
Capital contributions	_	_	9
Capital contributions from non-controlling interests and redeemable non-controlling interests	103	61	56
Distribution to non-controlling interests and redeemable non-controlling interests	(9)	(7)	_
Other financing activities, net	(8)	(6)	_
Net cash provided by financing activities	4,076	5,386	3,464
Net change in cash, cash equivalents and restricted cash	1,306	(24)	27
Cash, cash equivalents, and restricted cash, beginning of period	1,333	1,357	1,330
Cash, cash equivalents, and restricted cash, end of period	\$ 2,639	\$ 1,333	\$ 1,357
Supplemental cash flow information			
Cash and cash equivalents per consolidated balance sheets	\$ 2,458	\$ 1,253	\$ 1,357
Restricted cash included in other assets per consolidated balance sheets	 181	 80	 _
Total cash, cash equivalents, and restricted cash	\$ 2,639	\$ 1,333	\$ 1,357
Cash paid for interest	\$ 61	\$ 57	\$ 54
Income taxes paid	193	27	_
Non-cash transactions			
Available-for-sale fixed maturity securities acquired through reinsurance agreements	\$ 3,035	\$ 5,631	\$ _
Trading fixed maturity securities acquired through reinsurance agreements	_	807	_
Mortgage loans acquired through reinsurance agreements	_	954	_
Policyholder liabilities and accruals acquired through reinsurance agreements - future policy benefits	1,159	2,650	_
Policyholder liabilities and accruals acquired through reinsurance agreements - outstanding claims	1	_	_
Contractholder deposit funds acquired through reinsurance agreements	2,931	6,579	_

1. Nature of business

Global Atlantic Financial Limited (formerly, Commonwealth Re Midco Limited), a Bermuda company, (together with its subsidiaries, the "Company," we, our, or us) is a leading United States, or "U.S.," retirement and life insurance company focused on delivering meaningful long-term value for our customers and shareholders.

Our CEO and members of our current management team founded the Company in 2004 as the "Reinsurance Group" within The Goldman Sachs Group, Inc., or "Goldman Sachs." In May 2013, the Company separated from Goldman Sachs and became an independent company domiciled in Bermuda.

The Company focuses exclusively on two markets in the U.S.: retirement and life. The Company's two reportable segments reflect the markets in which it operates.

- The Retirement segment's principal products are fixed-rate annuities and fixed-indexed annuities.
 The Company also provides block reinsurance to institutions. In this segment, the Company primarily
 generates income by earning a spread between its asset yield and the cost of policyholder benefits,
 as well as fees earned on certain policies.
- The Life segment's principal products are indexed universal life and preneed life. The Company also
 provides block reinsurance to institutions. In this segment, the Company primarily generates income
 from premiums, fees and investment income, net of the cost of policyholder benefits.

The Company reports items not allocated to the Retirement and Life segments in Corporate & Other, such as unallocated general and administrative expenses and net investment income, debt costs and the results of regulatory closed blocks where the economic performance of assets are largely passed on to policyholders through dividends.

2. Basis of presentation and significant accounting policies

Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, or "U.S. GAAP." The preparation of financial statements in conformity with U.S. GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of any contingent assets and liabilities as of the date of the consolidated financial statements, and the amounts of revenues and expenses recognized 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. Actual experience could materially differ from these estimates and assumptions.

The most significant estimates are those used in determining valuation of policyholder liabilities, valuation of embedded derivatives, valuation and impairment of investments, amortization of deferred revenues and expenses, and income taxes.

The Company is undergoing a conversion to a new life insurance administration system. In a limited number of cases, as a result of the conversion, the Company is using estimates for certain policyholder balances recorded in the consolidated financial statements. Any variances to the estimates will be recorded in future periods if estimates are revised or no longer utilized.

The consolidated financial statements include the results of operations and financial position of the Company and all other entities in which the Company has a controlling financial interest. All material intercompany accounts and transactions have been eliminated in consolidation.

We are involved in certain entities that are considered variable interest entities, or "VIEs," as defined under U.S. GAAP. Our involvement with VIEs is primarily to invest in assets that allow us to gain exposure to a broadly diversified portfolio of asset classes. A VIE is an entity that does not have sufficient equity to finance its own activities without additional financial support or where investors lack certain characteristics of a controlling financial interest. We assess our relationships to determine if we have the ability to direct the activities, or otherwise exert control to evaluate if we are the primary beneficiary of the VIE.

Significant accounting policies

The following are the Company's significant accounting policies with references to notes providing additional information on such policies:

Accounting policy	Note
Investments	4, 5, and 6
Investment impairment	4 and 6
Variable interest entities	4 and 6
Derivative instruments	5, 6, and 8
Policyholder liabilities	6 and 8
Deferred policy acquisition costs	7
Value of business acquired	7
Unearned revenue reserves and unearned front-end loads	7
Closed blocks	9
Reinsurance	10
Debt	11
Equity-based compensation	16
Income taxes	17

Investments

In the normal course of business, the Company enters into transactions involving various types of investments.

Investments include the following: U.S. government and agency obligations; commercial mortgage-backed securities, or "CMBS," residential mortgage-backed securities, or "RMBS," collateralized loan obligations, or "CLOs," and all other structured securities (consisting primarily of asset-backed securities, or "ABS," and collateralized bond obligations, or "CBOs,") or together, "structured securities;" corporate bonds; state and political subdivision obligations; foreign government obligations; equity securities; mortgage and other loan receivables; policy loans; and other non-derivative investments. Investments are recorded on a trade-date basis.

Available-for-sale fixed maturity securities

The Company primarily accounts for its fixed maturity securities (including bonds, structured securities and redeemable preferred stock) as available-for-sale, or "AFS." AFS fixed maturity securities are carried at fair value, with unrealized gains and losses, net of tax, reported in accumulated other comprehensive income (loss) in the consolidated balance sheets. Realized investment gains and losses are recognized on a first-in first-out basis and are reported in net investment gains (losses) in the consolidated statements of income. The amortized cost of fixed maturity securities is adjusted for other-than-temporary impairment, or "OTTI," amortization of premiums and accretion of discounts. Such amortization and accretion is calculated using the effective yield method and included in net investment income in the consolidated statements of income. For structured securities, the Company recognizes interest income using a constant effective yield based on estimated cash flows generated from internal models utilizing interest rate, default and prepayment assumptions. Effective yields for structured securities that are not of high credit quality are recalculated and adjusted prospectively based on changes in expected undiscounted future cash flows. For structured securities that are of high credit quality, effective yields are recalculated based on payments received and updated prepayment expectations, and amortized cost is adjusted to the amount that would have existed had the new effective yield been applied since acquisition with a corresponding charge or credit to net investment income. Prepayment fees are recorded when earned in net investment income in the consolidated statements of income.

Trading fixed maturity securities

The Company accounts for certain fixed maturity securities as trading at acquisition, based on intent or via the election of the fair value option. Trading securities are carried at fair value, with realized and unrealized gains and losses reported in net investment gains (losses) in the consolidated statements of income. Interest income from these securities is reported in net investment income. These trading securities, for which investment results accrue to the benefit of either contractholders or reinsurance counterparties, are primarily used to match asset and liability accounting.

Equity securities

The Company accounts for its investments in equity securities (including common stock and non-redeemable preferred stock) that do not require equity method accounting or result in consolidation, at fair value. Realized and unrealized investment gains and losses are reported in net investment gains (losses) in the consolidated statements of income.

Mortgage and other loan receivables

The Company purchases and originates mortgage and other loan receivables, and these loans are carried at cost, less the allowance for loan losses and as adjusted for amortization/accretion of premiums/ discounts. Loan premiums or discounts are amortized or accreted using the effective yield method. Interest income is accrued on the principal balance of each loan based on its contractual interest rate. The accrual of interest is generally suspended when the collection of interest is no longer probable or the collection of any portion of principal is doubtful. When a loan is in non-accrual status, coupon payments are generally recognized as interest income as cash is received, subject to consideration as to the overall collectibility of the loan. A loan is returned to accrual status when the Company determines that the collection of amounts due is probable.

Mortgage loans held by the Company are diversified by property type and geographic area throughout the U.S. Other loan receivables primarily consist of warehouse facilities backed by residential and commercial real estate as well as middle market loans. The contracts governing these facilities include requirements for collateral maintenance, concentration limits and certain other covenants. Other loan receivables also include investments in student loans, primarily to high credit profile borrowers.

Policy loans

Policy loans are loans policyholders take out against their life insurance policies. Each policy loan is fully collateralized by the cash surrender value of the policyholder's life insurance policy. Policy loans are carried at unpaid principal balances. Interest income on such loans is recognized as earned using the contractually agreed upon interest rate and reflected in net investment income in the consolidated statements of income. Generally, interest is capitalized on the associated policy's anniversary date.

Other investments

Other investments in the consolidated balance sheets include the Company's investments in investment partnerships, for which the Company does not have voting control or power to direct activities. These investments are accounted for using the equity method of accounting unless the Company's interest is so minor that it has virtually no influence over partnership operating or financial policies. The equity method of accounting requires that the investments be initially recorded at cost and the carrying amount of the investment subsequently be adjusted to recognize the Company's share of the earnings and losses of the investee. Where there is a difference between the cost of the investment and the Company's proportionate share of the equity method investee's net assets, this basis difference is accreted to net investment income over the life of the underlying assets. In applying the equity method, the Company uses financial information provided by the investee, generally on a one to three month lag due to the timing of the receipt of related financial statements.

The income from the Company's equity method investments is included in net investment income in the consolidated statements of income. In limited circumstances, the Company elects to apply the fair value option to investment partnerships, which are carried at fair value with unrealized gains and losses reported in net investment gains (losses) in the consolidated statements of income. The contributions to and distributions from investment partnerships are classified as investing activities within the consolidated statements of cash flows.

The Company consolidates investment partnerships and other entities when it is deemed to control or is considered the primary beneficiary of a VIE. The results of certain consolidated investment entities are reported on a one to three month lag and intervening events are evaluated for materiality and recognition by disclosure or otherwise, as appropriate.

Included in other investments are the Company's investments in renewable energy partnerships and limited liability corporations, or "LLCs." Respective investments are consolidated when the Company has control, or are accounted for using the equity method of accounting when the Company has the ability to exercise significant influence but not control. These investments involve tiered capital structures that facilitate a waterfall of returns and allocations to ensure the efficient use of tax credits. A conventional income statement oriented approach to the equity method of accounting, or to the recognition of non-controlling interests (when the Company is consolidating the investment), based on ownership percentages does not accurately reflect the proper allocation of income and cash flows for these investments. Instead, the Company uses the hypothetical liquidation at book value method, or "HLBV," which is a balance sheet oriented approach to the equity method of accounting and to the recognition of non-controlling interests that allocates income and cash flows based on changes to each investor's claim to net assets assuming a liquidation of the investee as of each reporting date, including an assessment of the likelihood of liquidation in determining the contractual provisions to utilize when applying the HLBV method.

Investments in tangible assets included in other investments in the consolidated balance sheets relate to the Company's consolidated investments in renewable energy entities and investments in transportation assets. The income, as well as the depreciation and other expenses associated with these tangible assets is reported in net investment income in the consolidated statements of income.

Income on consolidated investments in renewable energy entities is earned from the sale of the energy generated under long-term contracts. Income on investments in transportation assets is earned from the lease of these assets. Tangible assets associated with renewable energy entities primarily comprise solar energy systems, which are depreciated on a straight-line basis over their estimated useful lives of generally 35 years. Transportation assets are primarily aircraft and railcars, which are depreciated to their estimated salvage value on a straight-line basis over their remaining useful lives. These useful lives generally range up to 25 years for aircraft and 45 years for railcars, as determined from the date of manufacture.

Other investments in the consolidated balance sheets also include the Company's investments in life settlement contracts which are accounted for using the investment method. Under the investment method, the Company's investments in life settlement contracts are initially measured at the transaction price plus initial direct costs, and ongoing costs to keep the policies in force are capitalized. Investments in Federal Home Loan Bank, or "FHLB," common stock are also included in other investments in the consolidated balance sheets and are accounted at cost.

The Company has investments in real estate held in consolidated investment companies that account for such real estate at fair value under investment company accounting. Net rental income on the investments in real estate is recognized in net investment income and changes in the fair value of such real estate are recognized in net investment gains (losses) in the consolidated statements of income.

Cash, cash equivalents and restricted cash

Cash and cash equivalents in the consolidated balance sheets include short-term highly liquid investments with a maturity of less than 90 days from the date of acquisition. Amounts included are readily convertible to known amounts of cash and are subject to an insignificant risk of change in value. Restricted cash is recognized in other assets and includes cash and cash equivalents that are legally or contractually restricted with respect to withdrawal or use. The Company's restricted cash principally includes certain cash and cash equivalents held in trusts setup for the benefit of ceding companies or held in connection with open derivative transactions.

Derivative instruments

Derivatives are instruments that derive their values from underlying asset prices, indices, foreign exchange rates, reference rates and other inputs or a combination of these factors. Derivatives may be privately negotiated contracts, which are usually referred to as over-the-counter, or "OTC," derivatives, or they may be listed and traded on an exchange, or "exchange-traded." The Company's derivative instruments are primarily used to hedge certain risks, including interest rate risk and equity market risk, and to a lesser extent foreign exchange and inflation risks. Where certain criteria are met, some of these hedging arrangements may achieve hedge accounting.

Derivative instruments are generally recognized at estimated fair value in either derivative assets, funds withheld receivable at interest, funds withheld payable at interest or accrued expenses and other liabilities in the consolidated balance sheets, with changes in fair value recorded in net investment gains (losses) in the consolidated statements of income. Where certain qualifying criteria are met, some derivative instruments are designated as accounting hedges and are recognized at estimated fair value in derivative assets or accrued expenses and other liabilities in consolidated balance sheets. For derivative instruments designated as fair value hedges, changes in fair value are recognized in the consolidated statements of income, in the same line where the hedged item is reported. For derivative instruments designated as cash flow hedges, changes in fair value are initially recognized in accumulated other comprehensive income and subsequently reclassified to the consolidated statements of income, in the same line item where the hedged item is reported.

Derivative receivables and payables with a counterparty that are subject to an International Swaps and Derivatives Association Master Agreement, or "ISDA," or other similar agreement that provides a legal right of setoff, are presented at their net amounts. Where the legal right of setoff exists, the Company also offsets the fair value of cash collateral received or posted under an ISDA, or other similar agreement with a counterparty, against the related derivative balances as appropriate.

Investment impairment

Available-for-sale fixed maturity securities

One of the significant estimates related to AFS securities is the evaluation of those investments for OTTI. The evaluation of investments for OTTI is a quantitative and qualitative quarterly process that is subject to risks and uncertainties and involves significant estimates and judgments by management. Changes in the estimates and judgments used in such analysis can have a significant impact on the Company's consolidated statements of income.

The Company regularly reviews its AFS securities for declines in fair value that it determines to be other-than-temporary. For fixed maturity securities, the Company first considers the ability and intent to sell a security, or whether it is more-likely-than-not that it will be required to sell the security, before the recovery of its amortized cost. If the Company intends to sell an AFS fixed maturity security with an unrealized loss or it is more-likely-than-not that it will be required to sell an AFS fixed maturity security with an unrealized loss before recovery of its amortized cost basis, OTTI is recognized and the amortized cost is written down to fair value, with a corresponding charge to net investment gains (losses) in the consolidated statements of income.

The review of each AFS fixed maturity security in an unrealized loss position for OTTI includes an analysis of gross unrealized losses by severity and/or the amount of time the security has been in an unrealized loss position. An extended and severe unrealized loss position on a fixed maturity security may not be reflective of the ability of the issuer to service all scheduled principal and interest payments. Accordingly, such an unrealized loss position may not impact the recoverability of all contractual cash flows or the ability to recover an amount at least equal to the investment's amortized cost based on the present value of the expected future cash flows to be collected. As a result, all the facts and circumstances available relevant to the duration and severity of the loss position are analyzed, including changes in market interest rates, credit issues, changes in business climate, management changes, litigation, government actions, and other similar factors that may impact the issuer's ability to meet current and future principal and interest obligations. Indicators of credit impairment may include changes in the issuers' credit ratings, the frequency of late payments, pricing levels, and deterioration in any, or a combination of, key financial ratios, financial statements, revenue forecasts, and cash flow projections.

Expected future cash flows for structured securities include assumptions about key systemic risks (e.g., unemployment rates, housing prices) and loan-specific information (e.g., delinquency rates, loan-to-value ratios). Estimating future cash flows is a quantitative and qualitative process that incorporates information received from third parties, along with assumptions and judgments about the future performance of the underlying collateral. For corporate and government bonds the recoverable value is determined using cash flow estimates that consider facts and circumstances relevant to the security and the issuer, including overall financial strength and secondary sources of repayment as well as pending restructuring or disposition of assets. Where information for such cash flow estimates is limited or deemed not reliable, fair value is considered the best estimate of the recoverable value.

For impaired AFS fixed maturity securities that the Company does not intend to sell, and will not be required to sell, the Company bifurcates the impairment into two components: credit impairment and non-credit impairment. Credit impairments are measured as the difference between the security's cost or amortized cost and its estimated recoverable value, which is the present value of its expected future cash flows discounted at the current effective interest rate. The remaining difference between the security's fair value and the recoverable value is the non-credit impairment. Credit impairments are charged to net investment gains (losses) in the consolidated statements of income and non-credit impairments are charged to accumulated other comprehensive income (loss) in the consolidated balance sheets.

In periods subsequent to the recognition of the credit related impairment components of OTTI on a fixed maturity investment, the Company accounts for the impaired security as if it had been purchased on the measurement date of the impairment. Accordingly, the discount (or reduced premium) based on the new cost basis is accreted into net investment income in the consolidated statements of income over the remaining term of the fixed maturity in a prospective manner based on the amount and timing of estimated future cash flows.

Other classes of investments

The determination of the amount of allowances and impairments on other classes of investments also requires significant judgment and is based upon a periodic evaluation and assessment of known and inherent risks associated with the respective asset class. Such assessments are revised as conditions change and new information becomes available.

The Company evaluates its investments in mortgage and other loan receivables for impairment each quarter. Loans are deemed to be impaired when it is probable that the Company will be unable to collect all the contractual payments as scheduled in the loan agreement. The impairment assessment considers the borrower's ability to pay and the value of the underlying collateral. When a loan is impaired, its impaired value is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate, except that as a practical expedient, the impaired value may be based on a loan's observable market price (where available), or the fair value of the collateral if the loan is a collateral-dependent loan. An allowance is established for the difference between the loan's impaired value and its current carrying value. Additional allowance amounts are established for incurred but not specifically identified impairments in the mortgage portfolio, based on analysis of market loss rate data, adjusted for specific characteristics of the Company's portfolio and changes in economic conditions. When all or a portion of a loan is deemed uncollectible, the uncollectible portion of the carrying amount of the loan is charged off against the allowance.

Impairment of consolidated renewable energy assets and transportation assets is assessed whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When indicators of impairment are present, a recoverability test is performed to determine if the sum of the estimated undiscounted future cash flows attributable to the assets is greater than the carrying amount. If the undiscounted estimated future cash flows are less than the carrying amount, an impairment loss is recognized based on the amount by which the carrying amount exceeds its estimated fair value.

Impairment of investments subject to the equity method of accounting is assessed whenever events or circumstances suggest that the carrying amount may not be recoverable. An impairment charge is recognized in earnings for a decline in value that is determined to be other than temporary, and is measured as the difference between the carrying amount and the fair value of the equity method investment as of the balance sheet date.

Investments in life settlement contracts are monitored for impairment quarterly. An impairment loss is recognized if the expected undiscounted cash inflows (that is, the insurance proceeds) are less than the carrying amount of the investment plus anticipated undiscounted future premiums and capitalizable direct external costs, if any. An impairment loss is recognized by writing the life settlement contract down to its estimated fair value. The fair value of life settlement contracts is determined by discounting the expected cash flows related to the respective contract at a market yield. Expected cash flows include the anticipated premiums, based on market mortality assumptions, and death benefit payments due on the contracts.

Variable interest entities

In the ordinary course of business, the Company invests in certain entities subject to analysis under the VIE consolidation model. An entity is a VIE if it has equity investors who lack the characteristics of a controlling financial interest or it does not have sufficient equity at risk. The Company analyzes each investment to determine whether it is a VIE or not, and if so, whether the Company is the primary beneficiary or a significant variable interest holder based on a qualitative and quantitative assessment. This assessment includes consideration as to whether or not the Company has the power to direct the activities of the VIE that most significantly impact its economic performance and whether or not the Company has either the obligation to absorb losses or the right to receive returns from the VIE that could be significant to the VIE. The Company evaluates the design of the entity, the risks to which the entity was designed to expose the variable interest holder and the extent of the Company's control of and variable interest in the VIE. The Company consolidates VIEs for which it meets the requirements of a primary beneficiary.

Deferral and amortization of certain revenues and expenses

Deferrals

Deferred policy acquisition costs, or "DAC," in the consolidated balance sheets consist of commissions and other costs that are directly related to the successful acquisition of new or renewal life insurance or annuity contracts. Deferred sales inducements, or "DSI," are generated by annuities that offer enhanced crediting rates or bonus payments to policyholders and is included in other assets in the consolidated balance sheets.

Value of business acquired, or "VOBA," in the consolidated balance sheets represents the difference between the carrying value of the purchased in-force insurance contract liabilities at the time of the business combination and the estimated fair value of insurance and reinsurance contracts.

Revenues from certain universal life insurance products are deferred to future periods and an unearned revenue reserve, or "URR," liability is established. The amount deferred is equal to the excess of the revenue collected over an estimate of the ultimate future level of these revenues and included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets.

Deferred revenue liability, or "DRL," represents the gross premium less the net premium on limited pay contracts (i.e., payout annuities.) Additionally, DRL also represents the liability offset to the deferred gain arising from the amendment of reinsurance agreements that changed from funds withheld to coinsurance. The amendment resulted in a gain and the DRL offset because the Company no longer records these liabilities at fair value. DRL is included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets.

For certain preneed contracts, the gross premium is in excess of the benefit reserve plus additional insurance liability. An unearned front-end load, or "UFEL," is established to defer the recognition of this front-end load. UFEL is included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets.

DAC, VOBA, DSI, DRL, URR and UFEL, or together "deferred revenues and expenses," are deferred and amortized over the expected lives of the respective contracts.

Amortization

For interest-sensitive products (fixed-indexed annuities and variable annuities, most universal life including preneed contracts, and variable universal life), DAC, VOBA, and DSI assets are generally amortized in proportion to actual historical gross profits and estimated future gross profits over the estimated lives of the contracts. The amount of gross profit consists principally of investment returns (including hedge gains and losses) in excess of the amounts credited to policyholders, asset-based and other policy fees, and surrender charges reduced by death and other excess benefits and expenses. Numerous factors including mortality, benefit utilization, surrender activity, premium persistency, and the economic environment influence the level and timing of gross profits.

Estimated gross profits are updated each reporting period with actual gross profits as part of the amortization process for the interest-sensitive policies. When actual gross profits are higher in the period than had been previously estimated, more amortization is recognized than planned. When actual gross profits are lower than had been previously estimated, less amortization is recognized than planned. These relationships hold provided that future estimates of gross profits remain unchanged, which may not always be true.

When a different basis of amortization is determined to be more representative of the economics, such as when negative estimated gross profits or margins occur, an alternative basis of amortization may be selected for both DAC and VOBA.

For universal life products with secondary guarantees, DAC and VOBA are amortized in proportion to the pattern of policyholder death benefits in-force, which better reflects the future consumption of economic benefits. For most term and whole life products, DAC and VOBA are amortized in proportion to premium revenue recognized.

DRL is amortized on a straight-line basis for whole life and term life insurance policies. For annuities, universal life and indexed universal life policies, DRL is amortized in proportion to the pattern of policyholder death benefits in-force. For payout annuities, DRL is recognized in income in a constant relationship with the amount of expected future payments.

URR is amortized consistent with the amortization of DAC on similar products. UFEL is amortized consistent with the method used in the amortization of DAC and VOBA for preneed contracts.

The key assumptions used in the calculation of the amortization of DAC, VOBA and DSI are periodically updated as part of the assumptions review process, which results in revisions to the estimated future gross profits. The effects of changes in assumptions are recorded as unlocking in the period in which the changes are made. The following are types of changes to future assumptions that would generally result in a negative unlocking (i.e., an acceleration of amortization resulting in a reduction to net income): lower equity returns, lower investment returns, higher operating expenses, higher mortality, and unfavorable lapses.

The carrying amounts of DAC, VOBA, DSI, URR and UFEL are adjusted for the effects of realized and unrealized gains and losses on debt and equity securities classified as AFS and certain derivatives.

Internal replacements

An internal replacement is a modification in product benefits, features, rights, or coverages that occurs by the legal extinguishment of one contract and the issuance of another contract (a contract exchange), or by amendment, endorsement, or rider to a contract, or by the election of a benefit, feature, right, or coverage within a contract. If the modification does not substantially change the contract, the Company does not change the accounting and amortization of existing DAC and related actuarial balances (i.e., continuation of contract accounting). If an internal replacement represents a substantial change, the original contract is considered to be extinguished and any related DAC or other policy balances are charged or credited to income, and any new deferrable costs associated with the replacement contract are deferred (for example, contract termination and new contract accounting).

Separate accounts

Separate account assets and liabilities represent segregated funds administered and invested by the Company for the benefit of variable annuities and variable universal life insurance contractholders and certain pension funds. The Company reports separately, as assets and liabilities, investments held in the separate accounts and liabilities of separate accounts if: (1) such separate accounts are legally recognized; (2) assets supporting the contract liabilities are legally insulated from the Company's general account liabilities; (3) investments are directed by the contract owner or participant; and (4) all investment performance, net of contract fees and assessments, is passed through to the contract owner.

Separate account assets consist principally of mutual funds at fair value. The investment income and gains and losses of these accounts generally accrue to the contractholders and therefore, are not included in the Company's net income. However, the Company's net income reflects fees assessed and earned on fund values of these contracts which are presented as a component of policy fees in the consolidated statements of income. Realized investment gains and losses related to separate accounts that meet the conditions for separate account reporting accrue to and are borne by the contractholder.

See Note 8 — "Policyholder liabilities" for additional information about liabilities for minimum guarantees.

Policyholder liabilities

Policyholder liabilities, or collectively, "reserves," are the portion of past premiums or assessments received that are set aside to meet future policy and contract obligations as they become due. Interest accrues on these reserves and on future premiums, which may also be available to pay for future obligations. The Company establishes reserves to pay future policyholder benefits, claims, and certain expenses for its life policies and annuity contracts.

Reserves are estimates based on models that include many actuarial assumptions and projections. These assumptions and projections, which are inherently uncertain, involve significant judgment, including assumptions as to the levels and/or timing of premiums, benefits, claims, expenses, interest credits, investment results (including equity market returns), mortality, longevity, and persistency.

The assumptions on which reserves are based are intended to represent an estimation of experience for the period that policyholder benefits are payable. The adequacy of these reserves and the assumptions underlying those reserves are reviewed at least annually. The Company cannot, however, determine with precision the amount or the timing of actual policyholder benefit payments. If actual experience is better than or equal to the assumptions, then reserves would be adequate to provide for future policyholder benefits and expenses. If experience is worse than the assumptions, additional reserves may be required to meet future policy and contract obligations. This would result in a charge to the Company's net income during the period in which excess policyholder benefits are paid or an increase in reserves occurs.

For a majority of the Company's in-force policies, including its universal life policies and most annuity contracts, the base policy reserve is equal to the account value. For these products, the account value represents the Company's obligation to repay to the policyholder the amounts held on deposit. However, there are several significant blocks of business where additional policyholder reserves are explicitly calculated, including variable annuities, fixed-indexed annuities, universal life with secondary guarantees, indexed universal life and preneed policies.

Fixed-rate and fixed-indexed annuities

Contractholder deposits fund reserves for fixed-indexed annuities earning a fixed rate of interest and certain other fixed-rate annuity products are computed under a retrospective deposit method and represent policyholder account balances before applicable surrender charges.

Certain of the Company's fixed-indexed annuity products enable the policyholder to allocate contract value between a fixed crediting rate and strategies which reflect the change in the value of an index, such as the Standard & Poor's, or "S&P," 500 Index, or other indices. These products are accounted for as investment-type contracts. The liability for these products consists of a combination of the underlying account value and an embedded derivative value. The liability for the underlying account value is primarily based on policy guarantees and its initial value is the difference between the premium payment and the fair value of the embedded derivative. Thereafter, the account value liability is determined in a manner consistent with the accounting for a deposit liability under the "constant yield method." All future host balances are determined as: (1) the initial host balance; (2) plus interest; (3) less applicable policyholder benefits. The interest rate used in the prior roll forward is re-determined on each valuation date, per the constant yield method. The embedded derivative component's fair value is based on an estimate of the policyholders' expected participation in future increases in the relevant index. The fair value of this embedded derivative component includes assumptions, including those about future interest rates and investment yields, future costs for options used to hedge the contract obligations, projected withdrawal and surrender activity, benefit utilization and the level and limits on contract participation in any future increases in the respective index option. The account value liability and embedded derivative are recorded in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets, with changes in value of the liabilities recorded in policy benefits and claims in the consolidated statements of income.

Contractholder deposit funds reserves for certain assumed blocks of fixed-indexed and fixed-rate annuity products are accounted for as investment-type contracts. A net liability (consisting of the benefit reserve plus deferred revenue liability less DAC) is established at inception and amortized under the constant yield method.

Guaranteed benefits

Certain fixed-rate and fixed-indexed annuity contracts provide the contractholder with guaranteed minimum death benefits, or "GMDB," and/or guaranteed minimum withdrawal benefits, or "GMWB." The associated reserves for these benefits are calculated by estimating the present value of total expected (excess) benefit payments over the life of the contract divided by the present value of total expected assessments over the life of the contract, or the "benefit ratio," and multiplying this ratio by the cumulative assessments recorded from the contract inception through the balance sheet date less cumulative benefit payments plus interest on the reserves. The liabilities are included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. The change in the reserve is included in policy benefits and claims in the consolidated statements of income.

Long-term care benefit riders

Certain fixed-rate contracts provide the policyholder with long-term care benefit riders. The long-term care benefit rider permits access to the policy's account value, along with a supplemental rider benefit value, free of a surrender charge, to reimburse the policyholder for certain qualified long-term care expenses. Depending on the outcome of simplified underwriting, the rider benefit is capped at the return of account value plus one or two times the account value. The benefit rider paid to the policyholder is subject to a monthly maximum such that the benefit is typically paid out over a period of six years or longer. The liabilities for these benefits are calculated by using the benefit ratio multiplied by the cumulative assessments recorded from the contract inception through the balance sheet date less cumulative benefit payments plus interest on the reserves. The change in the reserve is included in policy benefits and claims in the consolidated statements of income.

Variable annuities

Variable annuity contracts offered and assumed by the Company provide the contractholder with various combinations of GMDB, guaranteed minimum income benefits, or "GMIB," and GMWB. The liabilities for these benefits are included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets.

The liabilities for GMDB and GMIB are calculated by using the benefit ratio multiplied by the cumulative assessments recorded from the contract inception through the balance sheet date less cumulative benefit payments plus interest on the reserves. The change in the reserve is included in policy benefits and claims in the consolidated statements of income.

The GMWB is considered an embedded derivative, which is required to be bifurcated. The bifurcation of the GMWB is based on an implied return of premium, or "ROP," approach, in which the Company segregates cash outflows between ROP and other cash flows.

The liability for the GMWB is bifurcated into two separate and distinct components:

- An embedded derivative which is held for GMWB payments made in support of the implied ROP and recorded at fair value; and,
- An additional insurance liability which is held for the additional GMWB payments (over and above what supports the implied ROP).

The ROP cash flows (i.e., the cash flows that support an implied repayment of premium deposits) represent the embedded derivative and are used to calculate the fair value of this liability. The remaining cash flows represent a life contingent liability that are used to calculate the additional insurance liability.

The liabilities for the life contingent GMWB are calculated by using the benefit ratio multiplied by the cumulative assessments recorded from the contract inception through the balance sheet date less cumulative benefit payments plus interest on the reserves. The change in the reserve is included in policy benefits and claims in the consolidated statements of income.

Payout annuities

Payout annuities include single premium immediate annuities, annuitizations of deferred annuities and structured settlements. These contracts subject the insurer to risks over a period that extends beyond the period or periods in which premiums are collected. These contracts may be either non-life contingent or life contingent. Non-life contingent annuities are accounted for as financial instruments. For life contingent annuities, the Company records a liability at the present value of future annuity payments and estimated future expenses calculated using expected mortality and costs, and interest assumptions. Any gross premiums received in excess of the net premium is the DRL and is recognized in income in a constant relationship with the amount of expected future payments. The liabilities are recorded in policyholder liabilities in the consolidated balance sheets.

Universal life policies

For universal life policies, the base benefit reserves are deemed to be equal to the policyholder account value.

Contractholder deposit funds reserves for indexed universal life with returns linked to the performance of a specified market index are equal to the sum of two components: (1) the fair value of the embedded derivative and (2) the host (or guaranteed) component. The fair value of the embedded derivative component is based on the fair value of the policyholders' expected participation in future increases in the relevant index. The fair value of this embedded derivative component includes assumptions, including those about future interest rates and investment yields, future costs for options used to hedge the contract obligations, projected benefits, benefit utilization and the level and limits on contract participation in any future increases in the respective index option.

The initial host balance is established at the time of premium payment and is equal to the total account value less the embedded derivative component. Thereafter, the balance of the host component is determined in a manner consistent with the accounting for a deposit liability under the "constant yield method." All future host balances are determined as: (1) the initial host balance; (2) plus interest; (3) less applicable policyholder benefits. The interest rate used in the prior roll forward is re-determined on each valuation date, per the constant yield method.

For the years ended December 31, 2019, 2018 and 2017, the average interest crediting rate for indexed universal life was 6.22%, 8.60% and 9.15%, respectively. The Company holds additional liabilities for universal life products with secondary guarantees, sometimes referred to as no-lapse guarantees.

Variable universal life policies

Certain assumed variable universal life policies include several forms of secondary guarantees. The Company holds additional liabilities for its secondary guarantees as discussed above.

Preneed policies

The Company's preneed life insurance contracts are accounted for as universal life-type contracts which require that the retrospective deposit method be used. That accounting method establishes a liability for policyholder benefits in an amount determined by the account or contract balance that accrues to the benefit of the policyholder. This account value is deemed to be equal to the contract's statutory cash surrender value. The majority of the Company's preneed insurance contracts feature death benefits with a discretionary death benefit growth rate. The Company has the discretion to adjust these rates up or down. The Company has established an additional reserve for expected future discretionary benefits which is reflected as contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. The Company has also issued preneed insurance contracts with crediting rates tied to inflation as measured by the Consumer Price Index.

Whole and term life

The Company has established liabilities for amounts payable under insurance policies, including whole life insurance and term life insurance policies. Generally, liabilities for these policies are calculated as the present value of future expected benefits to be paid reduced by the present value of future expected net premiums. Principal assumptions used in the establishment of liabilities for future policyholder benefits are mortality, policy lapse, renewal, investment returns, inflation, expenses and other contingent events as appropriate for the respective product. These assumptions, which include provisions for adverse deviations, are established at the time the policy is issued and are intended to estimate the experience for the period the policyholder benefits are payable. By utilizing these assumptions, liabilities are established on a block-of-business basis. For whole life and term long-duration insurance contracts, assumptions such as mortality, morbidity and interest rates are locked-in upon the issuance of new business. However, significant adverse changes in experience on such contracts may require the Company to establish premium deficiency reserves. Premium deficiency reserves are established, if necessary, when the liability for future policyholder benefits plus the present value of expected future gross premiums are determined to be insufficient to provide for expected future policyholder benefits and expenses. Such reserves are determined based on assumptions at the time the premium deficiency reserve is established and do not include a provision for adverse deviation.

Future policyholder benefit liabilities for participating whole life insurance policies are equal to the aggregate of: (1) net level premium reserves for death and endowment policyholder benefits (calculated based upon the non-forfeiture interest rate, ranging from 2.5% to 6.5% and mortality rated guarantee in calculating the cash surrender values described in such contracts); and (2) the liability for terminal dividends.

Future policyholder benefit liabilities for non-participating whole life and term life insurance policies are equal to the aggregate of the present value of expected future policyholder benefit payments and related expenses less the present value of expected future net premiums. Assumptions as to the mortality and persistency are based upon the Company's experience when the basis of the liability is established, and are periodically updated. Interest rate assumptions for the aggregate future policyholder benefit liabilities range from 2.0% to 7.5%, calculated based on the portfolio rate, net of investment expenses.

Outstanding claims

Outstanding claims include amounts payable relating to in course of settlement and incurred but not reported claim liabilities. In course of settlement claim liabilities are established for policies when the Company is notified of the death of the policyholder but the claim has not been paid as of the reporting date. Incurred but not reported claim liabilities are determined using studies of past experience and are estimated using actuarial assumptions of historical claims expense, adjusted for current trends and conditions. These estimates are continually reviewed and the ultimate liability may vary significantly from the amounts initially recognized, which are reflected in net income in the period in which they are determined. Changes in policyholder and contract claims are recorded in policy benefits and claims in the consolidated statements of income.

Closed blocks

Through its insurance subsidiaries, the Company has acquired several closed blocks of participating life insurance policies. The Company has elected to account for the closed block policyholder liabilities using the fair value option.

The assets and cash flow generated by the closed blocks inure solely to the benefit of the holders of policies included in the closed blocks. All closed block assets will ultimately be paid out as policyholder benefits and through policyholder dividends. In the event that the closed blocks' assets are insufficient to meet the benefits of the closed blocks' benefits, general assets of the Company would be used to meet the contractual benefits to the closed blocks' policyholders.

The closed block liabilities are measured at fair value, which comprises the fair value of the closed block assets plus the present value of projected expenses including commissions and the cost of capital charges associated with the closed blocks. In calculating the present value, the Company used a discount rate based on current U.S. treasury rates, with a risk margin to reflect uncertainties in the closed block liability and a provision for the Company's nonperformance risk.

Reinsurance

The Company seeks to diversify risk and limits its overall financial exposure through reinsurance. In addition, consistent with the overall business strategy, the Company assumes certain policy risks written by other insurance companies on a coinsurance, modified coinsurance or funds withheld coinsurance basis. Reinsurance accounting is applied for ceded and assumed transactions when risk transfer provisions have been met. To meet risk transfer requirements, a long-duration reinsurance contract must transfer mortality or morbidity risks, and subject the reinsurer to a reasonable possibility of a significant loss. Those contracts that do not meet risk transfer requirements are accounted for using deposit accounting.

With respect to ceded reinsurance, the Company values reinsurance recoverables on reported claims at the time the underlying claim is recognized in accordance with contract terms. For future policyholder benefits, the Company estimates the amount of reinsurance recoverables based on the terms of the reinsurance contracts and historical reinsurance recovery information. The reinsurance recoverables are based on what the Company believes are reasonable estimates and the balance is reported as an asset in the consolidated balance sheets. However, the ultimate amount of the reinsurance recoverable is not known until all claims are settled.

The cost of reinsurance, which is the difference between the amount paid for a reinsurance contract and the amount of the liabilities for policy benefits relating to the underlying reinsured contracts, is deferred and amortized over the reinsurance contract period for short-duration contracts, or over the terms of the reinsured policies on a basis consistent with the reporting of those policies for long-duration contracts. Cost of reinsurance assets and liabilities are reported in DAC and contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets, respectively. Reinsurance contracts do not relieve the Company from its obligations to policyholders, and failure of reinsurers to honor their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible.

Debt

In general, the Company recognizes a liability for debt equal to the proceeds received. When the proceeds received are not the same as the amount due at maturity, the debt has been issued at a discount or premium and is recorded as a deduction from the face amount of the note.

Debt is recognized on the date the proceeds are received, or settlement date, versus the trade date. Debt issuance costs are specific incremental costs, other than those paid to the lender, that are incurred by a borrower and directly attributable to issuing a debt instrument. Debt issuance costs are deferred and reported in the balance sheet as a deduction from the face amount of the liability. Costs associated with entering into a revolving line of credit or revolving-debt arrangement are costs incurred in exchange for access to capital. These costs are recorded as assets on the balance sheet and amortized to interest expense on a straight-line basis over the contractual term of the arrangement.

Leases

The Company enters into lease contracts, the most significant being leases of office space for its operations and land leases for its consolidated renewable energy investments. The Company reports these leases as right-to-use assets with a corresponding lease liability in other assets and accrued expenses and other liabilities in the consolidated balance sheets, respectively. The lease liability represents the present value of the lease payments to be made over the lease term and is calculated using a discount rate equal to the Company's incremental borrowing rate.

Loss contingencies

A loss contingency is an existing condition, situation or set of circumstances involving uncertainty as to possible loss that will ultimately be resolved when one or more future events occur or fail to occur. Loss contingencies include regulatory judgments, claims, assessments, guarantees, pending or threatened litigation, recourse reserves, fines, penalties and environmental remediation costs. Amounts related to loss contingencies are accrued and recorded in accrued expenses and other liabilities in the consolidated balance sheets if it is probable that a loss has been incurred and the amount can be reasonably estimated, based on the Company's best estimate of the ultimate outcome.

See Note 21 — "Commitments and contingencies" for additional information about loss contingencies.

Non-controlling interests and redeemable non-controlling interests

Non-controlling interests and redeemable non-controlling interests represent investors' interests in the net assets of certain renewable energy partnerships. The Company uses the HLBV method to allocate income and cash flows based on investors' claim to net assets, including those for the non-controlling interests and redeemable non-controlling interests.

The Company classifies certain non-controlling interests with redemption features that are not solely within the control of the Company outside of permanent equity on its consolidated balance sheets. These redeemable non-controlling interests are reported using the greater of the carrying value at each reporting date as determined by the HLBV method or the estimated redemption value in each reporting period.

Recognition of insurance revenue and related benefits

Premiums related to whole life and term life insurance contracts and payout contracts with life contingencies are recognized in premiums in the consolidated statements of income when due from the contractholders.

Amounts received as payment for universal life and investment-type contracts are reported as deposits to contractholder account balances and recorded in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. Amounts received as payment for the Company's fixed fund variable annuities are reported as a component of contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. Revenues from these contracts consist primarily of fees assessed against the contractholder account balance for mortality, policy administration, separate account administration and surrender charges, and are reported in policy fees in the consolidated statements of income. Additionally, the Company earns investment income from the investment of contract deposits in the Company's general account portfolio, which is reported in net investment income in the consolidated statements of income.

Fees assessed that represent compensation to the Company for benefits to be provided in future periods and certain other fees are established as a unearned revenue reserve liability and amortized into revenue over the expected life of the related contracts in proportion to estimated gross profits in a manner consistent with DAC for these contracts. Unearned revenue reserves are reported in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets and amortized into policy fees in the consolidated statements of income. Benefits and expenses for these products include claims in excess of related account balances, expenses for contract administration and interest credited to contractholder account balances in the consolidated statements of income.

Other income

Other income is primarily comprised of administration, management fees and distribution fees.

See Note 12 — "Composition of other assets, liabilities, income, insurance expenses and general and administrative expenses" for additional information about other income.

Insurance expenses

Insurance expenses are primarily comprised of commissions expense, premium taxes and other expenses related to insurance products and reinsurance transactions.

See Note 12 — "Composition of other assets, liabilities, income, insurance expenses and general and administrative expenses" for additional information about insurance expenses.

General and administrative expenses

General and administrative expenses are primarily comprised of employee compensation and benefit expenses, administrative and professional services and other operating expenses.

See Note 12 — "Composition of other assets, liabilities, income, insurance expenses and general and administrative expenses" for additional information about general and administrative expenses.

Equity-based compensation

The Company has established a long-term incentive plan to foster and promote its long-term financial success through the grant of restricted share awards, or "RSAs," which are contractual rights to receive ordinary shares of Global Atlantic Financial Group Limited, or "GAFG," the Company's ultimate parent. Compensation expense for the Company's equity-based awards is recognized only when vesting is deemed to be probable.

The Company measures compensation cost for service-based, equity-classified share-based payment awards at fair value as of the grant date and recognizes it in general and administrative expenses in the consolidated statements of income as compensation expense over the requisite service period for awards expected to vest. The Company recognizes the expense using the straight-line attribution method, with adjustments for forfeitures as they occur. For awards with performance-based vesting, expense recognition is deferred until the performance factor occurs or becomes probable.

The Company measures compensation cost for liability-classified share-based payment awards, if any, using the fair value method, beginning on the grant date, and re-measures the fair value of the awards, net of an estimated forfeiture rate, at each reporting period until the awards are settled.

Income taxes

The Company operates certain subsidiaries in jurisdictions where they are subject to taxation. Income taxes are provided for using the asset and liability method under which deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax basis of assets and liabilities. Such temporary differences are primarily due to the tax basis of reserves, DAC, unrealized investment gains/losses, reinsurance balances, embedded derivatives, and net operating loss, or "NOL," carryforwards. Changes in deferred income tax assets and liabilities associated with components of other comprehensive (loss) income are recorded directly to accumulated other comprehensive income (loss) in the consolidated balance sheets.

The Company evaluates the likelihood of realizing the benefit of deferred tax assets and may record a valuation allowance if, based on all available evidence, the Company determines that it is more-likely-than-not that some portion of the tax benefit will not be realized. The Company adjusts the valuation allowance if, based on its evaluation, there is a change in the amount of deferred income tax assets that are deemed more-likely-than-not to be realized.

The Company recognizes tax positions in the consolidated financial statements only when it is more-likely-than-not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more-likely-than-not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the consolidated financial statements.

The Company records the effect of changes in tax laws or rates at the date of enactment. In the U.S., the enactment date is considered to be the date that the President signs the legislation. The total effect of a tax law or rate change on the deferred tax balance is recorded as a component of tax expense related to continuing operations for the period in which the law is enacted.

Such tax changes can create disproportionate tax effects, or stranded amounts in other comprehensive income, or "OCI," for AFS debt securities. The Company's accounting policy for clearing disproportionate tax effects relating to AFS debt securities is the aggregate portfolio approach. Under the aggregate portfolio approach, the disproportionate tax effect remains intact as long as the investment portfolio remains.

The tax benefit from investment tax credits generated are recognized under the flow through method, with 50% tax basis adjustment as prescribed under Accounting Standards Codification 740.

The Company reports interest expense related to income tax matters in income tax expense (benefit), and income tax penalties in general and administrative expenses in the consolidated statements of income.

Earnings per share

Basic net income (loss) per share is computed by dividing net income attributable to Global Atlantic Financial Limited shareholder by the weighted average shares outstanding for the period. Diluted net income (loss) per share is calculated in the same manner, but shares outstanding are adjusted to reflect the potential dilution that would occur if unvested equity-based compensation awards were vested. The dilutive effects of such equity-based compensation awards are calculated using the treasury stock method. As of December 31, 2019 and 2018, there were no such dilutive awards referenced to the shares of the Company. In periods where losses are recorded, inclusion of potentially dilutive securities in the calculation would decrease the loss per common share and therefore they are not added to the weighted average number of shares outstanding due to their anti-dilutive effect.

See Note 18 — "Earnings per share" for additional information about earnings per share.

Foreign currency

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the date of the balance sheet and revenues and expenses are translated at average rates of exchange for the relevant period. Foreign currency re-measurement gains or losses on transactions in non-functional currencies are recognized in net investment gains (losses) in the consolidated statements of income.

Adoption of new accounting pronouncements

Leasing transactions

In February 2016, the Financial Accounting Standards Board, or "FASB," issued new guidance on leasing transactions. For lessees, the primary change in guidance affects operating leases. The guidance requires a lessee of an operating lease with a term of more than 12 months to recognize an asset, representing a lessee's right to use the leased asset during the lease term, and a corresponding liability, representing the present value of lease payments, on its balance sheets. For lessors, the guidance is largely unchanged from previous U.S. GAAP requirements. The guidance also requires new disclosures. The Company adopted this standard using a modified retrospective approach effective January 1, 2019 and recognized \$48 million of right-to-use assets (net of \$17 million in deferred rent and lease incentives) and \$65 million in lease liabilities. The Company's adoption included the election of practical expedients, in particular not reassessing whether expired or existing contracts are, or contain, leases, not reassessing the lease classification for expired or existing leases, not reassessing initial direct costs for existing leases, and using hindsight in determining the lease term. The Company also has partially owned and consolidated subsidiaries that report results on a three month lag. For these subsidiaries, we started recording a right-to-use asset and corresponding lease liability on April 1, 2019. The Company recognized a \$37 million right-to-use asset and a corresponding \$37 million lease liability on April 1, 2019.

Targeted improvements to accounting for hedging activities

In August 2017, the FASB issued new guidance to better align risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The amendments also include certain targeted improvements to ease the application of current guidance related to the assessment of hedge effectiveness. Disclosure requirements have also been modified. The Company adopted the standard effective January 1, 2019. The adoption of this new guidance did not have a significant impact on the Company's consolidated financial statements.

Interim disclosure requirement for changes in equity

In August 2018, the SEC issued a final rule to amend certain disclosure requirements that were redundant, duplicative, overlapping or superseded by other SEC disclosure requirements. The amendments generally eliminate or otherwise reduce certain disclosure requirements of various SEC rules and regulations. However, in some cases, the amendments require additional information to be disclosed, including amendments to require the presentation of shareholder's equity for the current and comparative quarters and year-to-date interim periods. The final rule was published in the Federal Register on October 5, 2018, resulting in a November 5, 2018 effective date. The SEC staff, however, released transition guidance that they would not object to registrants first presenting the changes in shareholder's equity in their Form 10-Q for the quarter beginning after the effective date of the amendments (i.e., first quarter of 2019). The Company adopted the new rule effective January 1, 2019. The new required presentation was reflected on the interim consolidated statements of redeemable non-controlling interests and equity.

Financial instruments

In January 2016, the FASB issued new guidance on the recognition and measurement of financial instruments. The new guidance changes the prior accounting standard to require equity investments that are not subject to consolidation or the equity method of accounting to be measured at fair value with changes in fair value recognized in earnings. In addition, under this guidance, the presentation of changes in the fair value of financial liabilities measured under the fair value option due to instrument-specific credit risk is presented in OCI. The Company adopted the guidance on January 1, 2018 with no net change to equity with a net cumulative effect adjustment which increased retained earnings by \$1 million and decreased accumulated other comprehensive income (loss) by \$1 million. The cumulative effect adjustment is comprised of: (1) a \$5 million increase to retained earnings related to the reclassification of unrealized gains on equity investments previously included in accumulated other comprehensive income (loss); and (2) a \$4 million decrease to retained earnings related to the reclassification of the impact of own nonperformance risk associated with financial liabilities measured at fair value to accumulated other comprehensive income (loss) in the consolidated balance sheets.

Revenue recognition

In May 2014, the FASB issued a comprehensive new revenue recognition standard, which is effective for fiscal years beginning after December 15, 2017. This standard establishes the core principle of recognizing revenue to depict the transfer of promised goods and services in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The amendments define a five-step process that systematically identifies the various components of the revenue recognition process, culminating with the recognition of revenue upon satisfaction of an entity's performance obligation. The Company adopted the standard on January 1, 2018. The adoption of this guidance did not materially impact the consolidated financial statements but changed the presentation of investment fund sub-advisor fees from a net presentation in which sub-advisor fees reduced revenues from asset management fees to a gross presentation in which sub-advisor fees are now classified within general and administrative expenses in the consolidated statements of income. As a result, sub-advisor costs of \$10 million for both of the years ended December 31, 2019 and 2018 were recorded in general and administrative expenses in the consolidated statements of income.

Modification of share-based payment awards

In May 2017, the FASB issued new guidance on share-based payment awards. The guidance clarifies how to determine which changes to the terms and conditions of share-based payment awards require an entity to apply modification accounting. The guidance should be applied prospectively to an award modified on or after the adoption date. The guidance will reduce the number of share-based payment award modifications in periods after adoption. The Company adopted the new guidance prospectively on January 1, 2018. The adoption of this guidance did not impact the consolidated financial statements.

Gains and losses from the de-recognition of nonfinancial assets

In February 2017, the FASB issued new guidance that clarifies the scope and application of Other Income – Gains and Losses from the De-recognition of Nonfinancial Assets, to the sale or transfer of nonfinancial assets and in substance nonfinancial assets to non-customers, including partial sales. The Company adopted the guidance on January 1, 2018. The adoption of this guidance did not impact the consolidated financial statements.

Restricted cash

In November 2016, the FASB issued new guidance on restricted cash. The guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. As a result, the guidance requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown in the consolidated statements of cash flows. The Company adopted the guidance on January 1, 2018. The adoption of this guidance did not materially impact the consolidated financial statements.

Income taxes on intra-entity transfers of assets other than inventory

In October 2016, the FASB issued new guidance that will require an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs, rather than when the asset is sold to a third party. The Company adopted the guidance on January 1, 2018. The adoption of this guidance did not impact the consolidated financial statements.

Classification of certain cash receipts and cash payments on statement of cash flows

In August 2016, the FASB issued new guidance on the statements of cash flows to address diversity in practice in how certain cash receipts and cash payments are classified. The amendments provide clarity on the treatment of eight specifically defined types of cash inflows and outflows. The Company retrospectively adopted the guidance on January 1, 2018, reclassifying certain equity method distributions from investing activities to operating activities on the consolidated statements of cash flows. For the year ended December 31, 2017, the reclassification was \$10 million.

Reclassification of certain tax effects from accumulated other comprehensive income

In January 2018, the FASB issued new guidance that would permit a reclassification from accumulated other comprehensive income to retained earnings of the stranded tax effects resulting from application of the new federal corporate income tax rate enacted under the Tax Cuts and Jobs Act, or "TCJA." Under the guidance, entities have the option to reclassify from accumulated other comprehensive income to retained earnings those stranded tax effects resulting from the newly enacted federal corporate income tax rate and provide relevant disclosures. The amount of that reclassification would be the difference between: (1) the amount initially charged or credited directly to other comprehensive income at the previously applicable federal corporate income tax rate that remains in accumulated other comprehensive income; and (2) the amount that would have been charged or credited using the newly enacted federal corporate income tax rate, excluding the effect of any valuation allowance previously charged to income from continuing operations. The guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early application is permitted. The Company elected to early adopt the standard retrospectively effective December 22, 2017. The adoption resulted in a reclassification of \$185 million of stranded deferred taxes to retained earnings from accumulated other comprehensive income (loss).

Definition of a business

In January 2017, the FASB issued new guidance on business combinations to clarify when a set of transferred assets and activities is a business. If assessed as a business, the transfer of assets is accounted for as a business combination instead of an asset acquisition. This assessment could have relevance to the Company's accounting for both future legal entity acquisitions and the reinsurance of blocks of insurance business. The new guidance provides a screen to determine when a set is not a business. The screen requires that when substantially all the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or group of similar assets, the set is not a business. Therefore, the adoption of this standard will result in fewer acquisitions qualifying as businesses. As permitted under the standard, the Company early adopted its provisions effective January 1, 2017 on a prospective basis. The adoption of this standard did not impact the consolidated financial statements.

Employee share-based payment accounting

In March 2016, the FASB issued new guidance on stock compensation. The areas for simplification in this guidance involve several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the consolidated statements of cash flows. The new guidance requires either a modified retrospective, a retrospective or a prospective transition approach depending upon the type of change. The Company early adopted the standard effective January 1, 2017 and has provided enhanced disclosure in Note 16—"Equity-based compensation." The adoption of this standard resulted in the Company changing its forfeiture assumption to 0% (i.e., account for forfeitures as they occur) and recording "windfall" tax benefits through tax expense versus equity. The new forfeiture accounting policy did not significantly impact the consolidated financial statements. For 2017, the "windfall" tax benefit recognized by the Company was \$1 million. An unrecognized excess tax benefit of \$2 million resulting from a net operating loss for the fiscal year ended December 31, 2016 was also recognized in 2017 through a cumulative-effect adjustment to retained earnings.

Equity method and joint ventures

In March 2016, the FASB issued guidance to simplify the transition to equity method when as a result of an increase in the level of ownership or degree of influence an investment then qualifies for the use of the equity method. The guidance requires that the equity method investor add the cost of acquiring the additional interest in the investee to the current basis of the investor's previously held interest and adopt the equity method as of the date the investment becomes qualified for equity method accounting. The Company adopted the standard effective January 1, 2017. The adoption of this standard did not impact the consolidated financial statements.

Future application of accounting standards

Changes to the disclosure requirements for fair value measurement

In August 2018, the FASB issued amendments to the disclosure requirements related to fair value measurements, as part of the FASB disclosure framework project, which is intended to improve the effectiveness of the notes to the financial statements. The amendments remove certain disclosures, primarily qualitative in nature, that were not deemed to provide cost-beneficial information. The amendments also modify or add certain disclosures related to inputs to and changes in Level 3 fair value measurements.

The new guidance is effective for public business entities for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. As permitted, the Company has early adopted the provisions that remove or modify existing disclosures. The Company plans to adopt the added disclosures required by the new guidance on the effective date. The Company has evaluated the new standard and determined that it will not significantly impact its consolidated financial statements.

Credit losses on financial instruments

In June 2016, the FASB issued new guidance on the measurement of credit losses on financial instruments, including reinsurance recoverables. This guidance replaces the incurred loss impairment methodology with one that reflects expected credit losses. The measurement of expected credit losses should be based on historical loss information, current conditions, and reasonable and supportable forecasts. The new guidance also requires that a credit impairment on a debt security will be recognized as an allowance going forward, such that improvements in expected future cash flows after an impairment will no longer be reflected as a prospective yield adjustment through net investment income, but as a reversal of the previous impairment that is recognized immediately. In addition, the guidance requires enhanced disclosures.

The Company has used models to estimate expected lifetime credit losses on its loan portfolios, and has tested these models and related inputs. The Company has also developed a process for the evaluation of credit risk and measurement of an allowance on its reinsurance recoverable and funds withheld receivable at interest that considers, among other things, relevant credit enhancement and collateral provisions in the reinsurance arrangements. Required increases in expected credit losses on financial instruments measured at amortized cost including loan receivables and reinsurance recoverables will be recognized as a cumulative effect adjustment to retained earnings upon adoption on January 1, 2020. The Company will recognize an increase in allowances for credit losses of approximately \$173 million, with an offsetting cumulative effect adjustment to decrease retained earnings (pre-tax).

Simplifying the accounting for income taxes

In December 2019, the FASB issued new guidance to simplify the accounting for income taxes. This guidance eliminates the exceptions to the incremental approach, to accounting for basis differences when there are changes in ownership of foreign investments, and to interim period tax accounting for year-to-date losses that exceed anticipated losses. The guidance also simplifies the application of tax guidance related to franchise taxes, transactions with government entities, separate financial statements of legal entities that are not subject to tax, and enacted changes in tax laws in interim periods. The guidance is effective for public business entities that meet the definition of an SEC filer for fiscal years beginning after December 15, 2020, including interim period within those fiscal years. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

Targeted improvements to the accounting for long-duration contracts

In August 2018, the FASB issued new guidance for insurance and reinsurance companies that issue long-duration contracts such as life insurance and annuities. The objective of this guidance is to improve, simplify and enhance the financial reporting of long-duration contracts by providing financial statement users with useful information in a timely and transparent manner. The primary changes include: (1) more timely recognition of assumption changes in the liability for future policy benefits and use of a current rate for the discounting of future cash flows; (2) standardization and improvement in the accounting for certain market-based options or guarantees associated with deposit (or account balance) contracts (referred to as market risk benefits); (3) simplification of the amortization of deferred acquisition costs; and (4) enhanced disclosures.

The guidance is effective for public business entities that meet the definition of an SEC filer for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted. For changes related to the liability for future policy benefits and deferred acquisition costs, the new guidance requires adoption using a modified retrospective approach upon transition with an option to elect a retrospective approach. For changes related to market risk benefits, the new guidance requires a retrospective approach.

The Company intends to implement this standard using the modified retrospective approach for the liability for future policy benefits and deferred acquisition costs and retrospective approach for market risk benefits with an adoption date of January 1, 2022 and a transition date of January 1, 2020. (The Company will not early adopt the guidance). The Company has completed the design and planning phase of its implementation effort and has begun detailed implementation activities. The Company continues to evaluate the impact of this guidance but anticipates that the new standard will have a material impact on the Company's consolidated financial statements. The new guidance is expected to increase financial statement volatility primarily due to the requirement to measure market risk benefits at fair value, which is recorded in net income, except for changes in value attributable to changes in an entity's non-performance risk, which is recorded in other comprehensive income. In addition, the new guidance is expected to have a significant impact on the Company's systems, processes and controls.

3. Significant transactions

Reinsurance transactions and purchase of partnership interests

Effective June 1, 2018, the Company entered into coinsurance agreements with Talcott Resolution Life Insurance Company and Talcott Resolution Life and Annuity Insurance Company, subsidiaries of Talcott Resolution Life, Inc., whereby it assumed approximately \$8.7 billion of fixed annuity and payout annuity reserves. Concurrent with the aforementioned coinsurance agreement, the Company also ceded approximately \$1.2 billion of reserves to a third party on a funds withheld basis. See Note 10—"Reinsurance" and Note 20—"Related party transactions" for additional information.

On May 31, 2018, the Company closed on its previously announced purchase of a \$150 million limited partnership interest in the newly formed acquisition vehicle, Talcott Resolution Life, Inc., which owns Talcott Resolution Life Insurance Company and Talcott Resolution Life and Annuity Insurance Company (formerly Hartford Life Insurance Company and Hartford Life and Annuity Insurance Company.) The partnership interest represents approximately a 9% stake in Talcott Resolution Life, Inc. and entitles the Company to a 4.9% voting interest and the right to designate one of the eleven board members.

The Company also agreed to enter into an investment management agreement with Hartford Investment Management Company, or "HIMCO," whereby HIMCO, immediately following the closing of the sale of all of the issued and outstanding capital stock of Talcott Resolution Life Insurance Company will manage for the Company at all times during a five-year term a minimum of 35% of the fair market value of the assets maintained to support the Company's liabilities under the reinsurance agreements with Talcott Resolution Life Insurance Company and Talcott Resolution Life and Annuity Insurance Company. The assets managed by HIMCO under the investment management agreement include corporate bonds, privately placed debt investments and commercial mortgage loans (including participations therein).

Issuance and modification of debt

On October 7, 2019, Global Atlantic (Fin) Company, or "FinCo," a Delaware corporation and a direct subsidiary of the Company, issued \$500 million aggregate principal amount 4.400% senior unsecured notes due 2029, or the "2029 Senior Notes." The 2029 Senior Notes are fully and unconditionally guaranteed on a senior unsecured basis by the Company. See Note 11 —"Debt" and Note 21 —"Commitments and contingencies" for additional information on the 2029 Senior Notes.

On October 8, 2019, the Company used a portion of the proceeds from the 2029 Senior Notes to repay \$405 million of outstanding revolving borrowings under the revolving credit facility, or "RCF." See Note 11—"Debt" and Note 21—"Commitments and contingencies" for additional information on the 2029 Senior Notes and RCF.

On June 27, 2019, FinCo and the Company entered into a Joinder Agreement to the Term Loan Credit Agreement pursuant to which FinCo borrowed and the Company guaranteed, a \$125 million term loan on the same terms and with the same maturity as the existing \$100 million term loan. See Note 11 —"Debt" and Note 21—"Commitments and contingencies" for additional information on the term loan.

On December 21, 2018, FinCo and the Company, as a guarantor, entered into a term loan agreement, pursuant to which FinCo borrowed \$100 million due December 21, 2021. See Note 11 — "Debt" and Note 21 — "Commitments and contingencies" for additional information on the term loan.

On May 21, 2018, the Company amended and restated its RCF to among other things: (1) upsize the facility size from \$650 million to \$1 billion; (2) increase the aggregate letters of credit the Company may issue from \$350 million to \$500 million; (3) extend the maturity of the RCF from December 2021 to May 2023; and (4) remove certain restrictive covenants. FinCo is the borrower under the RCF, and the Company guarantees FinCo's obligations under the RCF. See Note 11 —"Debt" and Note 21 —"Commitments and contingencies" for additional information on the RCF.

4. Investments

Fixed maturity securities

The cost or amortized cost and fair value for AFS fixed maturity securities were as follows:

		oot or		Gross ur	rea	lized		
As of December 31, 2019	Cost or - amortized cost			gains	losses			Fair value
(\$ in millions)								
AFS fixed maturity securities portfolio by type:								
U.S. government and agencies	\$	583	\$	20	\$	(1)	\$	602
U.S. state, municipal and political subdivisions		2,206		378		(2)		2,582
Corporate ⁽¹⁾		22,262		1,736		(43)		23,955
RMBS		8,005		774		(32)		8,747
CMBS		3,727		164		(6)		3,885
CLOs		2,905		4		(57)		2,852
All other structured securities ⁽²⁾		6,938		222		(18)		7,142
Total AFS fixed maturity securities	\$	46,626	\$	3,298	\$	(159)	\$	49,765

⁽¹⁾ Includes related party corporate AFS fixed maturity securities with amortized cost, gross unrealized gains, gross unrealized losses and fair value of \$149 million, \$30 million, \$0 million and \$179 million, respectively.

⁽²⁾ Includes primarily ABS and CBOs.

		N4	Gross ur				
As of December 31, 2018		Cost or rtized cost	gains	losses			Fair value
(\$ in millions)							
AFS fixed maturity securities portfolio by type:							
U.S. government and agencies	\$	273	\$ 13	\$	(11)	\$	275
U.S. state, municipal and political subdivisions		2,116	163		(11)		2,268
Corporate ⁽¹⁾		16,792	154		(710)		16,236
RMBS		8,229	726		(74)		8,881
CMBS		3,305	42		(51)		3,296
CLOs		5,282	_		(198)		5,084
All other structured securities ⁽²⁾		6,019	89		(41)		6,067
Total AFS fixed maturity securities	\$	42,016	\$ 1,187	\$	(1,096)	\$	42,107

⁽¹⁾ Includes related party corporate AFS fixed maturity securities with amortized cost, gross unrealized gains, gross unrealized losses and fair value of \$119 million, \$0 million, \$(4) million and \$115 million, respectively.

As of December 31, 2019 and 2018, there were no non-credit OTTI losses reflected within the fair value of AFS fixed maturity securities.

Actual maturities may differ from contractual maturities, because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties, or the Company may have the right to put or sell the obligations back to the issuers.

⁽²⁾ Includes primarily ABS and CBOs.

The maturity distribution for AFS fixed maturity securities is as follows:

As of December 31, 2019	Cost or amortized cost		Fair value	
(\$ in millions)				
Due in one year or less ⁽¹⁾	\$ 455	\$	458	
Due after one year through five years ⁽²⁾	4,442		4,527	
Due after five years through ten years ⁽³⁾	6,640		6,978	
Due after ten years ⁽⁴⁾	13,514		15,176	
Subtotal	 25,051		27,139	
RMBS	8,005		8,747	
CMBS	3,727		3,885	
CLOs	2,905		2,852	
All other structured securities	6,938		7,142	
Total AFS fixed maturity securities	\$ 46,626	\$	49,765	

- (1) Includes related party AFS fixed maturity securities with amortized cost and fair value of \$1 million and \$1 million, respectively.
- (2) Includes related party AFS fixed maturity securities with amortized cost and fair value of \$14 million and \$14 million, respectively.
- (3) Includes related party AFS fixed maturity securities with amortized cost and fair value of \$2 million and \$2 million, respectively.
- 4) Includes related party AFS fixed maturity securities with amortized cost and fair value of \$132 million and \$162 million, respectively.

Securities in a continuous unrealized loss position

The following tables provide information about the Company's AFS fixed maturity securities that have been continuously in an unrealized loss position:

	Less than 12 months			12 months or more				Total				
As of December 31, 2019	Fair value		Unrealized losses		Fair value		Unrealized losses		Fair value		Unrealized losses	
(\$ in millions)												
AFS fixed maturity securities portfolio by type:												
U.S. government and agencies	\$	403	\$	(1)	\$	_	\$	_	\$	403	\$	(1)
U.S. state, municipal and political subdivisions		173		(2)		1		_		174		(2)
Corporate		1,570		(21)		743		(22)		2,313		(43)
RMBS		939		(19)		344		(13)		1,283		(32)
CMBS		435		(5)		41		(1)		476		(6)
CLOs		439		(8)		1,994		(49)		2,433		(57)
All other structured securities		1,077		(10)		158		(8)		1,235		(18)
Total AFS fixed maturity securities	\$	5,036	\$	(66)	\$	3,281	\$	(93)	\$	8,317	\$	(159)

	L	_ess than	han 12 months 12 months or n		12 months or more		s or more		s or more		s or more		s or more		Total									
As of December 31, 2018		Fair value	U	nrealized losses		Fair value	Unrealized losses																Fair Unr ⁄alue lo	
(\$ in millions)																								
AFS fixed maturity securities portfolio by type:																								
U.S. government and agencies	\$	31	\$	_	\$	141	\$	(11)	\$	172	\$	(11)												
U.S. state, municipal and political subdivisions		390		(7)		79		(4)		469		(11)												
Corporate		9,608		(458)		2,356		(252)		11,964		(710)												
RMBS		1,979		(54)		592		(20)		2,571		(74)												
CMBS		1,014		(19)		791		(32)		1,805		(51)												
CLOs		4,464		(182)		514		(16)		4,978		(198)												
All other structured securities		1,708		(21)		518		(20)		2,226		(41)												
Total AFS fixed maturity securities	\$	19,194	\$	(741)	\$	4,991	\$	(355)	\$	24,185	\$	(1,096)												

Unrealized gains and losses can be created by changing interest rates or several other factors, including changing credit spreads. The Company had gross unrealized losses on below investment grade AFS fixed maturity securities of \$20 million and \$39 million as of December 31, 2019 and 2018, respectively. The single largest unrealized loss on AFS fixed maturity securities was \$3 million and \$5 million as of December 31, 2019 and 2018, respectively. The Company had 1,272 and 5,472 securities in an unrealized loss position as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, AFS fixed maturity securities in an unrealized loss position for over 12 months consisted of 485 and 1,296 debt securities, respectively. These debt securities primarily relate to CLO, corporate and RMBS fixed maturity securities, which have depressed values due primarily to an increase in interest rates since the purchase of these securities. Unrealized losses were not recognized in earnings on these debt securities since the Company neither intends to sell the securities nor does it believe that it is more-likely-than-not that it will be required to sell these securities before recovery of their cost or amortized cost basis. For securities with significant declines in value, individual security level analysis was performed utilizing underlying collateral default expectations, market data and industry analyst reports.

Mortgage and other loan receivables

Mortgage and other loan receivables consist of the following:

		As of December 31,																				
		2019		2019		2019		2019		2019		2019		2019		2019		2019		2019		2018
(\$ in millions)																						
Commercial mortgage loans ⁽¹⁾	\$	6,740	\$	5,461																		
Residential mortgage loans		4,011		2,648																		
Other loan receivables ⁽²⁾⁽³⁾		2,777		2,046																		
Total mortgage and other loan receivables		13,528		10,155																		
Allowance for loan losses		(22)		(11)																		
Total mortgage and other loan receivables, net of allowance for loan losses	\$	13,506	\$	10,144																		

- (1) Includes \$6 million and \$88 million of loans carried at fair value using the fair value option as of December 31, 2019 and 2018, respectively. The fair value option was elected for these loans for asset-liability matching purposes. These loans had unpaid principal balances of \$0 million and \$87 million as of December 31, 2019 and 2018, respectively.
- (2) As of December 31, 2019 and 2018, respectively, other loan receivables consisted primarily of warehouse facilities backed by residential and commercial real estate of \$1.2 billion and \$1.6 billion, consumer loans of \$1.0 billion and \$229 million, and renewable energy development loans of \$450 million and \$143 million. Renewable energy development loans include related party loans with a carrying value of \$238 million and \$107 million as of December 31, 2019 and 2018, respectively.
- (3) Includes \$253 million and \$107 million of loans carried at fair value using the fair value option as of December 31, 2019 and 2018, respectively. These loans had unpaid principal balances of \$252 million and \$107 million as of December 31, 2019 and 2018, respectively.

The maturity distribution by contractual maturity for residential and commercial mortgage loans is as follows as of December 31, 2019:

Years	Residential Comme		Total mortgage loans
(\$ in millions)			
2020	\$ 743	\$ 337	\$ 1,080
2021	193	645	838
2022	148	620	768
2023	718	975	1,693
2024	121	667	788
2025 and thereafter	2,088	3,496	5,584
Total	\$ 4,011	\$ 6,740	\$ 10,751

Actual maturities could differ from contractual maturities, because borrowers may have the right to prepay (with or without prepayment penalties) and loans may be refinanced.

The Company diversifies its mortgage loan portfolio by both geographic region and property type to reduce concentration risk. The following tables present the Company's mortgage loans by geographic region and property type:

Mortgage loans - carrying value by geographic region as of December 31,	2019		 2018
(\$ in millions)			
Pacific	\$	2,966	\$ 1,892
South Atlantic		2,213	1,580
West South Central		1,772	1,313
Middle Atlantic		1,106	791
East North Central		627	535
Mountain		544	438
New England		377	343
East South Central		267	227
West North Central		152	146
Other regions		727	844
Total by geographic region	\$	10,751	\$ 8,109

Mortgage loans - carrying value by property type as of December 31,	2019		2018
(\$ in millions)			
Residential	\$	4,069	\$ 2,706
Office building		2,670	1,952
Industrial		1,374	1,023
Apartment		1,240	986
Retail		684	850
Other property types		509	398
Warehouse		205	194
Total by property type	\$	10,751	\$ 8,109

Allowance for loan losses

Changes in the allowance for loan losses are summarized below:

	As of December 31,								
		2019	2018			2017			
(\$ in millions)									
Balance, as of beginning of year	\$	11	\$	4	\$	_	_		
Provisions, net of releases		15		11		4	4		
Charge-offs, net of recoveries		(4)		(4)		-	_		
Balance, as of end of year	\$	22	\$	11	\$		4		

As of December 31, 2019 and 2018 the Company had \$89 million and \$65 million, respectively, of mortgage loans that were 90 days or more past due or in the process of foreclosure. The Company ceases accrual of interest on loans that are more than 90 days past due, and recognizes income as cash is received. As of December 31, 2019 and 2018 there were \$29 million and \$23 million, respectively, of mortgage loans that were non-income producing.

As of December 31, 2019 and 2018, the Company had \$1 million and less than \$1 million, respectively, of other loan receivables that were delinquent by more than 120 days or in default.

Loan-to-value ratio on mortgage loans

The loan-to-value ratio is expressed as a percentage of the current amount of the loan relative to the value of the underlying collateral. The following table summarizes the Company's loan-to-value ratios for its commercial mortgage loans as of December 31, 2019 and 2018:

	As of December 31,									
		201	9		18					
Loan-to-value	Carryii	Percentage of commercial mortgage carrying value loans		Carry	/ing value	Percentage of commercial mortgage loans				
(\$ in millions, except percentages)										
70% and less	\$	6,217	92%	\$	5,224	96%				
71% - 90%		523	8%		237	4%				
Total commercial mortgage loans	\$	6,740	100%	\$	5,461	100%				

Changing economic conditions affect the Company's valuation of commercial mortgage loans. Changing vacancies and rents are incorporated into the discounted cash flow analysis that the Company performs for monitored loans and may contribute to the establishment of (or increase or decrease in) a commercial mortgage loan valuation allowance for losses. In addition, the Company continuously monitors its commercial mortgage loan portfolio to identify risk. Areas of emphasis are properties that have exposure to specific geographic events, or have deteriorating credit.

The weighted average loan-to-value ratio for the Company's residential mortgage loans was 75% and 87% as of December 31, 2019 and 2018, respectively.

Other investments

Other investments consist of the following:

		As of Dec	cember 31,		
	2019			2018	
(\$ in millions)					
Investments in renewable energy ⁽¹⁾⁽²⁾⁽³⁾	\$	2,947	\$	2,135	
Investments in transportation and other leased assets ⁽⁴⁾		1,796		1,321	
Other investment partnerships		558		450	
Investments in real estate		384		346	
Life settlement contracts, single premium immediate annuities and other investments ⁽⁵⁾		49		277	
Federal Home Loan Bank common stock		113		106	
Total other investments	\$	5,847	\$	4,635	

- (1) Net of accumulated depreciation attributed to consolidated renewable energy assets of \$38 million and \$16 million as of December 31, 2019 and 2018, respectively.
- (2) Includes related party balance of \$145 million and \$159 million as of December 31, 2019 and 2018, respectively.
- (3) Includes an equity investment in Origis USA, LLC of \$38 million and \$42 million carried at fair value using the fair value option as of December 31, 2019 and 2018, respectively.
- (4) Net of accumulated depreciation of \$158 million and \$83 million as of December 31, 2019 and 2018, respectively.
- (5) During 2019, the Company sold life settlement contracts with a book value of \$233 million for total proceeds of \$221 million, resulting in a realized loss of \$12 million.

The total amount of other investments accounted for using the equity method of accounting was \$1.7 billion as of both December 31, 2019 and 2018. The Company's maximum exposure to loss related to these equity method investments is limited to the carrying value of these investments plus unfunded commitments of \$41 million and \$56 million as of December 31, 2019 and 2018, respectively.

In addition, the Company has investments that would otherwise require the equity method of accounting for which the fair value option has been elected. The carrying amount of these investments was \$151 million and \$138 million as of December 31, 2019 and 2018, respectively.

Summarized financial information of equity method investees

The following is the aggregated summarized financial information of our equity method investees, including those for which the fair value option has been elected. These primarily include investments in private equity funds, investments in renewable energy projects and certain strategic investments. The Company's ownership percentage in the respective investments varies and is generally between 3% and 40%.

		As of Dec	emb	er 31,
Aggregate balance sheet information of equity method investees	2019			2018
(\$ in millions)				
Total assets ⁽¹⁾	\$	177,398	\$	173,906
Total liabilities ⁽²⁾	\$	162,139	\$	159,430

⁽¹⁾ Includes \$161.8 billion and \$159.1 billion of assets related to the investment in Talcott Resolution Life, Inc. as of December 31, 2019 and 2018, respectively.

⁽²⁾ Includes \$159.3 billion and \$157.5 billion of liabilities related to the investment in Talcott Resolution Life, Inc. as of December 31, 2019 and 2018, respectively.

	For the years ended December 31,							
Aggregate income statement information of equity method investees		2019		2018		2017		
(\$ in millions)								
Revenues ⁽¹⁾	\$	2,787	\$	1,500	\$	353		
Expenses ⁽²⁾		2,061		794		138		
Net income	\$	726	\$	706	\$	215		

- (1) Includes \$2.1 billion and \$473 million of revenues related to the investment in Talcott Resolution Life, Inc. for the years ended December 31, 2019 and 2018, respectively. There were no revenues related to the investment in Talcott Resolution Life, Inc. for the year ended December 31, 2017.
- (2) Includes \$1.4 billion and \$391 million of expenses related to the investment in Talcott Resolution Life, Inc. for the years ended December 31, 2019 and 2018, respectively. There were no expenses related to the investment in Talcott Resolution Life, Inc. for the year ended December 31, 2017.

Investments in life settlement contracts

The following table presents additional information regarding the life settlement contracts and their expected duration as of December 31, 2019:

Years	Number of contracts	Expected cash flow	Death benefit payout
(\$ in millions, except number of contracts)			
2020 to 2022	_	\$ -	\$ —
2023	1	2	5
2024 and thereafter	19	96	117
Total	20	\$ 98	\$ 122

As of December 31, 2019, the anticipated life insurance premiums required to keep the life settlement contracts in-force are \$13 million in 2020 through 2022, \$4 million in 2023 and \$3 million in 2024 and thereafter. The anticipated life settlement premium payments are expected to be primarily funded by incoming single premium immediate annuity payments tied to the same reference lives.

Variable interest entities

The Company has created certain VIEs to hold investments, including railcar, aviation and other transportation equipment, renewable energy projects, life settlement contracts and single premium immediate annuities, fixed maturity securities, residential rental properties and student loans. These VIEs issue beneficial interests primarily to the Company's insurance entities and the Company maintains the power to direct the activities of the VIEs that most significantly impact their economic performance and bears the obligation to absorb losses or receive benefits from the VIEs that could potentially be significant. Accordingly, the Company is the primary beneficiary of these VIEs, which are consolidated in the Company's results. Where these VIEs or entities consolidated by these VIEs issue beneficial interests to third-parties, they are reported as non-controlling interests by the Company.

The following table illustrates the Company's consolidated VIE positions:

	_	er 31,		
		2019		2018
(\$ in millions)				
Assets of consolidated variable interest entities:				
Investments:				
AFS fixed maturity securities, at fair value	\$	1,236	\$	503
Mortgage and other loan receivables		1,044		249
Other investments:				
Investments in renewable energy		2,883		2,067
Investments in transportation and other leased assets		1,796		1,321
Life settlement contracts and single premium immediate annuities		_		228
Investments in real estate		382		344
Other investment partnerships		36		35
Total other investments		5,097		3,995
Total investments		7,377		4,747
Cash and cash equivalents		191		88
Accrued investment income		41		23
Other assets		62		3
Total assets of consolidated variable interest entities	\$	7,671	\$	4,861
Liabilities of consolidated variable interest entities:				
Accrued expenses and other liabilities	\$	181	\$	106
Total liabilities of consolidated variable interest entities		181		106
Redeemable non-controlling interests		94		_
Non-controlling interests of consolidated variable interest entities		135		70
Total liabilities, redeemable non-controlling interests and non-controlling interests of consolidated variable interest entities	\$	410	\$	176

The carrying amount and maximum exposure to loss relating to VIEs in which the Company holds a significant variable interest but is not the primary beneficiary and which have not been consolidated were as follows:

				As of Dece	emb	er 31,			
		2019				2018			
	Maximum Carrying exposure to amount loss ⁽¹⁾		Carrying amount		Maximum exposure to loss ⁽¹⁾				
(\$ in millions)									
Other investment partnerships	\$	513	\$	559	\$	409	\$	471	
Investments in renewable energy partnerships		64		64		68		68	
Total	\$	577	\$	623	\$	477	\$	539	

⁽¹⁾ The maximum exposure to loss relating to other limited and renewable energy partnership interests is equal to the carrying amounts plus any unfunded commitments.

Federal Home Loan Bank investment and funding agreements

Certain of the Company's subsidiaries are members of regional banks in the FHLB system. These subsidiaries have also entered into funding agreements with their respective FHLB. The funding agreements are issued in exchange for cash. The funding agreements require that the Company pledge eligible assets, such as commercial mortgage loans, as collateral. With respect to certain classes of eligible assets, the FHLB holds the pledged eligible assets in custody at the respective FHLB. The liabilities for the funding agreements are included in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. Information related to the FHLB investment and funding agreements as of December 31, 2019 and 2018 is as follows:

	In	vestment in c	:om	mon stock	Funding agreem n stock FHLB mem			ents issued to per banks Colla				teral		
		2019		2018		2019		2018		2019		2018		
(\$ in millions)														
FHLB Indianapolis	\$	69	\$	64	\$	1,544	\$	1,344	\$	2,527	\$	2,361		
FHLB Des Moines		30		27		500		420		811		775		
FHLB Boston		14		15		238		239		521		484		
Total	\$	113	\$	106	\$	2,282	\$	2,003	\$	3,859	\$	3,620		

Repurchase agreement transactions

For the years ended December 31, 2019 and 2018, the Company participated in third-party repurchase agreements. The Company accounts for these transactions as secured borrowings. There were no transactions outstanding and the Company did not pledge any associated collateral as of December 31, 2019 and 2018.

Other

As of December 31, 2019 and 2018, the Company had exposure to two separate issuers that exceeded 10% of equity. The carrying value of the Company's 33% interest in SP Solar Holdings I, LP, a holding company for 26 operating renewable energy plants, was \$1.1 billion and \$1.2 billion as of December 31, 2019 and 2018, respectively. Separately, the Company held \$634 million and \$610 million of investments in the AAA and AA rated tranches of a single collateralized loan obligation as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, the cost or amortized cost and fair value of the assets on deposit with various state and governmental authorities were \$149 million and \$174 million, and \$144 million and \$154 million, respectively.

Net investment income

Net investment income is comprised primarily of interest income, including amortization of premiums and accretion of discounts, based on yields which change due to expectations in projected cash flows, dividend income from common and preferred stock, earnings from investments accounted for under equity method accounting, and lease income on other investments.

The components of net investment income were as follows:

	For the years ended December 31,					
		2019		2018		2017
(\$ in millions)						
Fixed maturity securities – interest and other income	\$	2,180	\$	1,921	\$	1,652
Equity securities – dividends and other income		6		6		6
Mortgage and other loan receivables		565		366		206
Income from funds withheld at interest		12		52		106
Policy loans		37		40		42
Investments in transportation and other leased assets		176		127		70
Investments in renewable energy		78		88		40
Investments in real estate		12		8		_
Short-term and other investment income		134		81		27
Gross investment income ⁽¹⁾		3,200		2,689		2,149
Less investment expenses:						
Investment management and administration ⁽²⁾		155		130		95
Transportation and renewable energy asset depreciation and maintenance		113		82		38
Interest expense on derivative collateral and repurchase agreements		9		8		6
Net investment income	\$	2,923	\$	2,469	\$	2,010

⁽¹⁾ Includes income from related parties of \$32 million, \$60 million and \$54 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company had no fixed maturity securities in a non-accrual status as of December 31, 2019, 2018 or 2017. The Company had \$4 million of fixed maturity securities which were non-income producing as of December 31, 2019. The Company had no fixed maturity securities which were non-income producing as of December 31, 2018 or 2017.

Net investment gains (losses)

Net investment gains (losses) were as follows:

	For the	/ears	ended Decer	nber	31,
	2019				2017
(\$ in millions)					
AFS fixed maturity securities	\$ 89	\$	60	\$	163
Trading fixed maturity securities	104		(21)		_
Derivatives	345		(294)		274
Funds withheld receivable at interest	15		(23)		18
Other investments ⁽¹⁾	35		5		(8)
Impairments of life settlement contracts	(12)		(6)		(9)
OTTI on AFS fixed maturity securities	_		(5)		(14)
Net investment gains (losses)	\$ 576	\$	(284)	\$	424

⁽¹⁾ Includes gains (losses) from related party of \$(2) million, \$5 million and \$(2) million for the years ended December 31, 2019, 2018 and 2017, respectively.

⁽²⁾ Includes expenses from Goldman Sachs Asset Management LP, or "GSAM," an affiliate of Goldman Sachs, a related party, and Centaurus Renewable Energy, a related party, of \$13 million, \$12 million and \$13 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Other-than-temporary impairment

Available-for-sale fixed maturity securities

The table below presents a roll-forward of the cumulative credit loss component of OTTI losses recognized in net investment gains (losses) in the consolidated statements of income on AFS fixed maturity securities still held by the Company as of December 31, 2019, 2018 and 2017:

	As of December 31,						
		2019		2018		2017	
(\$ in millions)							
Balance, as of beginning of year	\$	19	\$	15	\$	21	
Additions:							
Initial impairments - credit loss OTTI recognized on securities not previously impaired		_		5		14	
Additional impairments - credit loss OTTI recognized on securities previously impaired		_		_		_	
Reductions:							
Due to sales (or maturities, pay downs or prepayments) during the period of securities previously impaired as credit loss OTTI		(18)		(1)		(20)	
Balance, as of end of year	\$	1	\$	19	\$	15	

Other investment impairment

As part of its periodic review of life settlement contracts for impairment, the Company determined several contracts were impaired for the years ended December 31, 2019, 2018 and 2017, because the sum of the carrying value plus expected future premium payments exceeded the expected contract value. Consequently, the Company recorded impairments on those life settlement contracts of \$12 million, \$6 million and \$9 million for the years ended December 31, 2019, 2018 and 2017, respectively, which are included in net investment gains (losses) in the consolidated statements of income.

Proceeds and gross gains and losses from voluntary sales

The proceeds from voluntary sales and the gross gains and losses on those sales of AFS fixed maturity securities were as follows:

	For the years ended December 31,									
	2019		2018		2017					
(\$ in millions)										
AFS fixed maturity securities:										
Proceeds from voluntary sales	\$ 10,278	\$	8,094	\$	6,162					
Gross gains	166		145		245					
Gross losses	(124)		(81)		(99)					

5. Derivative instruments

The Company holds derivative instruments that are primarily used in its hedge program. The Company has established a hedge program that seeks to mitigate economic impacts primarily from interest rate and equity price movements, while taking into consideration accounting and capital impacts.

The Company hedges interest rate and equity market risks associated with its insurance liabilities including fixed-indexed annuities, indexed universal life policies, variable annuity policies and variable universal life policies, among others. For fixed-indexed annuities and indexed universal life policies, the Company generally seeks to use static hedges to offset the exposure primarily created by changes in its embedded derivative balances. The Company generally purchases options which replicate the crediting rate strategies, often in the form of call spreads. Call spreads are the purchase of a call option matched by the sale of a different call option. For variable annuities and variable universal life policies, the Company generally seeks to dynamically hedge its exposure to changes in the value of the guarantee it provides to policyholders. Doing so requires the active trading of several financial instruments to respond to changes in market conditions. In addition, the Company enters into inflation swaps to manage inflation risk associated with inflation-indexed preneed policies.

In the context of specific reinsurance transactions in the institutional channel or acquisitions, the Company may also enter into hedges which are designed to limit short-term market risks to the economic value of the target assets. From time to time, the Company may also enter into hedges designed to mitigate interest rate and credit risk in investment income, interest expense, and fair value of assets and liabilities. In addition, the Company may enter into currency swaps and forwards to manage any foreign exchange rate risks that may arise from investments denominated in foreign currencies.

The Company attempts to mitigate the risk of loss due to ineffectiveness under these derivative investments through a regular monitoring process which evaluates the program's effectiveness. The Company is exposed to risk of loss in the event of non-performance by the counterparties and, accordingly, all option contracts are purchased from counterparties that have been evaluated for creditworthiness. All of these counterparties are nationally recognized financial institutions with a Moody's/S&P investment-grade credit rating. Management monitors the Company's derivative activities by reviewing portfolio activities and risk levels. Management also oversees all derivative transactions to ensure that the types of transactions entered into and the results obtained from those transactions are consistent with both the Company's risk management strategy and the Company's policies and procedures.

The restricted cash which was held in connection with open derivative transactions with exchange brokers was \$141 million and \$54 million as of December 31, 2019 and 2018, respectively.

The Company also has embedded derivatives related to reinsurance contracts that are accounted for on a modified coinsurance and funds withheld basis. An embedded derivative exists because the arrangement exposes the reinsurer to third-party credit risk. These embedded derivatives are included in funds withheld receivable at interest in the consolidated balance sheets.

Derivatives designated as accounting hedges

Where the Company has derivative instruments that are designated and qualify as accounting hedges, these derivative instruments receive hedge accounting.

The Company has designated an interest rate swap to hedge the interest rate risk associated with issued 2029 Senior Notes in a fair value hedge. The 2029 Senior Notes are reported in debt in the consolidated balance sheets and are hedged through their maturity in October 2029. This hedge qualifies for the shortcut method of assessing hedge effectiveness. For the year ended December 31, 2019, the carrying amount of the hedged 2029 Senior Notes was \$479 million, which is reduced by a fair value hedge adjustment of \$15 million. A loss due to changes in the fair value of the swap of \$15 million was recognized in interest expense in the consolidated statements of income for the year ended December 31, 2019, fully offsetting the fair value change in the hedged 2029 Senior Notes.

The Company has designated an interest rate swap to hedge the interest rate risk associated with the planned purchase of AFS debt securities in a cash flow hedge. Regression analysis is used to assess the effectiveness of this hedge. For the year ended December 31, 2019, there was a loss of \$2 million on the interest rate swap recorded in accumulated other comprehensive income. Amounts deferred in accumulated other comprehensive income are reclassified to net investment income following the qualifying purchases of AFS securities, as an adjustment to the yield earned over the life of the purchased securities, using the effective interest method. This arrangement is hedging purchases in 2020 and is expected to affect earnings until 2050. There were no securities purchased and no amounts reclassified to income for the year ended December 31, 2019. The Company estimates that the amount of gains/losses in accumulated other comprehensive income to be reclassified into earnings in the next 12 months will not be material.

The fair value and notional value of the derivative assets and liabilities were as follows:

As of December 31, 2019	Notional value		Derivative assets		Derivative liabilities
(\$ in millions)					
Equity market contracts	\$	15,495	\$	769	\$ 32
Interest rate contracts		3,994		67	60
Foreign currency contracts		40		1	1
Impact of netting ⁽¹⁾				(14)	(14)
Fair value included within derivative assets and derivative instruments payable				823	79
Embedded derivative – indexed universal life products				_	820
Embedded derivative – annuity products				_	1,426
Fair value included within policyholder liabilities				_	2,246
Embedded derivative – funds withheld at interest				79	61
Fair value included within total assets and liabilities			\$	902	\$ 2,386

(1) Represents netting of derivative exposures covered by qualifying master netting agreements.

As of December 31, 2018	Notional value		Derivative assets			Derivative liabilities
(\$ in millions)						
Equity market contracts	\$	11,801	\$	173	\$	4
Interest rate contracts		4,492		81		71
Foreign currency contracts		29		2		_
Impact of netting ⁽¹⁾				(48)		(48)
Fair value included within derivative assets and derivative instruments payable				208		27
Embedded derivative – indexed universal life products				_		526
Embedded derivative – annuity products				_		786
Fair value included within policyholder liabilities						1,312
Embedded derivative – funds withheld at interest				68		21
Fair value included within total assets and liabilities			\$	276	\$	1,360

⁽¹⁾ Represents netting of derivative exposures covered by qualifying master netting agreements.

The amounts of derivative gains and losses recognized for the years ended December 31, 2019, 2018, and 2017, respectively, are reported in the consolidated statements of income as follows:

		For the y	ears ended Decer	nber	31,
Derivative contracts not designated as hedges		2019	2018		2017
(\$ in millions)					
Net investment gains (losses):					
Embedded derivatives	\$	(29)	\$ (61)	\$	44
Equity index options		574	(272)		465
Equity future contracts		(324)	73		(238)
Interest rate contracts		124	(33)		17
Other		_	(2)		(14)
Total included in net investment gains (losses)	\$	345	\$ (295)	\$	274

	mber 31,				
2019			2018		2017
\$	_	\$	1	\$	_
\$	_	\$	1	\$	_
\$	15	\$	_	\$	_
\$	15	\$	_	\$	_
	\$ \$ \$ \$	\$ — \$ — \$ —	\$ — \$ \$ — \$ \$ 15	\$ — \$ 1 \$ — \$ 1 \$ — \$ 1	\$ — \$ 1 \$ \$ — \$ 1 \$ \$ — \$

The amount of net derivative assets and liabilities after consideration of collateral received or pledged were as follows:

	As of December 31,						
		2019		2018			
(\$ in millions)							
Derivative assets (excluding embedded derivatives)	\$	823	\$	208			
Derivative liabilities (excluding embedded derivatives)		(79)		(27)			
Net amount		744		181			
Net collateral (received) / pledged		(717)		(125)			
Net amount after collateral	\$	27	\$	56			

6. Fair value disclosure of financial instruments

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date (the exit price). The best evidence of fair value is a quoted price in an active market. If listed prices or quotations are not available, fair value is determined by reference to prices of similar instruments and quoted prices or recent prices in less active markets.

U.S. GAAP establishes a three-level valuation hierarchy based upon observable and non-observable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. The fair value hierarchy prioritizes inputs to the valuation techniques used to measure fair value, giving the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. A financial instrument's level in the fair value hierarchy is based on the lowest level of any input that is significant to fair value measurement of the financial instrument. The three levels of the fair value hierarchy are described below:

Basis of fair value measurement

Level 1: Unadjusted quoted prices in active markets to which the Company had access as of the measurement date for identical, unrestricted assets and liabilities.

Level 2: Inputs to valuation techniques are observable either directly or indirectly through quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable; and

Level 3: Model-derived where one or more inputs to the valuation techniques are significant and unobservable.

The measurement of Level 3 financial instrument fair values uses unobservable inputs that are based on management judgment and the internal determination of assumptions that market participants would use in valuing them. Valuation subjectivity increases when markets are less liquid due to the lack of more transparent market-based inputs, which may increase the potential that estimated fair values are not reflective of the price at which an actual transaction would occur.

The following tables represent the Company's hierarchy for its assets and liabilities measured at fair value on a recurring basis:

As of December 31, 2019	Level 1		Level 2	Level 3	Total
(\$ in millions)					
Assets:					
AFS fixed maturity securities:					
U.S. government and agencies	\$ 528	\$	62	\$ 12	\$ 602
U.S. state, municipal and political subdivisions	_		2,582	_	2,582
Corporate ⁽¹⁾	_		21,699	2,256	23,955
Structured securities	7		20,767	1,852	22,626
Total AFS fixed maturity securities	535		45,110	4,120	49,765
Trading fixed maturity securities:		_			
U.S. government and agencies	17		2	3	22
U.S. state, municipal and political subdivisions	_		41	_	41
Corporate	13		607	37	657
Structured securities	_		262	2	264
Total trading fixed maturity securities	 30		912	42	984
Equity securities	 _	_		58	58
Mortgage and other loan receivables ⁽²⁾	_		6	253	259
Other investments ⁽³⁾	_		_	424	424
Funds withheld receivable at interest	_		310	79	389
Reinsurance recoverable	_		_	1,316	1,316
Derivative assets:					
Equity market contracts	30		739	_	769
Interest rate contracts	1		66	_	67
Foreign currency contracts	_		1	_	1
Impact of netting ⁽⁴⁾	(9)		(5)	_	(14)
Total derivative assets	22		801	_	823
Separate account assets	5,504		_	_	5,504
Total assets at fair value	\$ 6,091	\$	47,139	\$ 6,292	\$ 59,522
Liabilities:					
Policyholder liabilities	\$ _	\$	_	\$ 429	\$ 429
Closed block policy liabilities	_		_	1,368	1,368
Funds withheld payable at interest	_		_	61	61
Derivative instruments payable:					
Equity market contracts	31		1	_	32
Interest rate contracts	17		43	_	60
Foreign currency contracts	_		1	_	1
Impact of netting ⁽⁴⁾	(9)		(5)	_	(14)
Total derivative instruments payable	39	_	40	_	79
Reinsurance liabilities	_		_	5	5
Embedded derivative — indexed universal life products	_		_	820	820
Embedded derivative — annuity products	_		_	1,426	1,426
Total liabilities at fair value	\$ 39	\$	40	\$ 4,109	\$ 4,188

⁽¹⁾ Includes related party balance of \$179 million in Level 2 for corporate AFS fixed maturity securities.

⁽²⁾ Includes related party balance of \$238 million in Level 3 for mortgage and other loan receivables.

⁽³⁾ Other investments excluded from the fair value hierarchy include certain real estate and private equity funds for which fair value is measured at net asset value per share as a practical expedient. As of December 31, 2019, the fair value of these investments was \$113 million.

⁽⁴⁾ Represents netting of derivative exposures covered by qualifying master netting agreements.

As of December 31, 2018	Level 1 Lev		Level 2	Level 3	Total	
(\$ in millions)						
Assets:						
AFS fixed maturity securities:						
U.S. government and agencies	\$	185	\$	77	\$ 13	\$ 275
U.S. state, municipal and political subdivisions		_		2,268	_	2,268
Corporate ⁽¹⁾		1		14,787	1,448	16,236
Structured securities		_		20,618	2,710	23,328
Total AFS fixed maturity securities		186		37,750	 4,171	42,107
Trading fixed maturity securities:			_			
U.S. government and agencies		72		12	3	87
U.S. state, municipal and political subdivisions		_		61	_	61
Corporate		6		380	62	448
Structured securities		_		194	7	201
Total trading fixed maturity securities		78		647	72	797
Equity securities		93	_		90	183
Mortgage and other loan receivables ⁽²⁾		_		88	107	195
Other investments ⁽³⁾		_		_	386	386
Funds withheld receivable at interest		_		278	68	346
Reinsurance recoverable		_		_	1,249	1,249
Derivative assets:						
Equity market contracts		23		150	_	173
Interest rate contracts		49		32	_	81
Foreign currency contracts		_		2	_	2
Impact of netting ⁽⁴⁾		(18)		(30)		(48)
Total derivative assets	'	54		154	_	208
Separate account assets		5,144		_	_	5,144
Total assets at fair value	\$	5,555	\$	38,917	\$ 6,143	\$ 50,615
Liabilities:						
Policyholder liabilities	\$	_	\$	_	\$ 364	\$ 364
Closed block policy liabilities		_		_	1,305	1,305
Funds withheld payable at interest		_		_	21	21
Derivative instruments payable:						
Equity market contracts		4		_	_	4
Interest rate contracts		17		54	_	71
Impact of netting ⁽⁴⁾		(18)		(30)	_	(48)
Total derivative instruments payable		3		24	_	27
Embedded derivative — indexed universal life products		_		_	526	526
Embedded derivative — annuity products		_		_	786	786
Total liabilities at fair value	\$	3	\$	24	\$ 3,002	\$ 3,029

⁽¹⁾ Includes related party balance of \$115 million in Level 2 for corporate AFS fixed maturity securities.

⁽²⁾ Includes related party balance of \$107 million in Level 3 for mortgage and other loan receivables.

⁽³⁾ Other investments excluded from the fair value hierarchy include certain real estate and private equity funds for which fair value is measured at net asset value per share as a practical expedient. As of December 31, 2018, the fair value of these investments was \$96 million.

⁽⁴⁾ Represents netting of derivative exposures covered by qualifying master netting agreements.

Fair value techniques and inputs

The following is a description of the valuation techniques and inputs used for instruments carried at fair value. The observability of the inputs used in the valuation determines the appropriate level in the fair value hierarchy for the respective asset or liability.

Investments

Investments in U.S. Treasury, government and agency securities, foreign government securities, short-term money market securities and mutual funds held in separate accounts are valued using quoted market prices for identical unrestricted instruments in active markets. Investments such as fixed maturity securities for which quoted market prices from active markets are not available are priced using observable inputs, which can be verified to quoted prices, recent trading activity for identical or similar instruments, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. Consideration is given to the nature of the quotations and the relationship of recent market activity to the prices provided from alternative pricing sources. Other investments having one or more significant valuation inputs that are not observable are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequently, the Company uses other methodologies to determine fair value, which vary based on the type of investment.

Valuation inputs and assumptions are changed when corroborated by substantive observable evidence, including values realized on sales.

Derivative instruments

Derivative instruments such as exchange-traded futures and options are valued at their quoted market price. Most of the over the counter derivative instruments used by the Company are those for which all significant valuation inputs are corroborated by market evidence. These derivative instruments are principally valued using an income approach. The Company calculates the fair value of derivative assets by discounting future cash flows at a rate that incorporates counterparty credit spreads and the fair value of derivative liabilities by discounting future cash flows at a rate that incorporates the Company's own credit spreads. When appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads and credit considerations. Such adjustments are generally based on available market evidence.

Valuations for non-option based interest rate derivatives are based on present value techniques, which utilize significant inputs that may include the swap yield curve, London Interbank Offered Rate, or "LIBOR," basis curves and repurchase rates. Valuations for option based interest rate derivatives are based on option pricing models, which utilize significant inputs that may include the swap yield curve, LIBOR basis curves and interest rate volatility.

Prices for foreign currency derivatives based on the exchange rates of leading industrialized nations, including those with longer tenors, are generally observable. The valuation of other derivative instruments including credit derivatives and equity market derivatives have significant unobservable inputs, such as equity volatility inputs for options that are very long dated, and are principally valued using an income approach.

Funds withheld at interest, reinsurance assets and insurance liabilities

The funds withheld receivable at interest carried at fair value is primarily valued based on the fair value of the underlying investments, which have quoted prices or other observable inputs to pricing. A portion of the funds withheld receivable at interest carried at fair value represents embedded derivatives and is valued using present value techniques that consider inputs including contractholder persistency and contract duration. Reinsurance recoverables carried at fair value are valued using present value techniques that consider inputs including mortality and surrender rates for the associated policies, as well as estimates of policy expenses and the cost of capital held in support of the related closed block policy liabilities.

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Notes to the Consolidated Financial Statements

Policyholder liabilities carried at fair value are valued using present value techniques that discount estimated liability cash flows at a rate that reflects the riskiness of those cash flows and also consider policyholder behavior (lapse rates, surrender rates and mortality). Closed block policy liabilities carried at fair value are valued using present value techniques that consider inputs including mortality and surrender rates for the respective policies, as well as estimates of policy expenses and the cost of capital held in support of the liabilities. The funds withheld payable at interest carried at fair value represents embedded derivatives and is valued based on the change in the fair value of the assets supporting the payable. Other embedded derivative liabilities are related to our fixed-indexed annuity, variable annuity and indexed universal life products, which contain equity-indexed features. We calculate the embedded derivative liabilities as the present value of future projected benefits in excess of the projected guaranteed benefits, using an option budget as the indexed account value growth rate and considering an adjustment to reflect the risk of nonperformance on our obligation and inputs such as projected withdrawal and surrender activity, and mortality. We calculate nonperformance risk using a blend of observable peer holding company credit spreads, adjusted to reflect the claims paying ability of our insurance entities, as well as an adjustment to reflect the priority of policyholder claims. See details in the table below.

Fair value of assets and liabilities

Significant unobservable inputs

The tables below present the ranges of significant unobservable inputs used to value the Company's Level 3 financial assets and liabilities, and includes only those items for which information is reasonably available, such as data from internal determinations of fair value. These ranges represent the significant unobservable inputs that were used in the valuation of each type of financial asset and liability. Weighted averages in the tables below are calculated by weighting each input by the relative fair value of the respective financial instruments. The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one financial asset or liability. Accordingly, the ranges of inputs presented below do not represent uncertainty in, or possible ranges of, fair value measurements of the Company's Level 3 financial assets and liabilities as of December 31, 2019 and 2018:

As of December 31, 2019												
Level 3 assets	Level 3 assets (\$ in millions)	Valuation techniques and significant unobservable inputs	Range of significant unobservable inputs (weighted average, or "WA")	Impact of an increase in the input on fair value								
Corporate fixed maturity securities	\$14	Market comparables — liquidity premium	0.25%	Decrease								
Structured securities	1,051	Consensus pricing — liquidity premium	0.29%	Decrease								
		Discounted cash flows — liquidity premium	0.00% to 0.16% (WA 0.13%)	Decrease								
		Market comparables — liquidity premium	0.10% to 3.60% (WA 2.49%)	Decrease								
Equity securities	38	Discounted cash flows- discount rate	17.50%	Decrease								
Other investments	384	Discounted cash flows- capitalization rate	5.36% to 6.38% (WA 5.80%)	Increase								
		Discounted cash flows- discount rate	8.00%	Decrease								
		Discounted cash flows- vacancy rate	6.49%	Decrease								
Funds withheld receivable at interest	79	Discounted cash flow - duration/weighted average life	0 to 21 years (WA 10.63 years)	Increase								
		Discounted cash flow - contractholder persistency	3.8% to 17.5% (WA 6.5%)	Increase								
		Nonperformance risk	0.23% to 0.95%	Decrease								
Reinsurance recoverable	1,316	Present value of expenses paid from the open block plus the cost of capital held in support of the liabilities.	The average expense assumption is between \$10 and \$78 per policy, increased by inflation.	Increase								
		Unobservable inputs are a market participant's view of the expenses, a risk margin on the uncertainty of the level of expenses and a cost of capital on the capital held in support of the liabilities.	Expense risk margin: 9.42%	Decrease								
			Cost of capital: 3.69% to 11.23%	Increase								
		Discounted cash flow - mortality rate	2.76%	Decrease								
		Discounted cash flow - surrender rate	5.57%	Decrease								

		As of December 31, 20	18	
Level 3 assets	Level 3 assets (\$ in millions)	Valuation techniques and significant unobservable inputs	Range of significant unobservable inputs (WA)	Impact of an increase in the input on fair value
Corporate fixed maturity securities	\$58	Market comparables — liquidity premium	0.25% to 0.80% (WA 0.72%)	Decrease
Structured securities	1,583	Consensus pricing — liquidity premium	0.21%	Decrease
		Discounted cash flows — spreads	0.10% to 1.20% (WA 0.22%)	Decrease
		Discounted cash flows — liquidity premium	0.08% to 0.24% (WA 0.18%)	Decrease
		Market comparables — liquidity premium	1.95% to 2.60% (WA 2.06%)	Decrease
Equity securities	32	Net asset value — liquidity premium	\$0.31 to \$0.50 (WA \$0.40) (per share)	Decrease
Other investments	344	Discounted cash flows- capitalization rate	5.38% to 6.23% (WA 5.58%)	Increase
		Discounted cash flows- discount rate	8.00%	Decrease
		Discounted cash flows- vacancy rate	6.65%	Decrease
Funds withheld receivable at interest	68	Discounted cash flow - duration/weighted average life	0 to 18 years (WA 9.5 years)	Increase
		Discounted cash flow - contractholder persistency	4.8% to 7.9% (WA 6.0%)	Increase
Reinsurance recoverable	1,249	Present value of expenses paid from the open block plus the cost of capital held in support of the liabilities.	The average expense assumption is between \$16 and \$78 per policy, increased by inflation.	Increase
		Unobservable inputs are a market participant's view of the expenses, a risk margin on the uncertainty of the level of expenses and a cost of capital on the capital held in support of the liabilities.	Nonperformance risk: 0.31%	Increase
			Expense risk margin: 9.42%	Decrease
			Cost of capital: 3.7% to 12.17%	Increase
		Discounted cash flow - mortality rate	3.0% to 9.0%	Decrease
		Discounted cash flow - surrender rate	2.5% to 3.5%	Decrease

		As of December 31, 20	19	
Level 3 liabilities	Level 3 liabilities (\$ in millions)	Valuation techniques and significant unobservable inputs	Range of significant unobservable inputs (WA)	Impact of an increase in the input on fair value
Policyholder liabilities	\$429	Present value of best estimate liability cash flows. Unobservable inputs include a market participant view of the risk margin included in the discount rate which reflects the riskiness of the cash flows.	Risk margin rate: 0.09%	Decrease
		Policyholder behavior is also a significant unobservable input, including lapse, surrender and mortality.	Lapse rate: 0.7% to 1.4%	Decrease
			Surrender rate: 0.7% to 2.1%	Increase
			Mortality rate: 0.3% to 21.1%	Increase
Closed block policy liabilities	1,368	Present value of expenses paid from the open block plus the cost of capital held in support of the liabilities.	The average expense assumption is between \$10 and \$78 per policy, increased by inflation.	Increase
		Nonperformance risk	0.23% to 0.95%	Decrease
		Unobservable inputs are a market participant's view of the expenses, a risk margin on the uncertainty of the level of expenses and a cost of capital on the capital held in support of the liabilities.	Expense risk margin: 9.42%	Decrease
			Cost of capital: 3.69% to 11.23%	Increase
		Discounted cash flow - mortality rate	2.76%	Decrease
		Discounted cash flow - surrender rate	5.57%	Decrease
Funds withheld payable at interest	61	Discounted cash flow - duration/weighted average life	0 to 21 years (WA 10.78 years)	Decrease
		Discounted cash flow - contractholder persistency	3.8% to 17.5% (WA 6.5%)	Decrease
		Nonperformance risk	0.23% to 0.95%	Decrease
Embedded derivative – indexed universal life products	820	Policy persistency is a significant unobservable input.	Lapse rate: 5%	Decrease
			Mortality rate: 0.13%	Decrease
		Future costs for options used to hedge the contract obligations	Option budget assumption: 3.91%	Increase
		Nonperformance risk	0.23% to 0.95%	Decrease
Embedded derivative – annuity products	1,426	Policyholder behavior is a significant unobservable input, including utilization and lapse.	Utilization: Fixed-indexed annuity WA 3.66%; Variable annuity: 0% to 65%	Decrease
			Surrender rate: Fixed-indexed annuity WA 10.38%; Variable annuity: 2.82% to 27.90%	Decrease
			Mortality rate: Fixed-indexed annuity WA 1.74%; Variable annuity: 1.14% to 8.33%	Decrease
		Future costs for options used to hedge the contract obligations	Option budget assumption: Fixed-indexed annuity WA 2.07%; Variable annuity: n/a	Increase
		Nonperformance risk	0.23% to 0.95%	Decrease

		As of December 31, 20	18	
Level 3 liabilities	Level 3 liabilities (\$ in millions)	Valuation techniques and significant unobservable inputs	Range of significant unobservable inputs (WA)	Impact of an increase in the input on fair value
Policyholder liabilities	\$364	Present value of best estimate liability cash flows. Unobservable inputs include a market participant view of the risk margin included in the discount rate which reflects the riskiness of the cash flows.	Risk margin rate: 0.09%	Decrease
		Policyholder behavior is also a significant unobservable input, including lapse, surrender and mortality.	Lapse rate: 0.7% to 1.4%	Decrease
			Surrender rate: 0.7% to 2.1%	Increase
			Mortality rate: 0.3% to 21.1%	Increase
Closed block policy liabilities	1,305	Present value of expenses paid from the open block plus the cost of capital held in support of the liabilities.	The average expense assumption is between \$16 and \$78 per policy, increased by inflation.	Increase
		Unobservable inputs are a market participant's view of the expenses, a risk margin on the uncertainty of the level of expenses and a cost of capital on the capital held in support of the liabilities.	Nonperformance risk: 0.31%	Increase
			Expense risk margin: 9.42%	Decrease
			Cost of capital: 3.7% to 12.17%	Increase
		Discounted cash flow - mortality rate	3.0% to 9.0%	Decrease
		Discounted cash flow - surrender rate	2.5% to 3.5%	Decrease
Funds withheld payable at interest	21	Discounted cash flow - duration/weighted average life	0 to 18 years (WA 9.6 years)	Decrease
		Discounted cash flow - contractholder persistency	4.8% to 7.9% (WA 6.0%)	Decrease
Embedded derivative – indexed universal life products	526	Policy persistency is a significant unobservable input.	Lapse rate: 5%	Decrease
			Mortality rate: 0.14%	Decrease
		Future costs for options used to hedge the contract obligations	Option budget assumption: 3.9%	Increase
Embedded derivative – annuity products	786	Policyholder behavior is a significant unobservable input, including utilization and lapse.	Utilization: Fixed-indexed annuity WA 4.51%; Variable annuity: 0% to 65%	Decrease
			Surrender rate: Fixed-indexed annuity WA 9.06%; Variable annuity: 2.86% to 20.66%	Decrease
			Mortality rate: Fixed-indexed annuity WA 1.69%; Variable annuity: 1.06% to 8.65%	Decrease
		Future costs for options used to hedge the contract obligations	Option budget assumption: Fixed-indexed annuity WA 1.97%; Variable annuity: n/a	Increase

Transfers between levels

Overall, transfers into and out of Level 3 are attributable to a change in the observability of inputs. Assets and liabilities are transferred into Level 3 when a significant input cannot be corroborated with market observable data. This occurs when market activity decreases significantly and underlying inputs cannot be observed, current prices are not available, and when there are significant variances in quoted prices, thereby affecting transparency. Assets and liabilities are transferred out of Level 3 when circumstances change such that a significant input can be corroborated with market observable data. This may be due to a significant increase in market activity, a specific event, or one or more significant input(s) becoming observable.

The tables below set forth a summary of changes in the fair value of the Company's Level 3 assets and liabilities for the years ended December 31, 2019 and 2018, respectively. The tables reflect gains and losses for the full year for all assets and liabilities categorized as Level 3 as of December 31, 2019 and 2018:

Assets A	Year ended December 31, 2019	a beg	lance, s of inning year	real aı unrea gai los inclu	et ized nd alized ns / ses ded in	g Id	Net realized pains / osses luded in OCI	Net ttlements / urchases	ransfers into Level 3	into out o		a	salance, s of end of year
AFS fixed maturity securities: U.S. government and agencies \$ 13 \$ 0 \$ 0 \$ 0 \$ 1.126 \$ 0 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 0 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1.20 \$ 1	(\$ in millions)												
No. government and agencies													
agencies \$ 13 \$ — \$ — \$ (1) — \$ — \$ (4) \$ — \$ (2) Corporate fixed maturity securities 1,448 2 (300) 1,126 24 (44) 2,256 Structured securities 2,710 1 115 287 40 (1,345) 4,120 Tradian FS fixed maturity securities 4,171 3 (185) 1,412 64 (1,345) 4,120 Tradian fixed maturity securities 8 8 8 8 9 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3													
maturity securities 1,448 2 (300) 1,126 24 (44) 2,256 Structured securities 2,710 1 115 287 40 (1,301) 1,852 Total AFS fixed maturity securities 4,171 3 (185) 1,412 64 (1,345) 4,120 Trading fixed maturity securities securities 3 - - - - - - 3 Corporate fixed maturity securities 62 - (6) (19) - - 37 Structured securities 7 - 4 (4) - (5) 2 Total trading fixed maturity securities 72 - 4 (4) - (5) 2 Total trading fixed maturity securities 72 - (2) (23) - (5) 42 Equity securities 72 - (2) (23) - (5) 42 Equity securities 107 - 2 144		\$	13	\$	_	\$	_	\$ (1)	\$ _	\$	_	\$	12
Total AFS fixed maturity securities			1,448		2		(300)	1,126	24		(44)		2,256
maturity securities 4,171 3 (185) 1,412 64 (1,345) 4,120 Trading fixed maturity securities 8 3 — — — — — 3 Corporate fixed maturity securities 62 — (6) (19) — — 37 Structured securities 7 — 4 (4) — (5) 2 Total trading fixed maturity securities 72 — 4 (4) — — 37 Structured securities 72 — 4 (4) — (5) 42 Equity securities 90 (1) (32) 1 — — 58 Mortgage and other loan receivables 107 — 2 144 — — 253 Other investments 386 30 — 8 — — — 79 Reinsurance receivable at interest 68 11 — — — —	Structured securities		2,710		1		115	287	40		(1,301)		1,852
Securities Sec			4,171		3		(185)	1,412	64		(1,345)		4,120
agencies 3 — — — — — — 3 Corporate fixed maturity securities 7 — (6) (19) — — 37 Structured securities 7 — 4 (4) — (5) 2 Total trading fixed maturity securities 90 (1) (32) 1 — — 58 Mortgage and other loan receivables 107 — 2 144 — — 253 Other investments 386 30 — 8 — — 253 Other investments 68 11 — — — — 79 Reinsurance receivable at interest 68 11 — — — — — 79 Reinsurance recoverable 1,249 67 — — — — — — 1,316 Total trading fixed maturities \$ 6,143 \$ 110 \$ (217) \$ 1,542 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
maturity securities 62 — (6) (19) — — 37 Structured securities 7 — 4 (4) — (5) 2 Total trading fixed maturity securities 72 — (2) (23) — (5) 42 Equity securities 90 (1) (32) 1 — — 58 Mortgage and other loan receivables 107 — 2 144 — — 253 Other investments 386 30 — 8 — — 424 Funds withheld receivable at interest 68 11 — — — — 79 Reinsurance recoverable 1,249 67 — — — — — 1,316 Total assets 6,143 110 (217) \$ 1,542 64 \$ (1,350) \$ 6,292 Liabilities 364 \$ 73 \$ \$ (8) — \$ \$ <td></td> <td></td> <td>3</td> <td></td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td>_</td> <td></td> <td>3</td>			3		_		_	_	_		_		3
Total trading fixed maturity securities 72			62		_		(6)	(19)	_		_		37
maturity securities 72 — (2) (23) — (5) 42 Equity securities 90 (1) (32) 1 — — 58 Mortgage and other loan receivables 107 — 2 144 — — 253 Other investments 386 30 — 8 — — 424 Funds withheld receivable at interest 68 11 — — — — 79 Reinsurance recoverable 1,249 67 — — — — — 1,316 Total assets 6,143 \$ 110 \$ (217) \$ 1,542 \$ 64 \$ (1,350) \$ 6,292 Liabilities: — — — — — — — 429 Closed block policy liabilities 364 \$ 73 \$ — \$ (8) \$ — \$ — — 1,368 Funds withheld payable at interest 21 40 — — —	Structured securities		7		_		4	(4)	_		(5)		2
Mortgage and other loan receivables 107 — 2 144 — — 253 Other investments 386 30 — 8 — — 424 Funds withheld receivable at interest 68 11 — — — — — 79 Reinsurance recoverable 1,249 67 — — — — — 1,316 Total assets \$ 6,143 \$ 110 \$ (217) \$ 1,542 \$ 64 \$ (1,350) \$ 6,292 Liabilities: — — — — — — — 429 Closed block policy liabilities 364 \$ 73 \$ — \$ (8) — \$ — \$ 429 Closed block policy liabilities 1,305 58 5 — — — — 1,368 Funds withheld payable at interest 21 40 — — — — — 61 Reinsurance liabilities — 5			72		_		(2)	(23)	_		(5)		42
Dan Feceivables 107	Equity securities		90		(1)		(32)	1			_		58
Funds withheld receivable at interest 68 11			107		_		2	144	_		_		253
receivable at interest 68 11 — — — — 79 Reinsurance recoverable 1,249 67 — — — — — 1,316 Total assets \$ 6,143 \$ 110 \$ (217) \$ 1,542 \$ 64 \$ (1,350) \$ 6,292 Liabilities: Total assets \$ 364 \$ 73 \$ — \$ (8) \$ — \$ — \$ 429 Closed block policy liabilities 1,305 58 5 — — — — 1,368 Funds withheld payable at interest 21 40 — — — — — 61 Reinsurance liabilities — 5 — — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — — 820 Embedded derivative – annuity products 786 267 — 373 — — — 1,426	Other investments		386		30		_	8	_		_		424
recoverable 1,249 67 — — — — 1,316 Total assets \$ 6,143 \$ 110 \$ (217) \$ 1,542 \$ 64 \$ (1,350) \$ 6,292 Liabilities: Policyholder liabilities \$ 364 \$ 73 \$ — \$ (8) \$ — \$ — \$ 429 Closed block policy liabilities 1,305 58 5 — — — 1,368 Funds withheld payable at interest 21 40 — — — — 61 Reinsurance liabilities — 5 — — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — — 1,426			68		11		_	_	_		_		79
Liabilities: Policyholder liabilities \$ 364 \$ 73 \$ - \$ (8) \$ - \$ \$ 429 Closed block policy liabilities 1,305 58 5 1,368 Funds withheld payable at interest 21 40 61 Reinsurance liabilities 5 5 Embedded derivative - indexed universal life products 526 361 (67) 820 Embedded derivative - annuity products 786 267 - 373 1,426			1,249		67		_	_	_		_		1,316
Policyholder liabilities 364 73 — (8) — — 429 Closed block policy liabilities 1,305 58 5 — — — 1,368 Funds withheld payable at interest 21 40 — — — — 61 Reinsurance liabilities — 5 — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — — 1,426	Total assets	\$	6,143	\$	110	\$	(217)	\$ 1,542	\$ 64	\$	(1,350)	\$	6,292
Closed block policy liabilities 1,305 58 5 — — — 1,368 Funds withheld payable at interest 21 40 — — — — 61 Reinsurance liabilities — 5 — — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — 1,426	Liabilities:												
liabilities 1,305 58 5 — — — 1,368 Funds withheld payable at interest 21 40 — — — — 61 Reinsurance liabilities — 5 — — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — 1,426	Policyholder liabilities	\$	364	\$	73	\$	_	\$ (8)	\$ _	\$	_	\$	429
payable at interest 21 40 — — — — 61 Reinsurance liabilities — 5 — — — 5 Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — 1,426			1,305		58		5	_	_		_		1,368
Embedded derivative – indexed universal life products 526 361 — (67) — — 820 Embedded derivative – annuity products 786 267 — 373 — — 1,426	Funds withheld payable at interest		21		40		_	_	_		_		61
- indexed universal life products 526 361 - (67) - - 820 Embedded derivative - annuity products 786 267 - 373 - - 1,426	Reinsurance liabilities		_		5		_	_	_		_		5
- annuity products 786 267 — 373 — — — 1,426	 indexed universal 		526		361		_	(67)	_		_		820
Total liabilities \$ 3,002 \$ 804 \$ 5 \$ 298 \$ — \$ 4,109	Embedded derivative – annuity products		786		267		_	373	_		_		1,426
	Total liabilities	\$	3,002	\$	804	\$	5	\$ 298	\$ 	\$		\$	4,109

Year ended December 31, 2019	Pu	Purchases		Issuances		Sales		Settlements		Net settlements / purchases	
(\$ in millions)											
Assets:											
AFS fixed maturity securities:											
J.S. government and agencies	\$	_	\$	_	\$	_	\$	(1)	\$	(1)	
Corporate fixed maturity securities		1,995		_		(208)		(661)		1,126	
Structured securities		1,290		_		(537)		(466)		287	
Total AFS fixed maturity securities		3,285				(745)		(1,128)		1,412	
Trading fixed maturity securities:								,			
Corporate fixed maturity securities		13		_		(31)		(1)		(19)	
Structured securities		_		_		(4)		_		(4)	
Total trading fixed maturity securities		13				(35)		(1)		(23)	
Equity securities		18				(14)		(3)		1	
Mortgage and other loan receivables		302		_		(67)		(91)		144	
Other investments		22		_		(14)		_		8	
Total assets	\$	3,640	\$		\$	(875)	\$	(1,223)	\$	1,542	
Liabilities:											
Policyholder liabilities	\$	_	\$	_	\$	_	\$	(8)	\$	(8)	
Embedded derivative – indexed universal life products		_		95		_		(162)		(67)	
Embedded derivative – annuity products		_		373		_		_		373	
Total liabilities	\$		\$	468	\$		\$	(170)	\$	298	

Year ended December 31, 2018	beg	llance, as of ginning f year	rea unro ga lo inclu	Net alized and ealized ains / sses uded in come			Net settlements / purchases		ansfers into .evel 3	ansfers out of Level 3	as	alance, of end of year
(\$ in millions)												
Assets:												
AFS fixed maturity securities:												
U.S. government and agencies	\$	_	\$	_	\$ 1	\$	12	\$	_	\$ _	\$	13
Corporate fixed maturity securities		598		_	(401)		1,250		1	_		1,448
Structured securities		1,562		9	(584)		1,806		_	(83)		2,710
Total AFS fixed maturity securities		2,160		9	(984)		3,068		1	(83)	••	4,171
Trading fixed maturity securities:												
U.S. government and agencies		_		_	_		3		_	_		3
Corporate fixed maturity securities		_		_	(2)		64		_	_		62
Structured securities							7					7
Total trading fixed maturity securities		<u> </u>			(2)		74					72
Equity securities		90		(2)	(3)		5		_	_		90
Mortgage and other loan receivables		_		_	_		107		_	_		107
Other investments		_		17	_		369		_	_		386
Funds withheld receivable at interest		130		(62)	_		_		_	_		68
Reinsurance recoverable		1,383		(134)			<u> </u>					1,249
Total assets	\$	3,763	\$	(172)	\$ (989)	\$	3,623	\$	1	\$ (83)	\$	6,143
Liabilities:												
Policyholder liabilities	\$	373	\$	(9)	\$ _	\$	_	\$	_	\$ _	\$	364
Closed block policy liabilities		1,436		(136)	5		_		_	_		1,305
Funds withheld payable at interest		22		(1)	_		_		_	_		21
Embedded derivative – indexed universal life products		755		(114)	_		(115)		_	_		526
Embedded derivative – annuity products		535		(48)			299		_			786
Total liabilities	\$	3,121	\$	(308)	\$ 5	\$	184	\$		\$ 	\$	3,002

Year ended December 31, 2018	Pu	rchases	ls	ssuances	Sales		S	ettlements	Net settlements purchases	
(\$ in millions)										
Assets:										
AFS fixed maturity securities:										
U.S. government and agencies	\$	12	\$	_	\$	_	\$	_	\$	12
Corporate fixed maturity securities		1,778		_		(282)		(246)		1,250
Structured securities		2,808		_		(302)		(700)		1,806
Total AFS fixed maturity securities		4,598				(584)		(946)		3,068
Trading fixed maturity securities:									_	
U.S. government and agencies		3		_		_		_		3
Corporate fixed maturity securities		84		_		_		(20)		64
Structured securities		7		_		_		_		7
Total trading fixed maturity securities		94				_		(20)		74
Equity securities		5				_		_		5
Mortgage and other loan receivables		107		_		_		_		107
Other investments		369		_		_		_		369
Total assets	\$	5,173	\$		\$	(584)	\$	(966)	\$	3,623
Liabilities:										
Embedded derivative – indexed universal life products	\$	_	\$	103	\$	_	\$	(218)	\$	(115)
Embedded derivative – annuity products		_		299		_		<u> </u>		299
Total liabilities	\$	_	\$	402	\$	_	\$	(218)	\$	184

Financial instruments not carried at fair value

The following tables present carrying amounts and fair values of the Company's financial instruments which are not carried at fair value as of December 31, 2019 and 2018. All remaining balance sheet amounts (including accrued investment income) excluded from the tables below are not considered financial instruments:

		Carrying	F					
As of December 31, 2019	,	value	Level 1	Level 2		Level 3	Fair value	
(\$ in millions)								
Financial assets:								
Mortgage and other loan receivables	\$	13,247	\$ _	\$ 9,203	\$	4,346	\$	13,549
Policy loans		711	_	_		834		834
FHLB common stock		113	_	113		_		113
Other investments		8	_	_		8		8
Funds withheld receivable at interest		2,039	_	2,039		_		2,039
Life settlement contracts and single premium immediate annuity assets		44	_	_		44		44
Cash and cash equivalents		2,458	2,458	_		_		2,458
Other assets - restricted cash		181	181	_		_		181
Total financial assets	\$	18,801	\$ 2,639	\$ 11,355	\$	5,232	\$	19,226
Financial liabilities:								
Other contractholder deposit funds	\$	11,190	\$ _	\$ 11,281	\$	_	\$	11,281
Supplementary contracts without life contingencies		27	_	_		27		27
Funding agreements issued to FHLB member banks		2,282	_	2,299		_		2,299
Funds withheld payable at interest		2,083	_	2,083		_		2,083
Debt		1,105	_	_		1,181		1,181
Tax payable to former parent company		90	_	_		90		90
Total financial liabilities	\$	16,777	\$ 	\$ 15,663	\$	1,298	\$	16,961

	 Carrying	_	F	air v	у				
As of December 31, 2018	value		Level 1		Level 2		Level 3	!	Fair value
(\$ in millions)									
Financial assets:									
Mortgage and other loan receivables	\$ 9,949	\$	_	\$	7,076	\$	2,901	\$	9,977
Policy loans	624		_		_		693		693
FHLB common stock	106		_		106		_		106
Other investments	9		_		_		9		9
Funds withheld receivable at interest	2,105		_		2,105		_		2,105
Life settlement contracts and single premium immediate annuity assets	267		_		_		308		308
Cash and cash equivalents	1,253		1,253		_		_		1,253
Other assets - restricted cash	80		80		_		_		80
Total financial assets	\$ 14,393	\$	1,333	\$	9,287	\$	3,911	\$	14,531
Financial liabilities:									
Other contractholder deposit funds	\$ 9,829	\$	_	\$	9,795	\$	_	\$	9,795
Supplementary contracts without life contingencies	26		_		_		26		26
Funding agreements issued to FHLB member banks	2,003		_		2,003		_		2,003
Funds withheld payable at interest	2,111		_		2,111		_		2,111
Debt	901		_		_		892		892
Tax payable to former parent company	98		_		_		98		98
Total financial liabilities	\$ 14,968	\$	_	\$	13,909	\$	1,016	\$	14,925

7. Deferred policy acquisition costs, value of business acquired, unearned revenue reserves and unearned front-end loads

The following reflects the changes to the DAC asset:

	For the years ended December 31,										
		2019		2017							
(\$ in millions)											
Balance, as of beginning of year	\$	1,891	\$	1,103	\$	1,199					
Acquisition/reinsurance		40		297		_					
Deferrals		526		425		354					
Amortized to expense during the year ⁽¹⁾		(253)		(187)		(172)					
Adjustment for unrealized investment (gains) losses during the year		(500)		253		(278)					
Balance, as of end of year	\$	1,704	\$	1,891	\$	1,103					

⁽¹⁾ These amounts are shown within amortization of policy acquisition costs in the consolidated statements of income.

The following reflects the changes to the VOBA asset:

	For the years ended December 31,							
	2019		2018		2018		2017	
(\$ in millions)								
Balance, as of beginning of year	\$ 668	\$	550	\$	807			
Amortized to expense during the year ⁽¹⁾	(48)		(70)		(83)			
Adjustment for unrealized investment (gains) losses during the year	(196)		188		(174)			
Balance, as of end of year	\$ 424	\$	668	\$	550			

(1) These amounts are shown within amortization of policy acquisition costs in the consolidated statements of income.

Estimated future amortization of VOBA as of December 31, 2019 is as follows:

Years	Amoun	its
	(\$ in millio	ons)
2020	\$	51
2021		46
2022		39
2023		33
2024		30
2025 and thereafter		225
Total	\$	424

The following reflects the changes to the URR and UFEL:

	For the years ended December 31,							
	2019		2018			2017		
(\$ in millions)								
Balance, as of beginning of year	\$	316	\$	103	\$	206		
Deferrals		142		127		120		
Amortized to income during the year ⁽¹⁾		(103)		(84)		(66)		
Adjustment for unrealized investment (gains) losses during the year		(224)		170		(157)		
Balance, as of end of year	\$	131	\$	316	\$	103		

⁽¹⁾ These amounts are shown within policy fees in the consolidated statements of income.

8. Policyholder liabilities

Future policyholder benefits, contractholder deposit funds and other policyholder liabilities

Future policyholder benefits and contractholder deposit funds and other policyholder liabilities by product were as follows as of December 31, 2019 and 2018:

		20		2018									
	Future policyholder benefits		Contractholder deposit funds and other policyholder liabilities		deposit funds and other policyholder		deposit funds and other Future policyholder policyholder		deposit funds and other policyholder		policyholder	der policyho	
(\$ in millions)													
Fixed-rate annuity ⁽¹⁾	\$	3,752	\$	31,040	\$ 2,603	\$	27,886						
Fixed-indexed annuity		4		14,656	_		10,501						
Variable annuity		_		2,456	_		2,411						
Indexed universal life		_		8,618	_		7,664						
Fixed and variable universal life		_		3,889	_		3,334						
Other life (term and whole life)		678		308	718		325						
Preneed		25		2,965	24		3,110						
Closed blocks		1,253		99	1,185		102						
Other (including funding agreements)		32		2,290	38		2,012						
Total	\$	5,744	\$	66,321	\$ 4,568	\$	57,345						

⁽¹⁾ Includes related party balances as of December 31, 2019 and 2018 of \$2.5 billion and \$2.6 billion, respectively, in future policyholder benefits, and \$4.9 billion and \$5.6 billion, respectively, in contractholder deposit funds and other policyholder liabilities.

Guaranteed benefits

Guaranteed minimum death benefits

Certain variable annuity and fixed-indexed annuity contracts contain GMDB features that provide a guarantee that the benefit received at death will be no less than a prescribed minimum amount, even if the account balance is reduced to zero. This amount is based on either the net deposits paid into the contract, the net deposits accumulated at a specified rate, the highest historical account value on a contract anniversary, or sometimes a combination of these values. If the GMDB is higher than the current account value at the time of death, the Company pays a benefit equal to the difference.

The following table shows the balance of the GMDB reserves reported in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets. The GMDB exposure includes reinsurance assumed.

	For the years ended December 31,							
	2019		2018		2017			
(\$ in millions)								
Balance, as of beginning of year	\$ 274	\$	215	\$	254			
Expense incurred	(8)		93		(6)			
Claims paid	(25)		(28)		(25)			
Reinsurance premium paid	(25)		(24)		(28)			
Claims ceded to reinsurers	18		18		20			
Balance, as of end of year	\$ 234	\$	274	\$	215			

Notes to the Consolidated Financial Statements

The reserve is calculated by estimating the present value of total expected excess benefit payments over the life of the contract divided by the present value of total expected assessments over the life of the contract, or the "benefit ratio," multiplied by the cumulative assessments as of the reporting date, less cumulative benefit payments, plus interest.

The following information relates to the reserving methodology and assumptions for GMDB as of December 31, 2019 and 2018:

- The projection model uses multiple stochastic scenarios with mean total returns ranging from 2% per annum for money market funds to 4% per annum for bond funds to 8% per annum for equities;
- For the projection of equity index returns for the legacy and assumed variable annuity blocks, a one factor local volatility log-normal model was used. For the recent direct sales of variable annuity products projected fund returns are determined by a third-party proprietary model:
- For the legacy and assumed variable annuity blocks, equity implied volatilities by duration are graded from OTC quotes on the front to historical volatilities on the back. For the years ended December 31, 2019 and 2018, at-the-money equity volatilities ranged from 14.2% to 27.0% and from 17.3% to 27.0%, respectively, depending on index and term;
- The mortality assumptions are factors of an industry standard mortality table based on company experience varying by age and gender, with 20 years of mortality improvements; and,
- The partial withdrawal rate assumption varies by tax-qualified status and attained age. For the years ended December 31, 2019 and 2018 total projected partial withdrawals were from 3.0% to 7.0% and 3.0% to 6.5%, respectively.

The following table presents the account value, net amount at risk and average attained age of underlying variable annuity contractholders for guarantees in the event of death as of December 31, 2019 and 2018. The net amount at risk is the death benefit coverage in-force or the amount that the Company would have to pay if all variable annuity contractholders had died as of the specified date, and represents the excess of the guaranteed benefit over the account value.

	As of Dec	cember 31,		
	2019		2018	
(\$ in millions, except for contractholders information)				
Net deposits paid				
Account value	\$ 4,592	\$	4,410	
Net amount at risk	\$ 91	\$	183	
Average attained age of contractholders	67		67	
Ratchet (highest historical account value at specified anniversary dates)				
Account value	\$ 489	\$	465	
Net amount at risk	\$ 18	\$	38	
Average attained age of contractholders	71		71	
Roll-up (net deposits accumulated at a specified rate)				
Account value	\$ 13	\$	15	
Net amount at risk	\$ 4	\$	6	
Average attained age of contractholders	83		83	
Higher of ratchet or roll-up				
Account value	\$ 1,715	\$	1,647	
Net amount at risk	\$ 435	\$	662	
Average attained age of contractholders	77		76	
Total of guaranteed benefits categorized above				
Account value	\$ 6,809	\$	6,537	
Net amount at risk	\$ 548	\$	889	
Average attained age of contractholders (weighted by account value)	70		69	
Number of contractholders	89,297		96,279	

Variable annuity guaranteed minimum income benefits

The Company previously issued variable annuity contracts with a GMIB feature. The GMIB liability was \$2 million and \$3 million as of December 31, 2019 and 2018, respectively. The GMIB expenses incurred were less than \$1 million for the years ended December 31, 2019, 2018 and 2017. The GMIB benefits paid were less than \$1 million for the years ended December 31, 2019, 2018 and 2017. The reserves for the GMIB liability are calculated by using a methodology that is the same as the reserve for the corresponding GMDB liability, as discussed above.

Guaranteed minimum withdrawal benefits

Certain fixed-indexed and variable annuity contracts are issued with a guaranteed minimum withdrawal feature. GMWB are an optional benefit where a contractholder is entitled to withdraw up to a specified amount of their benefit base each year.

The feature provides annuity policyholders with a minimum guaranteed stream of income for life, once the option is elected. The annual income amount is based on an annual withdrawal percentage multiplied by the contractual benefit base. The benefit base is defined in the contract and is generally the initial premium, reduced by any partial withdrawals, increased by a contractually defined percentage. Benefit payments are first deducted from the contractual account value. Excess guaranteed benefits are defined as the benefits paid once the underlying account value has reached zero.

The ultimate cost of these benefits will depend on the level of market returns and the level of contractual guarantees, as well as policyholder behavior, including surrenders, withdrawals and benefit utilization. For fixed-indexed annuity products, costs also include certain non-guaranteed terms that impact the ultimate cost, such as caps on crediting rates that can, at the Company's discretion, reset annually.

Reserves for the variable annuity GMWB are bifurcated into an embedded derivative (recorded at fair value) and an additional insurance liability. The additional insurance liability for the variable annuity GMWB and the reserves for the fixed-indexed annuity GMWB are calculated in a manner similar to the reserves for the GMDB and GMIB discussed above.

The following table shows the balance of the GMWB reserves reported in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets:

	For the years ended December 31,							
	2019		2018			2017		
(\$ in millions)								
Balance, as of beginning of year	\$	392	\$	287	\$	238		
Expense incurred		109		105		49		
Balance, as of end of year	\$	501	\$	392	\$	287		

The following table presents the account value, net amount at risk and number of contractholders for annuity contracts with guaranteed withdrawal benefits as of December 31, 2019 and 2018:

	As of December 31,				
		2019	2018		
(\$ in millions, except for contractholders information)					
Account value	\$	9,716	\$	8,935	
Net amount at risk	\$	2,822	\$	2,588	
Number of contractholders		75,882		73,138	

Contractholder deposit funds with embedded derivatives

The following table shows the balances of the account value and embedded derivatives reported in contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets:

	As of December 31,				
	2019		2018		
(\$ in millions)					
Account value	\$ 17,089	\$	13,937		
Embedded derivatives	\$ 2,246	\$	1,312		

The following paragraphs describe the products presented within the above table along with the underlying methodology used to calculate the embedded derivatives.

The Company's fixed-indexed annuity, indexed universal life and variable annuity products contain equity-indexed features which are considered embedded derivatives and required to be measured at fair value. The fair value of the embedded derivative is calculated as the present value of future projected benefits in excess of the projected guaranteed benefits, using an option budget as the indexed account value growth rate, for fixed-index annuity and indexed universal life products, and the present value of future projected benefits in excess of the future allocated assessments for variable annuity products. In addition, the fair value of the embedded derivative is reduced to reflect the risk of nonperformance on the Company's obligation, referred to as nonperformance risk. Changes in interest rates, future index credits, nonperformance risk, projected withdrawal and surrender activity, and mortality can have a significant impact on the value of the embedded derivative.

Fixed-indexed annuities

Fixed-indexed annuity contracts allow the policyholder to elect a fixed interest rate return or a market indexed strategy where interest credited is based on the performance of an index, such as S&P 500 or other indices. The equity market strategy is an embedded derivative, similar to a call option. The fair value of the embedded derivative is computed as the present value of benefits attributable to the excess of the projected policy contract values over the projected minimum guaranteed contract values. The projections of policy contract values are based on assumptions for future policy growth, which include assumptions for expected index credits, future equity option costs, volatility, interest rates and policyholder behavior. The projections of minimum guaranteed contract values include the same assumptions for policyholder behavior as are used to project policy contract values. The embedded derivative cash flows are discounted using a risk free interest rate increased by a non-performance risk spread tied to the Company's own credit rating.

Indexed universal life

Indexed universal life contracts allow a policyholder's account value growth to be indexed to certain equity indices, which result in an embedded derivative similar to a call option. The embedded derivative related to the index is bifurcated from the account value and measured at fair value. The valuation of the embedded derivative is the present value of future projected benefits in excess of the projected guaranteed benefits, using the option budget as the indexed account value growth rate and the guaranteed interest rate as the guaranteed account value growth rate. Present values are based on discount rate curves determined at the valuation date/issue date as well as assumed lapse and mortality rates. The discount rate equals the forecast treasury rate plus a non-performance risk spread tied to the Company's own credit rating. Changes in discount rates and other assumptions such as spreads and/or option budgets can have a substantial impact on the embedded derivative.

Variable annuities with guaranteed minimum withdrawal benefits

The Company has issued variable annuity contracts with a GMWB feature. The GMWB feature provides annuity contractholders with a guaranteed stream of payments for life, once income is activated. The annual income amount is based on a percentage multiplied by the contractual benefit base. The benefit base is defined in the contract and may incorporate various combinations of ratchet and roll-up features. Benefit payments are first deducted from the account value. Excess guaranteed benefits are defined as all GMWB paid once the underlying account value has reached zero. Reserves for the GMWB are bifurcated into an embedded derivative (recorded at fair value) and an additional insurance liability.

The fair value calculation for the embedded derivative includes the following considerations:

- The reserve is based on projections run under a large number of stochastic scenarios;
- All underlying scenarios are generated using risk neutral assumptions;
- The mean of the projected returns is based on a risk free rate;
- Volatilities are based on market implied volatilities; and,
- The discount rate for this fair value calculation equals the risk free rate plus a spread consistent with the Company's risk of non-performance on its obligations, which is referred to as its own credit risk.

Universal life with no-lapse guarantee

The Company has certain in-force universal life contracts which provide a secondary guarantee, or "nolapse guarantee," to the policyholder. The policy can remain in-force, even if the policyholder's account value is zero, as long as contractual secondary guarantee requirements have been met. The primary risk associated with these guarantees are that the premium collected under these policies, together with the investment return earned on that premium, is ultimately insufficient to pay the policyholder's benefits and the expenses associated with issuing and administering these policies. The Company holds an additional reserve in connection with these guarantees. The change in the reserve is included in policy benefits and claims in the consolidated statements of income.

The additional reserve related to universal life products with secondary guarantees is calculated using methods similar to those described above under "Guaranteed minimum death benefits." The costs related to these secondary guarantees are recognized over the life of the contracts through the accrual and subsequent release of a reserve which is revalued each period. The reserve is determined for any point in time equal to the accumulated value of the assessments since inception times the benefit ratio less the accumulated value of the excess death benefits paid since inception due to the no-lapse guarantee feature, plus interest. The benefit ratio is the present value of total expected excess benefit payments over the life of the contract divided by the present value of total expected assessments over the life of the contract. The carrying amount of the reserves is adjusted for the effects of realized and unrealized gains and losses on debt securities classified as AFS and certain derivatives. The reserves for universal life no-lapse guarantees were \$1.7 billion and \$1.5 billion as of December 31, 2019 and 2018, respectively.

Preneed reserves

Preneed life insurance pays a death benefit that helps cover funeral costs according to a prearranged funeral agreement. A liability for preneed policyholder benefits is established in an amount determined by the account or contract balance that accrues to the benefit of the policyholder. Reserves on preneed business are based on cash surrender values of issued policies. An additional insurance liability is established as of each reporting date where the total liability is equal to the present value of projected future benefits and maintenance expenses, including discretionary death benefits to be credited to policies using current period discretionary death benefit crediting rates under current assumptions. We have the discretion to adjust these death benefit crediting rates up or down. The Company has also issued preneed insurance contracts with crediting rates tied to inflation as measured by the Consumer Price Index or other indices. For these contracts, future death benefit growth is based on the expected yield curve on the swaps hedging the reserves.

These crediting rates utilize the following assumptions:

- Credited interest rate: Based on the non-forfeiture rates of 3.0% to 5.5%.
- Mortality: Based on the Company's experience.
- Death benefit inflation: Based on the discretionary death benefit inflation rates in effect at the current reporting date. To mitigate the risk that a policy will not keep pace with increases in funeral prices or remain competitive, the Company has the discretion to increase or decrease the death benefit. Such increases or decreases are considered on a quarterly basis and vary by plan.
- Maintenance expenses: Based on the Company's experience and expressed as a cost per paid-up
 policy and a cost per premium-paying policy.

The earned interest rate used to calculate estimated gross profits is based on the asset yield.

Separate accounts with credited interest guarantees

The Company issued variable annuity and variable universal life contracts through its separate accounts for which net investment income and investment gains and losses accrue directly to, and investment risk is borne by, the contractholder. The Company also issued variable annuity and variable universal life contracts through separate accounts where the Company guarantees to the contractholder the total deposits made to the contract less any partial withdrawals plus a minimum return.

The market-value adjusted product attributable to a third party was assumed on a modified coinsurance basis. Therefore, the assets related to these liabilities are recorded as a modified coinsurance receivable, which is included within funds withheld receivable at interest in the consolidated balance sheets. See Note 10 —"Reinsurance" for additional information about reinsurance.

The Company had the following variable annuity with guaranteed minimum returns:

	As of December 31,				
	2019		2018		
(\$ in millions)					
Account value	\$ 7	\$	7		
Range of guaranteed minimum return rates	2.8% - 3.1%		2.8% - 3.1%		

Account balances of these contracts with guaranteed minimum returns were invested as follows:

	As of December 31,				
	2	2019		2018	
(\$ in millions)					
Asset type:					
Fixed maturity securities	\$	9	\$		10
Cash and cash equivalents		2			1
Total	\$	11	\$		11

9. Closed blocks

Summarized financial information of the Company's closed blocks is as follows:

	As of December 31,		
Balance sheets	2019	2018	
(\$ in millions)			
Assets			
Total investments	\$ 1	\$ 1	
Cash and cash equivalents	2	4	
Reinsurance recoverable	1,316	1,249	
Deferred income taxes	46	30	
Other assets		1	
Total assets	1,365	1,285	
Liabilities			
Future policyholder benefits	1,250	1,177	
Outstanding claims	17	18	
Contractholder deposit funds and other liabilities	1	1	
Policyholder dividend obligation at fair value ⁽¹⁾	84	86	
Policyholder dividends payable at fair value ⁽¹⁾	13	15	
Total policyholder liabilities	1,365	1,297	
Accrued expenses and other liabilities	8	8	
Reinsurance liabilities	5	_	
Total liabilities	1,378	1,305	
Excess of closed block liabilities over assets designated to the closed blocks and maximum future earnings to be recognized from closed block assets and liabilities	\$ 13	\$ 20	

⁽¹⁾ Included within contractholder deposit funds and other policyholder liabilities in the consolidated balance sheets.

		For the years	ended Decem	ber 31,	
Statements of income	2	019	2018	2017	
(\$ in millions)					
Revenues					
Premiums and other income	\$	— \$	_	\$	_
Net investment expense		_	_		_
Total revenues		_			_
Benefits and expenses					
Policyholder benefits		2	1		_
Other expenses		_	_		_
Total benefits and expenses		2	1		
Net contribution from the closed blocks		(2)	(1)		_
Income tax (benefit) expense		(15)	1		12
Net income (loss)	\$	13 \$	(2)	\$	(12)

Many expenses related to the closed block operations are charged to operations outside the closed blocks; accordingly, the contribution from the closed blocks does not represent the actual profitability of the closed block operations.

The closed blocks of business represents policies acquired through acquisition, which were valued at fair value as of the acquisition date.

10. Reinsurance

The Company maintains a number of reinsurance treaties with third parties whereby the Company assumes fixed annuity, variable annuity, payout annuity, universal life, variable universal life and term life insurance policies on a coinsurance, modified coinsurance and funds withheld basis. The Company also maintains other reinsurance treaties including the cession of certain fixed annuity, variable annuity, payout annuity, universal life policies, individual disability income policies and discontinued accident and health insurance.

Effective December 31, 2019, the Company entered into a coinsurance agreement with a third party whereby it assumed approximately \$1.3 billion of fixed annuity and universal life reserves.

Effective August 13, 2019, the Company entered into a coinsurance agreement with a third party whereby it assumed payout group annuity reserves. Subsequently, blocks of business were assumed as part of the same agreement through the rest of the year. The Company assumed \$847 million of reserves as of December 31, 2019.

Effective January 1, 2019, the Company entered into a coinsurance agreement with a third party whereby it assumed approximately \$1.6 billion of fixed annuity reserves.

Effective December 12, 2018, the Company entered into a coinsurance agreement with a third party whereby it assumed approximately \$31 million of payout group annuity reserves. Subsequently, blocks of business were assumed as part of the same agreement during 2019. The Company assumed an additional \$302 million of reserves as of December 31, 2019.

Effective June 1, 2018, the Company entered into a coinsurance agreements with related parties, Talcott Resolution Life Insurance Company and Talcott Resolution Life and Annuity Insurance Company (formerly Hartford Life Insurance Company and Hartford Life and Annuity Insurance Company,) subsidiaries of Talcott Resolution Life, Inc., whereby it assumed approximately \$8.7 billion of fixed annuity and payout annuity reserves.

Concurrent with the aforementioned coinsurance agreement, the Company also retroceded approximately \$1.2 billion of reserves to a third party on a funds withheld basis.

Effective May 1, 2018, the Company entered into a reinsurance agreement whereby it ceded \$654 million of the fixed fund exposures of certain variable annuity contracts on a modified coinsurance basis.

Effective January 1, 2018, the Company entered into a coinsurance agreement with a third party, whereby the Company assumed approximately \$416 million of fixed annuity reserves.

The effects of all reinsurance agreements on the consolidated balance sheets were as follows:

	As of December 31,				
	2019		2018		
(\$ in millions)					
Policyholder liabilities:					
Direct	\$ 50,430	\$	43,168		
Assumed ⁽¹⁾	21,814		18,949		
Total policyholder liabilities	72,244		62,117		
Ceded ⁽²⁾	(4,130)		(4,121)		
Net policyholder liabilities	\$ 68,114	\$	57,996		

- (1) Includes related party balances of \$7.4 billion and \$8.2 billion as of December 31, 2019 and 2018, respectively.
- (2) Reported within reinsurance recoverable in the consolidated balance sheets.

The Company determines the appropriate amount of reinsurance based on evaluation of the risks accepted and on market conditions (including the availability and pricing of reinsurance). The Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk. Based on its review of its reinsurers' financial statements and reputations in the reinsurance marketplace, the Company held no allowance for uncollectible amounts and no amounts were deemed uncollectible as of December 31, 2019 or 2018.

As of December 31, 2019 and 2018, the Company had \$2.4 billion and \$2.5 billion of funds withheld receivable at interest, respectively, with five counterparties related to modified coinsurance and funds withheld contracts. The assets supporting these receivables were held in trusts and not part of the respective counterparty's general accounts.

The effects of reinsurance on the consolidated statements of income were as follows:

	For the years ended December 31,								
	2019		2018		2017				
(\$ in millions)									
Premiums:									
Direct	\$ 167	\$	158	\$	124				
Assumed ⁽¹⁾	1,245		2,740		72				
Ceded	(120)		(1,388)		(140)				
Net premiums	\$ 1,292	\$	1,510	\$	56				

⁽¹⁾ Includes related party balances of \$37 million and \$2.6 billion for the years ended December 31, 2019 and 2018, respectively. There were no related party balances for the year ended December 31, 2017.

	For the years ended December 31,								
	2019	2018			2017				
(\$ in millions)									
Policy fees:									
Direct	\$ 870	\$	883	\$	815				
Assumed ⁽¹⁾	353		366		415				
Net policy fees	\$ 1,223	\$	1,249	\$	1,230				

(1) Includes related party balances of \$16 million and \$10 million for the years ended December 31, 2019 and 2018, respectively. There were no related party balances for the year ended December 31, 2017.

	For the years ended December 31,							
		2019	2018			2017		
(\$ in millions)								
Policy benefits and claims:								
Direct	\$	2,927	\$	1,259	\$	1,815		
Assumed ⁽¹⁾		1,950		3,777		728		
Ceded		(356)		(1,377)		(205)		
Net policy benefits and claims	\$	4,521	\$	3,659	\$	2,338		

⁽¹⁾ Includes related party balances of \$298 million and \$2.8 billion for the years ended December 31, 2019 and 2018, respectively. There were no related party balances for the year ended December 31, 2017.

The Company holds collateral for and provides collateral to our reinsurance clients. The Company held \$2.1 billion of collateral on behalf of our reinsurers as of both December 31, 2019 and 2018. As of December 31, 2019 and 2018, reinsurers held collateral of \$1.2 billion and \$1.3 billion, respectively, on behalf of the Company. A significant portion of the collateral that the Company provides to its reinsurance clients is provided in the form of assets held in a trust for the benefit of the counterparty. As of December 31, 2019, these trusts were required to hold, and held in excess of, \$18.2 billion of assets to support reserves of \$17.2 billion. As of December 31, 2018, these trusts were required to hold, and held in excess of, \$15.5 billion of assets to support reserves of \$14.4 billion.

11. Debt

Debt was comprised of the following:

	December 31, 2019				December 3'	1, 2018
	Amount		nount Rate		mount	Rate
(\$ in millions, except interest rates)						
Senior notes assumed through acquisition, due April 2021	\$	150	8.63%	\$	150	8.63%
Term loan, due December 2021		225	3.08%		100	3.85%
Revolving credit facility, due May 2023		_	n/a		405	4.01%
Senior notes, due October 2029		500	4.40%		_	n/a
Subordinated debentures, due October 2046		250	9.50%		250	9.50%
Total debt – principal		1,125			905	
Purchase accounting adjustments ⁽¹⁾		3			6	
Debt issuance costs, net of accumulated amortization ⁽²⁾		(8)			(10)	
Fair value gain of hedged senior notes due 2029, recognized in earnings		(15)			_	
Total debt	\$	1,105		\$	901	

- (1) The amortization of the purchase accounting adjustment related to the acquired Senior Notes, or the "2021 Senior Notes," was \$3 million for both of the years ended December 31, 2019 and 2018.
- (2) The amortization of the debt issuance costs was \$1 million and \$2 million for the years ended December 31, 2019 and 2018, respectively.

Principal payments due on debt are as follows:

Years	Amo	ounts
	(\$ in m	nillions)
2020	\$	_
2021		375
2022		_
2023		_
2024		_
2025 and thereafter		750
Total	\$	1,125

Senior notes due 2021

In 2011, Forethought Financial Group, Inc. or "FFG," issued \$150 million aggregate principal amount of 8.625% senior notes due 2021. In December 2017, FFG and Forethought Services, LLC were merged with and into FinCo. FinCo, as the surviving entity, is now liable for the 2021 Senior Notes. Interest is paid semi-annually. FinCo may, at its option, redeem some or all of the senior notes due 2021 at any time at a redemption price equal to 100% of the principal amount of the notes to be redeemed plus a "make-whole" premium and accrued and unpaid interest, if any, to the date of redemption.

If an event of default occurs, either the trustee or the holders of not less than 25% in aggregate principal amount of the 2021 Senior Notes then outstanding may declare the principal amount of all 2021 Senior Notes to be due and payable immediately. As of December 31, 2019, we were in compliance with all covenants, and no default or event of default has occurred and is continuing.

Term Ioan

On December 21, 2018, FinCo, as borrower, and the Company, as guarantor, entered into a term loan credit agreement, or the "Term Loan Credit Agreement," pursuant to which FinCo borrowed \$100 million. All borrowings under the Term Loan Credit Agreement must be repaid by December 21, 2021. Interest on the borrowing currently accrues at one month LIBOR plus a spread ranging from 1.125% to 1.750% based on the Company's long-term issuer credit ratings. Interest payments on outstanding borrowings accruing interest based on LIBOR are due on the last day of the applicable interest period, which is currently monthly. The material events of default, representations and warranties and covenants under the Term Loan Credit Agreement are the same as those under the RCF. If an event of default occurs, the lenders under the Term Loan Credit Agreement will be entitled to take various actions, including the termination of their commitments and the acceleration of amounts due thereunder. As of December 31, 2019, the Company was in compliance with all covenants, and no default or event of default has occurred and is continuing.

On June 27, 2019, FinCo and the Company entered into a Joinder Agreement to the Term Loan Credit Agreement pursuant to which FinCo borrowed for general corporate purposes, and the Company guaranteed, a \$125 million term loan on the same terms and with the same maturity as the existing \$100 million term loan.

Revolving credit facility

FinCo is the borrower and the Company is the guarantor under the RCF. On May 21, 2018, the Company amended and restated its RCF to, among other things: (1) upsize the facility size from \$650 million to \$1 billion; (2) increase the aggregate letters of credit the Company may issue from \$350 million to \$500 million; (3) extend the maturity of the RCF from December 2021 to May 2023; and (4) remove certain restrictive covenants. Interest on any funded balances accrues at LIBOR plus a spread ranging from 1.125% to 2.00% based on the Company's long-term issuer credit ratings. The borrower must pay a commitment fee on any unfunded committed balance under the RCF ranging from 0.15% to 0.35% based on the long-term issuer credit rating. The commitment fee on unfunded balances is paid quarterly in arrears. The RCF contains customary events of default, representations and warranties and covenants, including, among other things, covenants that the Company's consolidated debt to total capitalization, as defined in the RCF, cannot be more than 35% and that the Company's consolidated net worth determined in accordance with GAAP cannot be less than 70% of the value of the Company's consolidated net worth as of March 31, 2018, plus 50% of net income since March 31, 2018.

If an event of default occurs, the lenders under the RCF will be entitled to take various actions, including the termination of their commitments and the acceleration of amounts due thereunder. As of December 31, 2019, the Company was in compliance with all covenants, and no default or event of default has occurred and is continuing.

As of December 31, 2019 and 2018, there was \$0 million and \$405 million, respectively, in revolving borrowings outstanding and no letters of credit outstanding under the RCF.

Senior notes due 2029

On October 7, 2019, FinCo issued \$500 million aggregate principal amount of 4.400% senior unsecured notes due 2029. The 2029 Senior Notes were issued pursuant to an Indenture, dated as of October 7, 2019, among FinCo, as issuer, the Company, as guarantor, and U.S. Bank National Association, as trustee, or the "Trustee," as supplemented by the First Supplemental Indenture, dated as of October 7, 2019, among FinCo, the Company and the Trustee. The 2029 Senior Notes are fully and unconditionally guaranteed on a senior unsecured basis by the Company.

The 2029 Senior Notes bear interest at a rate of 4.400% per year. Interest on the 2029 Senior Notes is payable semi-annually in arrears on April 15 and October 15 of each year, beginning on April 15, 2020. The 2029 Senior Notes will mature on October 15, 2029. FinCo may, at its option, redeem some or all of the 2029 Senior Notes at any time: (i) prior to July 15, 2029 at a redemption price equal to 100% of the principal amount of the 2029 Senior Notes to be redeemed plus a "make-whole" premium and accrued and unpaid interest, if any, to the date of redemption; and (ii) on or after July 15, 2029 at a redemption price equal to 100% of the principal amount of the 2029 Senior Notes to be redeemed, plus accrued and unpaid interest to the date of redemption.

On October 8, 2019 the Company used a portion of the proceeds from the 2029 Senior Notes to repay \$405 million of outstanding revolving borrowings under the RCF.

Subordinated debentures

On October 5, 2016, FinCo, as issuer, and the Company, as guarantor, entered into an issuing and paying agency agreement pursuant to which FinCo issued \$250 million of the subordinated debentures unconditionally guaranteed on a subordinated basis by the Company in a private placement.

Interest on the subordinated debentures is payable semi-annually in arrears on April 1 and October 1 of each year and accrues at 9.5% per annum from and including October 5, 2016 to, but excluding, October 1, 2021. On October 1, 2021 and on each fifth anniversary of such date thereafter, each, a "Reset Date," the interest rate shall be recomputed based on the yield (rounded to two decimal places) reported as of two business days prior to the Reset Date for the most recently issued actively traded on the run U.S. Treasury securities having a maturity of five years from the Reset Date, plus 8.38% per annum.

FinCo has the right on one or more occasions to defer the payment of interest on the subordinated debentures for up to five consecutive years, each such period, an optional deferral period. During an optional deferral period, interest will continue to accrue at the interest rate on the subordinated debentures, compounded semi-annually as of each interest payment date.

If FinCo has exercised its right to defer interest payments on the subordinated debentures, FinCo and the Company generally may not: (1) make payments on or redeem or purchase (a) our common stock or (b) with respect to FinCo, any indebtedness ranking on parity with or junior to the subordinated debentures, and with respect to us, any indebtedness ranking on parity with or junior to the guarantee; or (2) make any guarantee payments with respect to any guarantee by FinCo or by the Company of any securities or any of their respective subsidiaries if such guarantee ranks equally with or junior to the debentures.

FinCo may elect to redeem the subordinated debentures either: (1) in whole or in part on any interest payment date on or after October 1, 2021, at a redemption price equal to the principal amount plus accrued and unpaid interest; or (2) in whole, but not in part, at any time prior to October 1, 2021, within 90 days after the occurrence of a tax event or a rating agency event, as defined in the issuing and paying agency agreement, at a redemption price equal to the principal amount plus accrued and unpaid interest up to, but excluding, the redemption date.

12. Composition of other assets, liabilities, income, insurance expenses and general and administrative expenses

Other assets consist of the following:

	As of December 31,				
		2019		2018	
(\$ in millions)					
Restricted cash	\$	181	\$	80	
Miscellaneous assets ⁽¹⁾		151		95	
Right-to-use lease asset		109		_	
Investments in process of settlement		48		54	
Deferred sales inducement and intangible assets		44		58	
Current income tax recoverable		41		_	
Premiums and other account receivables		37		40	
Deferred tax asset		_		166	
Total other assets	\$	611	\$	493	

⁽¹⁾ Includes related party notes receivable of \$35 million as of December 31, 2019. There were no related party notes receivable as of December 31, 2018.

The definite life intangible assets are amortized by using the straight-line method over the useful life of the assets which is between 4 to 9 years. The indefinite life intangible assets are not subject to amortization. The amortization expense of definite life intangible assets was \$1 million, \$2 million and \$2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Accrued expenses and other liabilities consist of the following:

	As of December 31,			
	201	19		2018
(\$ in millions)				
Accrued expenses ⁽¹⁾	\$	452	\$	495
Deferred tax liability		220		_
Accrued employee related expenses		163		160
Lease liability		128		_
Investments in process of settlement		96		25
Derivative instruments payable		79		27
Accounts and commissions payables		22		18
Accrued interest		14		9
Other tax related liabilities		13		11
Current income tax payable		_		57
Single premium immediate annuity note payable		_		24
Total accrued expenses and other liabilities	\$	1,187	\$	826

⁽¹⁾ Includes related party balances of \$19 million and \$17 million as of December 31, 2019 and 2018, respectively.

Other income consists of the following:

	For the years ended December 31,								
		2019	2018		20				
(\$ in millions)									
Administrative, marketing and distribution fees	\$	35	\$	37	\$		27		
Miscellaneous income		23		21			7		
Total other income	\$	58	\$	58	\$		34		

Insurance expenses consist of the following:

	For the years ended December 31,							
	2019	2018			2017			
(\$ in millions)								
Commission expense	\$ 60	\$	46	\$	36			
Other insurance expenses ⁽¹⁾	25		34		27			
Premium taxes	21		18		21			
Total insurance expenses	\$ 106	\$	98	\$	84			

(1) Includes related party balances of \$7 million for both of the years ended December 31, 2019 and 2018. There were no related party balances for the year ended December 31, 2017.

General and administrative expenses consist of the following:

	For the years ended December 31,								
	2019	2018			2017				
(\$ in millions)									
Employee-related expenses	\$ 289	\$	289	\$	229				
Administrative and professional services	191		200		198				
Miscellaneous operating expenses ⁽¹⁾	8		16		44				
Total general and administrative expenses	\$ 488	\$	505	\$	471				

⁽¹⁾ Includes related party balances of \$10 million and \$6 million for the years ended December 31, 2019 and 2018, respectively. There were no related party balances for the year ended December 31, 2017.

13. Shareholder's equity

The Company had 304 common shares outstanding, with a par value of \$1, and did not have any dividends payable as of December 31, 2019. All 304 shares were held by the Company's direct parent as of December 31, 2019.

The maximum number of the Company shares authorized for issuance is 100,000,000 common shares. In 2016, Global Atlantic Financial Life Limited, or "Global Atlantic Financial Life," a Bermuda exempted company and the Company's direct parent, made capital contributions to the Company in exchange for 199 common shares in exchange for the contributed assets of FinCo.

14. Accumulated other comprehensive income (loss)

Information regarding amounts reclassified out of each component of accumulated other comprehensive income (loss) for the years ended December 31, 2019, 2018 and 2017 was as follows:

		For the years ended December 31,						
Components of accumulated other comprehensive income (loss)	Consolidated statements of income and consolidated statements of comprehensive income (loss) location		2019		2018		2017	
(\$ in millions)								
Net unrealized investment gains on other investments:	AFS fixed maturity securities and							
Net unrealized investment gains	Net investment gains (losses)							
Net unrealized investment gains, before income tax		\$	89	\$	60	\$		163
Income tax expense			18		13			57
Net unrealized investment gains, net of income tax, reclassified		\$	71	\$	47	\$		106

15. Redeemable non-controlling interests

During the first quarter of 2019, the Company acquired controlling interests in certain renewable energy partnerships in which the non-controlling shareholder can sell its ownership back to the Company after a specified date is reached. The Company has redeemable non-controlling interests related to these renewable energy partnerships of \$94 million at December 31, 2019 as determined by the HLBV method. The estimated redemption value of redeemable non-controlling interests is calculated as the discounted cash flows subsequent to the expected flip date of the respective renewable energy partnership. The flip date represents the date at which the allocation of income and cash flows among the investors in the partnership is adjusted, pursuant to the redeemable non-controlling interest investors having achieved an agreed-upon return. The flip date of the Company's renewable energy partnerships determines when the redeemable non-controlling interests are eligible to be redeemed. Eligible redemption dates range from 2022 to 2027. For the redeemable non-controlling interests outstanding at December 31, 2019, the estimated redemption value that would be due at the respective redemption dates is \$7 million.

16. Equity-based compensation

The Company has established, through its indirect subsidiary, an Annual Incentive Plan, or "AI Plan," to foster and promote its long-term financial success through, among other things, the grant of RSAs, which are contractual rights to receive shares of GAFG, the Company's ultimate parent. Share-based awards under this plan may be equity-classified or liability-classified. As of December 31, 2019, all of the Company's share-based awards were equity-classified.

On March 1, 2019, in addition to the grant of annual, service-based RSAs under the AI Plan and performance-based RSAs under the ELTIP, defined below, the Company granted certain new performance-based RSAs, or "AI PRSAs". The AI PRSAs are fixed at the date of grant and subject to vesting based on certain non-GAAP, internal performance measures, primarily targeted profit increases in the Company's reinsurance business. As of the grant date, the Company expected the performance measures to be met at 100% of target and began recording expense for the AI PRSAs commensurate with the grant date. During the fourth quarter of 2019, the performance measures were expected to exceed target, and the Company adjusted expenses for these awards accordingly. The AI PRSAs are subject to a continued service requirement, in addition to the performance requirement, and are expected to cliff vest in three years. The AI PRSAs are included in the table of RSA activity below.

On March 1, 2018, the Company granted the initial performance-based RSAs, or "PRSAs," under the Equipment Long Term Incentive Plan, or "ELTIP," a sub-plan of the AI Plan. The PRSAs are fixed at the date of grant and subject to vesting based on certain non-GAAP, internal performance measures: (1) the initial expected future value of a specified pools of assets; (2) the expected internal rate of return, or "Expected IRR," on such assets; and (3) the target internal rate of return, or "Target IRR," on the assets. As of the grant date, the Company expected the Expected IRR to be met and began recording expense for the PRSAs commensurate with that date. The PRSAs are also subject to a continued service requirement and are expected to cliff vest in five years if the performance conditions described above are met. The PRSAs are included in the table of RSA activity below.

The components of compensation expense related to equity-based compensation were as follows:

		For the years ended December 31,							
	20	2019		2018		2017			
(\$ in millions)									
Service-based RSAs	\$	21	\$	21	\$	12			
Performance-based RSAs		3		1		_			
Total equity-based compensation expense	\$	24	\$	22	\$	12			
Deferred tax asset	\$	5	\$	4	\$	3			

The income tax benefit recognized by the Company with respect to the RSAs for each of the years ended December 31, 2019, 2018 and 2017 was \$4 million and is recognized prospectively as income tax benefit in the consolidated statements of income. In connection with the adoption of a FASB guidance, during 2017 the Company recorded an unrecognized excess tax benefit of \$2 million resulting from a net operating loss for the fiscal year ended December 31, 2016 through a cumulative-effect adjustment to retained earnings.

No cash settlements under the Company's equity-based compensation plan were made to employees during 2019, 2018 or 2017.

The Company recognized approximately \$18 million of amortized equity-based compensation expense, through adjustments within additional paid-in capital upon the February 28, 2019 vesting of RSAs and the associated issuance of GAFG ordinary shares to its employees. In connection with this issuance, the Company did not record an additional reduction to additional paid-in capital to satisfy employees' withholding taxes payable upon the delivery of GAFG shares for the year ended December 31, 2019.

The Company recognized approximately \$13 million of amortized equity-based compensation expense, through adjustments within additional paid-in capital upon the February 28, 2018 vesting of RSAs and the associated issuance of GAFG ordinary shares to its employees. In connection with this issuance, the Company recorded an additional reduction to additional paid-in capital of approximately \$6 million to satisfy employees' withholding taxes payable upon the delivery of GAFG shares.

The Company recognized approximately \$7 million of amortized equity-based compensation expense, through adjustments within additional paid-in capital upon the March 1, 2017 vesting of RSAs and the associated issuance of GAFG ordinary shares to its employees. In connection with this issuance, the Company recorded an additional reduction to additional paid-in capital of approximately \$4 million to satisfy employees' withholding taxes payable upon the delivery of GAFG shares.

The shares withheld to satisfy withholdings due upon the vesting of RSAs during 2019, 2018 and 2017 were classified as financing activities on the consolidated statements of cash flows.

The aggregate change to additional paid-in capital related to share-based payment expense amortization and utilization was a \$4 million increase, a \$2 million increase, and a \$1 million increase for the years ended December 31, 2019, 2018 and 2017, respectively.

No equity-based compensation costs were capitalized during the years ended December 31, 2019, 2018 or 2017.

The following table presents the Company's unrecognized compensation expense related to equity-based compensation and the expected weighted average period over which this expense will be recognized as of December 31, 2019:

		Expense	Weighted average period
	(\$	in millions)	(years)
Service-based RSAs	\$	33	2.5
Performance-based RSAs		9	3.2
Outstanding balance, as of end of year	\$	42	

Equity-classified awards

Restricted share awards

RSAs are grants of contractual rights to receive ordinary shares of the Company's ultimate parent, GAFG. The RSAs' underlying unvested shares are contractually entitled to dividends. Accordingly, the estimated fair value of the RSAs is derived from the fair value of GAFG's ordinary shares, as computed using the discounted cash flow method. Under this method, management's financial projections are used to determine a terminal year book value which is then discounted at a cost of equity capital which incorporates the risk profile of the Company.

The Company grants RSAs annually under its AI Plan, which was established on April 30, 2013, and was amended and restated on August 2, 2016. The determination of eligible employees under the AI Plan is made by the Compensation Committee of GAFG's Board of Directors. The total number of RSAs authorized for issuance under the AI Plan may not exceed 5% of GAFG's fully-diluted outstanding shares (or, approximately 7 million shares). RSAs may also be granted, at the Company's discretion, outside of the annual performance cycle. Any such RSAs granted reduce the maximum aggregate number of Ordinary Shares authorized to be issued under the AI Plan.

RSAs granted under the AI Plan are subject only to service-based vesting requirements and generally vest in three equal annual installments. RSAs granted prior to 2017 contain provisions for the acceleration of unvested shares upon an initial public offering, or "IPO." All RSAs contain accelerated vesting provisions for termination of employment as a result of death, disability or retirement. Unvested RSAs are forfeited following any other type of termination of employment except termination after a change in control. Any RSAs forfeited under the AI Plan are allocated back into the pool of available shares for future issuance.

The Company also grants certain PRSAs under the AI Plan and the ELTIP, which reduce the number of shares available for issuance under the AI Plan. The PRSAs, noted above, are subject to cliff vesting based on certain non-GAAP internal performance measures, as well as, continuous employment, with certain forfeiture provisions lapsing in the event of terminations of employment as a result of death, disability or retirement. All of the Company's PRSAs are equity-classified and included in the table of RSA activity below.

The table below presents the activity related to equity-classified RSAs for the year ended December 31, 2019:

	Restricted shares	Weighted average grant date fair value per share
Outstanding balance, as of beginning of year	1,877,365	\$24.35
Granted	2,068,166	22.06
Forfeited	(318,537)	23.76
Vested and issued	(569,106)	23.09
Vested and withheld for taxes	(358,780)	23.09
Outstanding balance, as of end of year	2,699,108	23.10

Liability-classified awards

Prior to the adoption of new FASB guidance on January 1, 2017, certain RSAs granted to employees who reside and work in Bermuda, which has no minimum statutory tax rate, but who are subject to U.S. tax withholdings were classified as liabilities and subject to re-measurement as of each accounting period until vested. Effective with the adoption of a new guidance, as long as the maximum tax requirement for any individual in a jurisdiction is not exceeded when using shares to satisfy withholdings, awards may still retain equity classification. As Bermuda's maximum tax rate for U.S. individual tax payers is greater than the maximum withholding rate for supplemental wages for U.S. filers, the withholding of shares to satisfy Bermuda-based employees' U.S. withholding requirements post-adoption of the new guidance no longer necessitates liability-classification.

The change in classification from liabilities to equity was accounted for as a modification of the affected awards. As a result, on January 1, 2017, the Company reclassified \$1 million of amortized share-based payment expense from other liabilities to additional paid-in capital, and fixed the measurement of fair value of the affected awards at the fair value of the underlying shares in effect immediately prior to adoption date. The aggregate unamortized share-based payment expense remaining on the affected awards as of December 31, 2016 was \$1 million, which is being recognized over the remaining vesting periods. Subsequent to January 1, 2017, RSAs granted to employees residing in Bermuda are accounted for as equity instruments as of the date of grant.

As of December 31, 2019, there were no liability-classified share-based payment awards outstanding.

Parent-company sponsored plans

In addition to the AI Plan sponsored by the Company, certain employees of the Company also participate in equity-based compensation awards under plans sponsored by the Company's parents, Global Atlantic Financial Life and GAFG: the carried incentive unit plan, or the "CI Plan," and the long-term incentive plan, or the "LTI Plan." The Company recorded allocated expenses related to these plans of \$0 million, \$1 million and \$2 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Certain Company employees hold awards under the CI Plan representing interests, or "incentive units," in a limited partnership which holds "incentive shares" of Global Atlantic Financial Life, the Company's immediate parent company. These incentive units entitle the incentive unit holders to a percentage of distributions from Global Atlantic Financial Life once GAFG shareholders have received their capital return plus a cumulative annualized internal rate of return of 8% on such capital contributions, or the "Preferred Return." As of December 31, 2019 and 2018, there were 942 and 1,000 incentive units outstanding, respectively, with a grant-date fair value of \$14,068 per incentive unit. Half of the incentive units are servicebased and subject to forfeiture in the event of a termination of employment prior to the fifth anniversary of the unit holder's admission to the limited partnership, with such forfeiture provision lapsing in four equal installments on the second through fifth anniversaries of the unit holder's admission to the limited partnership or, if earlier, upon a sale, initial public offering, merger, consolidation, distribution or disposition of stock or other disposition of Global Atlantic Financial Life or GAFG or an IPO of the Company resulting in aggregate gross proceeds of at least \$75 million, or an "Exit Transaction." The remaining half of the incentive units are performance-based, subject to the Preferred Return, and are subject to forfeiture in the event of a termination of employment, with such forfeiture provision lapsing upon an Exit Transaction. In the event that unit holder's employment is terminated for "cause," all incentive units held by such unit holder, whether or not vested, would be forfeited. The incentive units generally are not transferable by the unit holder. As of December 31, 2019 and 2018, approximately 505 and 481 incentive units were no longer subject to forfeiture, respectively, but were not eligible for distributions because the return of capital and Preferred Return had not been met. As of December 31, 2019, there was no unamortized service-based compensation expense remaining for the incentive units. The Company has not recognized any expense for the performance-based incentive units, which have an aggregate grant date fair value of \$7 million, as an Exit Transaction had not occurred and the Preferred Return was not met as of December 31, 2019.

Stock appreciation rights, or "SARs," were granted to certain employees under the LTI Plan. Half of each grant of SARs are subject to service-based vesting and half of each grant are subject to performance basedvesting. Service-based SARs vest over four years beginning with the second anniversary of the grant date. Performance-based SARs vest upon the occurrence of a change in control or an IPO of a certain size of GAFG or Global Atlantic Financial Life or an IPO of the Company. Even if vested, no SAR is exercisable until the GAFG shareholders have received their capital return plus a cumulative annualized internal rate of return of 8% on such capital contributions, or the "Performance Hurdle." After the Performance Hurdle has been met, one-third of the then-vested SARs become exercisable, with half of the remaining then-vested SARs becoming exercisable on the first anniversary and the remaining then-vested SARs becoming exercisable on the second anniversary. SARs that vest after the Performance Hurdle has been met are then subject to the same two year schedule for exercisability commencing on the date such SARs vested. Once exercisable, each SAR represents the right to receive upon exercise or redemption the fair market value of one Global Atlantic Financial Life ordinary share over the base price set in the award agreement settled in cash or securities. Once the Performance Hurdle has been met, each SAR also entitles the holder to dividend equivalent rights equal to the value of any dividend or distribution on Global Atlantic Financial Life ordinary shares. The administrator of the LTI Plan also has the discretion to vest and settle all outstanding SARs upon a change in control of GAFG or Global Atlantic Financial Life or an IPO of Global Atlantic Financial Life. Unvested SARs and dividend equivalent rights are forfeited following any type of termination of employment except death. As of December 31, 2019, approximately 12,730 SARs have vested but have not become exercisable. The SARs have a contractual life of twelve years and are generally transferable only upon death. As of December 31, 2019 and 2018, approximately 23,479 and 24,221 SARs, with a weighted average grant-date fair value of \$318.20 and \$404.45 per unit, respectively, were outstanding. As of December 31, 2019, there was no unamortized service-based compensation expense related to the SARs remaining. The Company has not recognized any expense for the performance-based SARs, which have an aggregate grant-date fair value of \$4 million, as the achievement of the Performance Hurdle was not deemed probable as of December 31, 2019.

17. Income taxes

Provision for income taxes

The Company and its direct Bermuda subsidiary have obtained an assurance from the Bermuda Minister of Finance that, in the event of an enactment of legislation imposing tax on income, profits or capital, such tax would not be applicable until March 31, 2035.

Certain subsidiaries of the Company operating in the U.S. are subject to tax in the U.S. Income taxes reported in these consolidated financial statements relate to those entities. One of the Company's subsidiaries operates in Bermuda and intends to operate its business such that it is not considered to be treated as engaged in the conduct of a trade or business in the U.S. Because the U.S. tax code, regulations and court decisions do not definitively identify activities that constitute being engaged in a trade or business in the U.S., the Internal Revenue Service, or "IRS," may assert that the Company's non-U.S. subsidiary is engaged in a trade or business in the U.S. The Company and its Bermuda subsidiary file protective U.S. income tax returns and the Company's U.S. subsidiaries file income tax returns with the U.S. federal government and various U.S. state governments.

Global Atlantic Re Limited, or "Global Atlantic Re," a direct subsidiary of the Company based in Bermuda, made an election under Internal Revenue Code, or "IRC," Section 953(d) for 2018 to be treated as a U.S. domestic insurance company and will be filing Form 1120 L for the tax years ended December 31, 2019 and 2018.

The table below presents the components of the expense (benefit) for taxes attributable to continuing operations:

	For the years ended December 31,						
	2019		2018			2017	
(\$ in millions)							
Current income tax expense							
Federal	\$	100	\$	82	\$	28	
State/local		_		(1)		3	
Total current income tax expense		100		81		31	
Deferred income tax benefit							
Federal		(58)		(35)		(53)	
State/local		(3)		(2)		5	
Total deferred income tax benefit		(61)		(37)		(48)	
Total income tax expense (benefit)	\$	39	\$	44	\$	(17)	

The table below presents the components of income before income taxes by jurisdiction:

	For the years ended December 31,						
	2019		2018			2017	
(\$ in millions)							
Income before income taxes:							
U.S.	\$	481	\$	340	\$	241	
Bermuda		122		86		311	
Total income before income taxes	\$	603	\$	426	\$	552	

The expected tax provision computed on income before income taxes at the weighted average tax rate has been calculated as the sum of income before income taxes in each jurisdiction multiplied by that jurisdiction's applicable statutory tax rate. The statutory rates by jurisdiction were 0% and 21% for Bermuda and the U.S., respectively. A reconciliation of the differences between the provision for income taxes and the expected tax provision computed at weighted statutory rates is as follows:

	For the years ended December 31,						
		2019	2018	2017			
(\$ in millions)							
Expected income tax expense at weighted average rate	\$	101	\$ 71	\$ 84			
Addition (reduction) in income tax resulting from:							
Dividend received deduction		(3)	(3)	(8)			
Low income housing tax credits		(2)	(3)	(3)			
Prior year taxes, including tax rate differential		(1)	(11)	2			
State taxes		(2)	(2)	5			
Non-controlling interest tax effect		14	11	9			
Intercompany reinsurance through funds withheld trusts		_	_	(6)			
Non-deductible conversion costs		_	1	9			
Investment tax credits		(71)	(15)	_			
Global Atlantic Re opening U.S. deferred tax adjustment		_	(6)	_			
Revaluation due to change in tax rate		_	_	(109)			
Other		3	1	_			
Total income tax expense (benefit)	\$	39	\$ 44	\$ (17)			

Deferred income taxes

Deferred income taxes reflect the net effects of temporary differences between financial reporting and tax basis of assets and liabilities. These temporary differences result in taxable or deductible amounts in future years and are measured using the tax rates and laws that will be in effect when such differences are expected to reverse. Valuation allowances are established to reduce deferred tax assets to the amount that more-likely-than-not will be realized.

The table below presents the significant components of deferred tax assets and liabilities:

	As of Dece	mber 31,		
	 2019	2018		
(\$ in millions)				
Deferred tax assets:				
Insurance reserves	\$ 951	\$	719	
Tax attributes carryforward	16		96	
Employee compensation	17		17	
Deferred revenue liabilities	247		286	
Goodwill	10		12	
Other	32		21	
Subtotal deferred tax assets	1,273		1,151	
Valuation allowance	(2)		(3)	
Total deferred tax assets	1,271		1,148	
Deferred tax liabilities:				
VOBA	156		373	
DAC	522		242	
Loss reserve adjustment (transition rule)	167		208	
Investments, including derivatives	645		153	
Other	1		6	
Total deferred tax liabilities	1,491		982	
Total deferred tax (liability) asset, net	\$ (220)	\$	166	

Tax attributes

The Company recorded a valuation allowance of \$2 million against tax benefits from state net operating loss carryforwards for the tax year ended December 31, 2019 and a valuation allowance of \$3 million against tax benefits from capital loss and state net operating loss carryforwards for the tax year ended December 31, 2018. For the tax year ended December 31, 2019, the capital loss carryforward expired, therefore no valuation allowance was recorded. In management's judgment, the remaining gross deferred tax asset will more-likely-than-not be realized through reductions of future taxes, except as otherwise noted. This conclusion is based primarily on a review of expected taxable income and considers all available evidence, both positive and negative.

As of December 31, 2019, the Company had net operating loss carryforwards of \$66 million which will begin to expire in 2034.

Unrecognized tax benefits

The Company recognizes tax positions in the consolidated financial statements only when it is more-likely-than-not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more-likely-than-not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the consolidated financial statements. The Company believes that its income tax filing positions and deductions will be sustained on audit and does not anticipate any adjustments that will impact the Company's financial condition, results of operations or cash flows. As of December 31, 2019 and 2018, the Company did not record a liability related to accounting for uncertainty in income taxes.

Status of open tax years

The Company's U.S. domiciled subsidiaries' federal income tax returns are routinely audited by the IRS, and when appropriate, provisions are made in the consolidated financial statements in anticipation of the results of these audits. The tax years under examination by the IRS vary by company, however, the earliest tax year that remains open is 2011. In 2018, the IRS completed an audit of several of the Company's U.S. domiciled non-insurance entities' 2013 to 2015 federal income tax returns; the audit did not result in any material adjustments to such tax returns. In 2018, the IRS started an audit of several of the Company's U.S. domiciled insurance entities' for tax years 2014 to 2016; to date, no material proposed adjustments have been identified in connection with this audit.

U.S. withholding tax

U.S. withholding taxes have not been provided on undistributed earnings of the Company's U.S. subsidiaries as of December 31, 2019 and 2018. Although U.S. withholding taxes may apply in the event a dividend is paid by the Company's U.S. subsidiaries, the Company has not accrued withholding taxes. Although it may be material to the Company's financial position and results of operations, the cumulative amount subject to U.S. withholding taxes, if distributed, and determination of the tax liability is not practicable to compute.

Tax Cuts and Jobs Act

H.R. 1, commonly referred to as the TCJA, was enacted into U.S. law on December 22, 2017. This law includes a broad range of tax reform changes that will affect U.S. businesses, including changes to corporate tax rates, business deductions and international tax provisions.

In December 2017, the SEC staff issued Staff Accounting Bulletin, or "SAB," 118 to address the application of U.S. GAAP in situations when a registrant does not have necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of TCJA. In January 2018 FASB issued FASB Staff Q&A, Topic 740, No. 1 stating that application of SAB 118 would be considered to be in accordance with U.S. GAAP for private company financial statements. SAB 118 provides guidance under three scenarios: (1) measurement of certain income tax effects is complete; (2) measurement of certain income tax effects can be reasonably estimated; and (3) measurement of certain income tax effects cannot be reasonably estimated. SAB 118 provides that the measurement period is complete when a company's accounting is complete and in no circumstances should the measurement period extend beyond one year from the enactment date. SAB 118 acknowledges that a company may be able to complete the accounting for some provisions earlier than others. As a result, it may need to apply all three scenarios in determining the accounting for TCJA based on information that is available.

Upon enactment of TCJA, the Company recognized a \$109 million tax benefit in income tax expense (benefit) in the Company's Consolidated Statements of Income for the year ended December 31, 2017. This net tax benefit resulted from the reduction in the U.S. tax rate from 35% to 21% and was comprised of a \$76 million tax expense from the decrease in net deferred tax assets related to the non-OCI portion of the deferred inventory, offset by a \$185 million tax benefit from the decrease in net deferred tax liabilities related to the OCI portion of the deferred inventory. The Company has completed its accounting of the tax effects of TCJA. As a result, during the year ended December 31, 2018, the Company recorded a net income tax benefit of \$6 million as an adjustment to the provisional amounts recorded as of December 31, 2017.

18. Earnings per share

The following table sets forth the computation of basic and diluted earnings per share, or "EPS":

	For the years ended December 31,							
	2019		2018		2018		2017	
(\$ in millions, except for share and per share amounts)								
Net income attributable to Global Atlantic Financial Limited shareholder	\$	633	\$	434	\$	595		
Participating common shares as of the end of the year		304		304		304		
Net income attributable to Global Atlantic Financial Limited shareholder – basic and diluted	\$	633	\$	434	\$	595		
	Ť		Ť		Ť			
Weighted average common shares outstanding – basic		304		304		304		
Weighted average common shares outstanding – diluted		304		304		304		
Earnings per share:								
Basic	\$	2,082,237	\$	1,427,632	\$	1,957,237		
Diluted	\$	2,082,237	\$	1,427,632	\$	1,957,237		

For the purposes of calculating earnings per share, the 199 common shares issued and outstanding to Global Atlantic Financial Life as part of the reorganization discussed in Note 13 — "Shareholder's equity," were considered to have been issued for all periods presented, consistent with the retrospective application of the assets and liabilities of an entity under common control.

As of December 31, 2019, 2018 and 2017, there were no dilutive equity-based compensation awards currently referenced to the shares of the Company, or any other sources of dilution to the Company's issued and outstanding common shares. There were also no share amounts excluded from the calculation of "Earnings per share – Diluted" as no shares had an as-converted effect of being anti-dilutive.

19. Dividend restrictions and statutory information

Several of the Company's subsidiaries are regulated insurance companies and subject to laws governing the payment of dividends to shareholders in the U.S. and Bermuda.

The United States of America

The laws and regulations of each of our U.S. insurance subsidiaries' state of domicile require notice to and approval by the applicable state insurance commissioner prior to the declaration or payment of an extraordinary dividend. An extraordinary dividend is any dividend, which, together with other dividends or distributions made within the preceding 12 months, exceeds the greater of: (1) 10% of the insurer's policyholder surplus as of December 31 of the preceding year; or (2) the statutory net gain from operations for the twelve-month period ending on the last preceding December 31. An ordinary dividend is any dividend that does not exceed such amount. Insurance statutes also generally require an insurance company to pay a dividend or distribution out of earned surplus, unless it receives the prior approval of its domiciliary state insurance regulator. These laws and regulations require, among other things, each U.S. insurance subsidiary to maintain minimum solvency requirements and limit the amount of dividends these subsidiaries can pay.

The Company's primary U.S. insurance subsidiary, Commonwealth Annuity and Life Insurance Company, or "CwA," a stock company of the Commonwealth of Massachusetts, is the sole owner of the Company's other U.S. insurance subsidiaries. As a result, if it receives any dividend payments from those subsidiaries it must further dividend those payments in order for the payments to reach the Company. As such, the ordinary dividend capacity at CwA effectively limits the Company's access to the dividend capacity of its other U.S. insurance subsidiaries unless CwA seeks and receives extraordinary dividend approval from CwA's primary insurance regulator, the Massachusetts Division of Insurance.

The following table sets forth statutory and dividend information of CwA:

	 As of, and for the years ended December 31,							
	2019	2018			2017			
(\$ in millions)								
Statutory net (loss) income	\$ (32)	\$	(23)	\$	268			
Statutory net gain from operations	99		(71)		526			
Capital and surplus	2,846		2,788		2,488			
Dividends permitted without approval during the following year	285		279		526			

The Company's U.S. insurance subsidiaries must meet minimum capital and surplus requirements under a risk-based capital, or "RBC," formula. RBC is the standard measurement of an insurance company's required capital on a statutory basis, and is based on a formula calculated by applying factors to various assets, premium and statutory reserve items. The formula is intended to take into account the risk characteristics of the insurer, including asset risk, insurance risk, interest rate risk and business risk. Regulatory action is tied to maintaining certain levels of a company's surplus deficit under the RBC formula or company action level RBC, or "CAL RBC." All of the Company's U.S. insurance subsidiaries individually exceeded CAL RBC for 2019 and 2018.

Certain of the Company's regulated insurance subsidiaries are required to file financial statements with U.S. state regulatory authorities prepared on an accounting basis prescribed or permitted by their domiciliary state. Statutory surplus computed under those methodologies differ from equity reported in accordance with U.S. GAAP primarily because fixed maturity securities are required to be carried at cost or amortized cost, policy acquisition costs are expensed when incurred and asset valuation and interest maintenance reserves are required to be held. Life insurance reserves are calculated based upon different assumptions and the recognition of deferred tax assets is based on different recoverability assumptions.

The Company's insurance entities cede certain term life and universal life insurance statutory reserves to wholly-owned captives on coinsurance and funds withheld coinsurance bases. The reserves are secured by cash, invested assets and financing provided by highly rated third parties. As of December 31, 2019 and 2018, the Company's wholly-owned captives assumed statutory reserves of \$5.9 billion and \$5.6 billion, respectively, from the Company's insurance entities. In the states of Vermont and Iowa, the affiliated reinsurers have adopted prescribed practices allowing for the outstanding principal of a contingent note or a parental guarantee serving as collateral in connection with a reinsurance credit to be included in surplus as admitted assets. As of December 31, 2019 and 2018, assets admitted under these practices increased surplus by \$2.0 billion and \$1.9 billion, respectively.

Bermuda

Global Atlantic Re and Global Atlantic Assurance Limited, or "Global Atlantic Assurance," are subsidiaries of the Company. Beginning in 2018, Global Atlantic Re is treated as a U.S. domestic insurance company under IRC Section 953(d) and began filing Form 1120 L for the tax year ended December 31, 2018. Prior to 2018, Global Atlantic Re was a Bermuda tax exempted company. Global Atlantic Assurance is a Bermuda tax exempted company. Together we refer to both companies as "our Bermuda insurance subsidiaries." Our Bermuda insurance subsidiaries are subject to the Bermuda Insurance Act 1978, as amended and related regulations, or the "Bermuda Insurance Act."

The Bermuda Insurance Act limits the ability of our Bermuda insurance subsidiaries to pay dividends or make capital distributions by stipulating certain margin and solvency requirements and by requiring approval from the Bermuda Monetary Authority, or the "BMA," prior to a reduction of 15% or more of an insurer's total statutory capital as reported on its prior year statutory balance sheet. Moreover, an insurer must submit an affidavit to the BMA, sworn by at least two directors and the principal representative in Bermuda of the respective Bermuda insurance subsidiary, at least seven days prior to payment of any dividend which would exceed 25% of an insurer's total statutory capital and surplus as reported on its prior year statutory balance sheet. The affidavit must state that, in the opinion of those swearing, the declaration of such dividend has not caused the insurer to fail to meet its relevant margins (a "Bermuda Dividend Affidavit"). Accordingly, our Bermuda insurance subsidiaries may distribute up to (1) 100% of statutory surplus plus (2) an amount less than 15% of statutory capital, upon providing the BMA with a Bermuda Dividend Affidavit and meeting applicable solvency requirements, without BMA approval.

With respect to margin and solvency requirements, the Bermuda Insurance Act prohibits our Bermuda insurance subsidiaries from declaring or paying any dividends during any financial year if it is in breach of its solvency margin or if the declaration or payment of such dividends would cause such a breach. If the insurer has failed to meet its minimum solvency margin on the last day of any financial year, such insurer will also be prohibited, without the approval of the BMA, from declaring or paying any dividends during the next financial year. Our Bermuda insurance subsidiaries are also prohibited from declaring or paying a dividend where it has failed to comply with its enhanced capital requirement, until such noncompliance is rectified. Both of the Company's Bermuda reinsurance subsidiaries individually exceeded their enhanced capital requirements.

The following table sets forth statutory and dividend information of our Bermuda insurance subsidiaries:

	As of, and for the years ended December 31,						
	2019		2018			2017	
(\$ in millions)							
Global Atlantic Re							
Statutory net income	\$	223	\$	212	\$	275	
Capital and surplus		1,215		934		761	
Dividends permitted without approval during the following year		969		688		515	
Global Atlantic Assurance							
Statutory net income	\$	132	\$	92		n/a	
Capital and surplus		872		452		n/a	
Dividends permitted without approval during the following year		493		69		n/a	

On December 29, 2017, Global Atlantic Re paid a dividend of \$450 million to the Company after providing a Bermuda Dividend Affidavit to the BMA in accordance with the Bermuda Insurance Act, and following expiration of the corresponding seven day notice period. Neither of our Bermuda insurance subsidiaries declared or paid a dividend in 2019 or 2018.

In 2020, Global Atlantic Re has the capacity to declare a dividend of \$969 million and Global Atlantic Assurance has the capacity to declare a dividend of \$493 million, in either case without BMA approval subject to providing the BMA a Bermuda Dividend Affidavit, meeting applicable margin and solvency requirements and complying with Bermuda law more generally. Dividends paid to the Company by Global Atlantic Re (with respect to any period in which it has an effective IRC Section 953(d) election in place) may be subject to a 30% U.S. withholding tax.

The Bermuda Insurance Act requires our Bermuda insurance subsidiaries to prepare and file statutory financial statements with the BMA in accordance with BMA prescribed or permitted practices that may differ from U.S. GAAP. For example, Bermuda statutory surplus differs from U.S. GAAP primarily due to a modification that permits our Bermuda insurance subsidiaries to not measure the embedded derivative included within certain funds withheld coinsurance agreements at fair value.

The Bermuda Insurance Act also requires our Bermuda insurance subsidiaries to maintain certain measures of solvency and liquidity. The Bermuda statutory financial statements form the basis for assessing our Bermuda insurance subsidiaries' liquidity, minimum solvency margin and class of registration. These financial statements in turn form the basis for the preparation of the insurer's economic balance sheet. Economic balance sheet is a principles-based valuation approach to determine an insurer's capital adequacy and is used as the basis for determination of the Bermuda insurance subsidiary's enhanced capital requirement.

20. Related party transactions

On September 24, 2018, the Company and Origis Energy, or "Origis," a utility-scale renewable energy developer, entered into a series of agreements whereby the Company invested in a minority equity position in Origis USA, LLC, or "Origis USA," the holding company for Origis, and agreed to provide development financing for renewable energy projects that the Company may purchase in the future subject to certain conditions. These agreements enable the Company to exercise significant influence over the operating and financial policies of Origis USA. The Company reported a loan receivable of \$237 million and \$107 million and an equity investment of \$38 million and \$42 million in Origis USA as of December 31, 2019 and 2018, respectively. In addition, in lieu of funding certain loans to Origis in cash, the Company has arranged for third-party banks to issue letters of credit on behalf of Origis in the amount of \$14 million as of December 31, 2019. During 2019, the Company also purchased controlling interests from Origis in projects that we now consolidate. The amount of purchases of controlling interests totaled \$313 million for the year ended December 31, 2019. As of December 31, 2019, \$13 million of the purchase price was unpaid. See Note 21—"Commitments and contingencies" for more information on the Company's arrangement of letters of credit.

Effective June 1, 2018, the Company entered into coinsurance agreements with Talcott Resolution Life Insurance Company and Talcott Resolution Life and Annuity Insurance Company (formerly Hartford Life Insurance Company and Hartford Life and Annuity Insurance Company,) subsidiaries of Talcott Resolution Life, Inc., whereby it assumed approximately \$8.7 billion of fixed deferred annuities, payout annuities and structured settlement contracts. In addition, on May 31, 2018, the Company also purchased a \$150 million limited partnership interest in the acquisition vehicle formed in connection with the sale of The Hartford's run-off life and annuity business, now referred to as Talcott Resolution. As a result of this ownership interest, the aforementioned reinsurance transaction is considered a transaction with an affiliate. The Company reported assumed policyholder liabilities in connection with the reinsurance agreement of \$7.4 billion and \$8.2 billion as of December 31, 2019 and 2018, respectively. The Company reported assumed policy benefits and claims of \$298 million and \$2.8 billion for the years ended December 31, 2019 and 2018, respectively.

Affiliates of two of GAFG's lead investors, Pine Brook Capital Partners II (Cayman) AV, L.P. and Safra Galileo Global Fund Ltd., also each purchased a \$150 million limited partnership interest in Talcott Resolution. The Company and the other investors in Talcott Resolution also entered into an agreement, the "Master Framework Agreement," that governs the rights among the investors in Talcott Resolution. Pursuant to the Master Framework Agreement, the Company's voting interest in Talcott Resolution is capped at 4.9%. The other investors in Talcott Resolution are each entitled to a pro rata share of the remaining voting interest in Talcott Resolution according to their economic interests. The Master Framework Agreement also allocates among the investors rights to designate members of the board of directors of two indirect parent entities of Talcott Resolution, pursuant to which the Company, Pine Brook Capital Partners II (Cayman) AV, L.P. and Safra Galileo Global Fund Ltd. are each entitled to the right to designate one of the 11 directors of each board. One of the Company's directors has been designated to serve on the board of directors by Safra Galileo Global Fund Ltd. The Master Framework Agreement also contains customary transfer restrictions and preemptive rights applicable to the Company's investment in Talcott Resolution.

The Company has certain investments in renewable energy entities that are LLCs where an affiliate of Centaurus Capital LP, or "Centaurus," a shareholder of our ultimate parent GAFG, is the managing member. In connection with the acquisition of a renewable energy project from Centaurus Renewable Energy, or "CRE," an affiliate of Centaurus, the Company has recorded \$13 million and \$14 million payable to CRE as of December 31, 2019 and 2018, respectively. The Company also purchased controlling interests from Centaurus in projects that we now consolidate, and co-invested in investments with Centaurus where we have an equity method investment. The amount of purchases of controlling interests totaled \$366 million and \$213 million for the years ended December 31, 2019 and 2018, respectively. The amount of purchases of equity method investments in entities controlled by Centaurus totaled \$0 million and \$29 million for the years ended December 31, 2019 and 2018, respectively.

In May 2018, we entered into a Forward Flow Agreement with Clenera, LLC, or "Clenera," and CRE. Pursuant to the agreement, Clenera and CRE granted us the exclusive right, subject to existing rights, during the twelve-month exclusivity period that terminated June 1, 2019, to acquire (i) 100% of the equity interests in any entity that owns an identified group of renewable energy projects and (ii) certain other renewable energy projects in which Clenera or CRE thereafter acquire rights. CRE has the option to fund the construction of each such renewable energy project, in which case we may acquire these projects from CRE for an agreed yield. If CRE does not elect to fund construction, we may elect to do so, in which case we would pay Clenera a per watt fee for each such project. Clenera and Centaurus are entitled to carried interest on projects for which we fund construction after we attain a specified return. In exchange for the grant of the exclusive purchase rights, we paid Clenera \$7 million for the twelve-month exclusivity period.

During the years ended December 31, 2019 and 2018, the Company purchased structured securities directly from Goldman Sachs with a cost of \$56 million and \$11 million, respectively. The Company did not buy any structured securities directly from Goldman Sachs during the year ended December 31, 2017. The Company considers these purchases to be transactions in the ordinary course of its business.

An affiliate of Goldman Sachs, Goldman Sachs & Co. LLC, served as joint-book running manager in connection with the October 2019 offering of FinCo's 2029 Senior Notes. In connection with their services as joint-book running manager, they were paid approximately \$1 million by the Company.

The Company has investment management service agreements with GSAM. GSAM provides investment management services across the Company. The Company recorded expenses for these agreements of \$12 million, \$11 million and \$13 million for the years ended December 31, 2019, 2018 and 2017, respectively, and had \$7 million and \$3 million payable as of December 31, 2019 and 2018, respectively.

On April 30, 2013, GAFG, Global Atlantic Financial Life and FinCo entered into a Tax Benefit Payment Agreement with Goldman Sachs. The agreement was the result of transactions entered into prior to the separation from Goldman Sachs that resulted in approximately a \$234 million tax liability relating to the Company. Under this agreement, the Company has agreed to pay Goldman Sachs \$214 million over a 25-year period, subject to certain deferral conditions. This agreement represents payments to Goldman Sachs corresponding to taxes paid on the Company's behalf prior to the separation from Goldman Sachs. This payable was established on the Company's balance sheet at its present value of \$140 million as of April 30, 2013. As of December 31, 2019 and 2018, the liability under this agreement was \$90 million and \$98 million, respectively. The Company recognized \$4 million for each of the years ended December 31, 2019, 2018 and 2017 in related interest expense in the consolidated statements of income. The Company made principal payments of \$8 million, \$3 million and \$6 million in 2019, 2018 and 2017, respectively.

The Company recorded intercompany expenses related to certain employee compensation plans of \$0 million, \$1 million and \$2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company had a receivable of \$0 million and \$3 million from Global Atlantic Financial Life as of December 31, 2019 and 2018, respectively, related to potential IPO transaction costs incurred by the Company. The Company had a payable of \$0 million and \$12 million to GAFG as of December 31, 2019 and 2018, respectively, relating to payables associated with equity-based compensation awards the Company settled in GAFG ordinary shares. On October 18, 2019, the Company issued a \$35 million intercompany loan to its ultimate parent, GAFG, in order to fund the repurchase of GAFG ordinary shares.

The Company held related party investments in its portfolio as of December 31, 2019 and 2018 as follows:

		As of December 31, 2019					
Туре	Balance sheet classification		carrying alue		Accrued interest		tal balance eet amount
(\$ in millions)							
Investments in renewable energy entities managed by an affiliate of Centaurus	Other investments	\$	145	\$	_	\$	145
Goldman Sachs Group bonds	AFS fixed maturity securities		179		1		180
Origis loan receivable	Mortgage and other loan receivables		238		3		241
Total related party investments		\$	562	\$	4	\$	566

Туре	Balance sheet classification		Asset carrying Accrued value interest				al balance et amount
(\$ in millions)							
Investments in renewable energy entities managed by an affiliate of Centaurus	Other investments	\$	159	\$	_	\$	159
Goldman Sachs Group bonds	AFS fixed maturity securities		115		1		116
Origis loan receivable	Mortgage and other loan receivables		107		_		107
Total related party investments		\$	381	\$	1	\$	382

In addition to the foregoing related party investments, the Company also invested in funds managed by a related party as of December 31, 2019 and 2018, as follows:

		As of December 31, 2019						
Туре	Balance sheet classification	Asset carrying value		Accrued interest			al balance et amount	
(\$ in millions)								
Goldman Sachs money market funds	Cash and cash equivalents	\$	1,248	\$	_	\$	1,248	
Total related party investments		\$	1,248	\$	_	\$	1,248	

		As of December 31, 2018											
Туре	Balance sheet classification		carrying alue	Accrued interest									
(\$ in millions)													
Goldman Sachs money market funds	Cash and cash equivalents	\$	862	\$	_	\$	862						
Goldman Sachs exchange traded funds	Equity securities		47		_		47						
Total related party investments		\$	909	\$		\$	909						

The Company earned net investment income and net investment gains (losses) from related party investments and from investments managed by related parties, as follows:

	For the years ended December 31,						
		2019		2018		2017	
(\$ in millions)							
Net investment income:							
Investments in renewable energy entities managed by an affiliate of Centaurus	\$	(6)	\$	28	\$	40	
Origis loan receivable		17		2		_	
Goldman Sachs Group bonds		6		7		7	
Goldman Sachs money market funds		14		21		6	
Goldman Sachs exchange traded funds		_		2		1	
Talcott Resolution		1		_		_	
Total net investment income	\$	32	\$	60	\$	54	
Net investment (losses) gains:							
Investments in renewable energy entities managed by an affiliate of Centaurus	\$	_	\$	4	\$	(2)	
Goldman Sachs Group bonds		_		2		_	
Goldman Sachs exchange traded funds		(2)		(1)		_	
Total net investment (losses) gains	\$	(2)	\$	5	\$	(2)	

21. Commitments and contingencies

Commitments

The Company has operational servicing agreements with third-party administrators for policy administration over certain fixed-rate annuities, universal life, variable annuity, variable universal life, whole life, and term life policies. Additionally, the Company is party to a third-party professional services agreement regarding the management of aspects of the Company's reinsurance portfolio. The Company leases office space for its operations.

As of December 31, 2019, purchase commitments under agreements with third-party administrators and other service providers and lease commitments were as follows:

Years	Amounts
	(\$ in millions)
2020	\$ 39
2021	34
2022	31
2023	24
2024	16
2025 and thereafter	55
Total	\$ 199

The Company has lease contracts with incremental borrowing rates, which range from 4.5% to 5.4% depending on the term. As of December 31, 2019, the Company has a right-to-use asset of \$109 million (net of \$19 million in deferred rent and lease incentives) and a corresponding lease liability of \$128 million.

The Company has commitments to purchase or fund investments of \$1.2 billion and \$673 million as of December 31, 2019 and 2018, respectively. These commitments include those related to commercial mortgage loans, other lending facilities and investments in limited partnerships, joint ventures and LLCs. The commitment periods vary, with most extending for the next 3 years, but some extend longer. Some of these investment commitments may be subject to conditions that must be met prior to funding.

In addition, the Company has entered into certain forward flow agreements that allow us to purchase loans. These agreements, and our obligations under them, are subject to change, curtailment, and cancellation based on various provisions including repricing mechanics, due diligence reviews, and performance or pool quality, among other factors.

Contingencies

Guarantees

In connection with the 2029 Senior Notes entered into by FinCo, the Company has agreed to fully and unconditionally guarantee on a senior unsecured basis. See Note 3 —"Significant transactions" and Note 11 —"Debt" for additional information on the 2029 Senior Notes.

In connection with the \$1 billion RCF entered into by FinCo and expiring May 2023, the Company has agreed to jointly and severally guarantee, together with any subsidiary guarantors, payment and performance of FinCo's obligations under the RCF when due if not promptly paid by FinCo for the benefit of the lenders. The guarantees provided by the Company and any subsidiary guarantors are released when all commitments and obligations under the RCF have been paid in full or when the RCF commitments expire, or are terminated upon the merger of certain subsidiary guarantors with or into FinCo in accordance with the terms set forth in the RCF. As of December 31, 2019, the Company was the only guarantor under the RCF. See Note 3—"Significant transactions."

In connection with the \$225 million term loan entered into by FinCo and due 2021, the Company has agreed to jointly and severally guarantee payment and performance of FinCo's obligations under the Term Loan Credit Agreement when due if not promptly paid by FinCo for the benefit of the lenders. The guarantees provided by the Company are released when all obligations under the Term Loan Credit Agreement have been paid in full. As of December 31, 2019, the Company was the only guarantor of the term loan. See Note 11 —"Debt" for additional information on the Term Loan Credit Agreement.

In connection with the \$250 million 9.5% fixed-to-fixed rate subordinated debentures due 2046 issued by FinCo, the Company agreed to unconditionally guarantee, on a subordinated, unsecured basis the payment in full of all payments due to and required to be paid to holders of the debentures under the relevant subordinated debentures agreements. See Note 11 —"Debt" for additional information on the subordinated debentures.

In connection with a Tax Benefit Payment Agreement entered into between FinCo, as payor, and Goldman Sachs, as payee, Global Atlantic Financial Life and GAFG have agreed to guarantee the payment and performance of FinCo, for the benefit of Goldman Sachs. See Note 20 —"Related party transactions" for additional information on the Tax Benefit Payment Agreement.

In lieu of funding certain investments in loan facilities to borrowers in cash, the Company has arranged for third-party banks to issue letters of credit on behalf of the borrowers in the amount of \$225 million, with expiration dates to January 2020 and October 2020. The Company has available lines of credit that would allow for additional letters of credit to be issued on behalf of its borrowers, up to \$65 million. For accounting purposes, these letters of credit are considered guarantees of certain obligations of the borrowers. If a letter of credit were drawn, the Company would be obligated to repay the issuing third-party bank, and the Company would recognize a loan receivable from the borrowers on its balance sheet. The Company monitors the likelihood of these letters of credit being drawn, and any related contingent obligation. As of December 31, 2019, there was no liability recognized for a contingent obligation.

GAFG has guaranteed the obligations of the Company's indirect subsidiary Global Atlantic Equipment Management, LLC pursuant to servicing agreements related to the servicing of certain aviation and rail assets. The guarantees expired subsequent to the end of the reporting period, on November 7, 2018.

In 2014, GAFG provided a guarantee, or "Guarantee," to the limited purpose captive insurance subsidiary Cape Verity II LLC, or "Cape Verity II," to finance the non-economic portion of its reserves. On May 1, 2019 and in connection with an agreement with a third party to finance such reserves, the parties terminated the Guarantee effective as of April 1, 2019. No payments were made under the Guarantee prior to its termination.

In 2013, the Company's limited purpose captive insurance subsidiary Cape Verity III entered into a note agreement with a third party. As a part of this agreement, Global Atlantic Financial Life will provide a guarantee of related fee and indemnification obligations of Accordia Life and Annuity Company, or "Accordia." Under the guarantee, Global Atlantic Financial Life agreed to guarantee payment, on demand, of fee and indemnification obligations related to the note, subject to certain conditions. To date, Global Atlantic Financial Life has not paid any amounts pursuant to the guarantee. On May 1, 2019, the Company assumed this guarantee from Global Atlantic Financial Life, effective as of April 1, 2019.

Legal matters

The Company is involved from time to time in judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its business. Given the inherent difficulty of predicting the outcome of the Company's litigation and regulatory matters, particularly in cases or proceedings in which substantial or indeterminate damages or fines are sought, the Company cannot estimate losses or ranges of losses for cases or proceedings where there is only a reasonable possibility that a loss may be incurred.

In connection with the process of converting over 500,000 in-force life insurance policies from systems managed by Athene Holdings Limited, or "Athene," to the platform of one of our third party service providers, DXC, or the "Conversion," the Company expects to incur a variety of litigation and regulatory costs. The Company has received formal and informal inquiries from state regulators concerning the administration of policies, policyholder complaints and possible violations of state insurance or consumer protection laws, which have resulted in and may result in additional fines, monetary settlements or proceedings. For example, on June 13, 2018, the Company's subsidiary Accordia received notice of a regulatory matter from the California Department of Insurance regarding administration issues relating to certain California life insurance policies reinsured by Accordia which are administered by DXC. The Company has an agreement in principle with the California Department of Insurance to resolve the matter and is currently working with the Department to finalize that agreement.

In addition, on June 28, 2018 a subsidiary of Athene and the Company's subsidiary First Allmerica Financial Life Insurance Company entered into a consent order with the New York State Department of Financial Services, or "NYSDFS," relating to the NYSDFS' market conduct examination findings that related primarily to disruptions in servicing caused by the Conversion. Pursuant to the consent order, Athene paid the NYSDFS a fine of \$15 million and is also taking corrective actions and providing remediation to policyholders impacted by the Conversion. Under the agreements between the Company's subsidiaries and Athene, the Company provides indemnities to Athene, including for fines and penalties resulting from violations of law. The Company paid Athene an amount equal to the NYSDFS fine. As of December 31, 2019, the Company also included in its reserve for all regulatory, litigation and related matters an amount for costs related to certain aspects of the corrective actions agreed to under the consent order. The Company may be required to indemnify Athene for additional amounts.

The Company has also been named in several lawsuits involving Conversion-related issues and may face additional claims in the future. Accordia is a defendant in a putative policyholder class action, *Clapp, et al. v. Accordia Life and Annuity Company, et al.*, in the Central District of Illinois, and until recently, was a defendant in a putative policyholder class action *McGuire v. Accordia Life and Annuity Company, et al.*, in the Central District of California. Both cases alleged injuries to policyholders related to billing issues stemming from the Conversion. In December 2018, the parties in the *McGuire* action filed a joint stipulation of dismissal without prejudice. The plaintiffs in the *Clapp* action have filed an amended complaint alleging claims on behalf of a nationwide class, subsuming the claims previously brought in the *McGuire* action. On June 7, 2019, the court preliminarily approved of the settlement agreement the Company entered into in May 2019 with the plaintiffs in the *Clapp* matter. Under the settlement we will provide policyholder remediation, including a claim review process with third party review upon request of a policyholder. The settlement remains subject to final approval by the court. We do not expect to incur any additional costs under the settlement agreement that have not already been accrued as of December 31, 2019.

An independent life insurance producer has also filed a class action complaint in the Southern District of Iowa against GAFG, Accordia, and DXC. The plaintiff seeks to represent a class of Accordia independent producers whom he claims were harmed by, and unable to receive renewal commissions due to, the Conversion. The Company denies that any agent has been or will ultimately be injured as a result of the allegations in the complaint, notwithstanding this, the Company has an agreement in principle to resolve the matter and is working with DXC and plaintiffs on a Memorandum of Understanding as the first step toward documenting a settlement.

Although the Company's ultimate legal and financial responsibility and our actual future expenditures to address Conversion matters cannot be estimated at this time and could prove to be materially different from the amount that we accrue or reserve for, the Company believes that certain liabilities are probable and can be reasonably estimated and accordingly has recorded a total reserve for all regulatory, litigation and related matters of approximately \$41 million and \$45 million as of December 31, 2019 and 2018, respectively.

Financing arrangements

The Company has financing arrangements with unaffiliated third parties to support the reserves of its affiliated captive reinsurers. Total fees expensed associated with these credit facilities were \$18 million, \$17 million, and \$15 million for the years ended December 31, 2019, 2018, and 2017, respectively, and are included in insurance expenses in the consolidated statements of income. As of December 31, 2019 and 2018, the total capacity of the financing arrangements with third parties was \$2.0 billion and \$966 million, respectively.

There were no outstanding or unpaid balances from the financing arrangements with unaffiliated third parties as of December 31, 2019 or 2018.

Separation agreement

In connection with our separation from Goldman Sachs in 2013, GAFG entered into a separation agreement pursuant to which, among other things, GAFG (1) accepted and assumed all assets, equity interests and liabilities related to the operations of the "Reinsurance Group" within Goldman Sachs; and (2) granted certain rights to Goldman Sachs intended to facilitate Goldman Sachs' compliance with the Bank Holding Company Act of 1956, as amended, or the "BHCA." All such obligations have been incurred as of December 31, 2019 and have been appropriately reflected in the consolidated financial statements. Additionally, for so long as the Company is considered a "subsidiary" of Goldman Sachs for purposes of the BHCA, the Company will continue to grant the above mentioned rights to Goldman Sachs.

22. Segment information

The Company operates its core business strategies out of two reportable segments: Retirement and Life. In addition, certain other operations are reported within Corporate & Other.

In the Retirement segment, the Company's principal retirement products are fixed-rate annuities, fixed-indexed annuities and annuity block reinsurance. These retirement products help consumers save for and provide income during retirement. The Company offers its retirement products through its retail distribution partners, primarily banks and broker-dealers, as well as through block reinsurance.

In the Life segment, the Company's life insurance products are indexed universal life, preneed life and life block reinsurance. These life products can be used for a wide range of purposes, including savings and estate planning. The Company offers its life products through its retail distribution partners, primarily independent insurance agencies and funeral homes, as well as through block reinsurance.

Corporate & Other includes items not allocated to the Retirement and Life segments, such as unallocated general and administrative expenses, net investment income on assets not attributable to the Retirement and Life segments, debt costs and regulatory closed blocks where the economic performance of assets are largely passed on to policyholders through dividends.

Segment revenues and adjusted operating earnings before income taxes

Segment revenues and segment adjusted operating earnings, before income taxes, are internal measures used by the chief operating decision maker to evaluate and assess the results of our segments.

Segment operating revenue is an internal measure used to evaluate our financial performance of our segments. Our segment operating revenue equals revenue, as reported, adjusted to eliminate the impact of the following adjustments: (1) investment gains (losses), inclusive of renewable asset income (loss) and strategic equity investment income (loss); (2) the change in the fair value of derivatives associated with fixed-indexed annuities, indexed universal life contracts and variable annuities; and (3) transaction, conversion and integration expenses included in revenue (primarily related to reinsurance ceded premium expense which is reported net of premium revenue). These adjustments are reported gross of income tax.

Segment operating revenues are reconciled to total revenues as presented in the consolidated statements of income as follows:

	For the years ended December 31,						
		2019 2018		2017			
(\$ in millions)							
Revenues by segment:							
Retirement	\$	3,722	\$	3,446	\$	1,497	
Life		1,722		1,738		1,686	
Corporate & Other		47		54		72	
Segment revenues		5,491		5,238		3,255	
Adjustments:							
Investment gains (losses)		165		(39)		231	
Change in the fair value of derivatives for fixed-indexed annuities, indexed universal life contracts and variable annuities		420		(197)		268	
Transaction, conversion and integration expenses		(4)		_		_	
Total adjustments		581		(236)		499	
Total revenues	\$	6,072	\$	5,002	\$	3,754	

Adjusted operating earnings, before income taxes, is an internal measure used to evaluate our financial performance of our segments. Our adjusted operating earnings, before income taxes, equals income before income taxes adjusted to eliminate the impact of the following adjustments: (1) investment gains (losses), inclusive of renewable energy asset income (loss) and strategic equity investment income (loss); (2) change in the fair value of derivatives and embedded derivatives associated with fixed-indexed annuities, indexed universal life contracts and variable annuities; and (3) transaction, conversion and integration expenses. These adjustments are reported gross of income tax and, where applicable, net of offsets related to: (1) DAC, VOBA, URR and DSI amortization; (2) changes to reserves for certain guaranteed benefits; and (3) policy fees to cover benefits.

Segment adjusted operating earnings before income taxes are reconciled to income before income taxes as presented in the consolidated statements of income as follows:

	For the years ended December 31,					
	2019	2018		2017		
(\$ in millions)						
Adjusted operating earnings, before income taxes, by segment:						
Retirement	\$ 649	\$ 550	\$	447		
Life	68	135		154		
Corporate & Other	(85)	(53)		(12)		
Total adjusted operating earnings, before income taxes	632	632		589		
Adjustments:						
Investment gains (losses), net of offsets	80	(19)		123		
Change in the fair value of derivatives and embedded derivatives for fixed-indexed annuities, indexed universal life contracts and variable annuities, net of offsets	(32)	(62)		(18)		
Transaction, conversion and integration expenses	(77)	(125)		(142)		
Total adjustments	(29)	(206)		(37)		
Income before income taxes	\$ 603	\$ 426	\$	552		

Segment assets

Total assets for each of the Company's segments were as follows:

	As of December 31,				
		2019		2018	
(\$ in millions)					
Total assets by segment:					
Retirement	\$	60,782	\$	51,357	
Life		19,375		17,591	
Corporate & Other		9,399		6,292	
Total assets	\$	89,556	\$	75,240	

23. Subsequent events

The Company evaluated all events and transactions through February 28, 2020, the date the accompanying consolidated financial statements were issued, that would merit recognition or disclosures in the consolidated financial statements and determined there were none.