

RG Americas Reinsurance Company, Ltd.

Consolidated Financial Statements as of and for the
Years Ended December 31, 2020 and 2019, and
Independent Auditors' Report

RGAMERICAS REINSURANCE COMPANY, LTD.
TABLE OF CONTENTS

	<u>Page</u>
Independent Auditors' Report	1
Consolidated Financial Statements as of and for the years ended December 31, 2020 and 2019:	
Consolidated Balance Sheets	3
Consolidated Statements of Income	4
Consolidated Statements of Comprehensive Income	5
Consolidated Statements of Shareholder's Equity	6
Consolidated Statements of Cash Flow	7
Notes to Consolidated Financial Statements:	
Note 1 Business and Basis of Presentation	8
Note 2 Significant Accounting Policies and Pronouncements	9
Note 3 Investments	20
Note 4 Derivative Instruments	26
Note 5 Fair Value of Assets and Liabilities	30
Note 6 Reinsurance	38
Note 7 Deferred Policy Acquisition Costs	39
Note 8 Income Tax	39
Note 9 Employee Benefit Plans	42
Note 10 Financial Condition and Net Income on a Statutory Basis	44
Note 11 Shareholder's Equity	45
Note 12 Related-Party Transactions	45
Note 13 Commitments, Contingencies and Guarantees	46
Note 14 Comprehensive Income	46

INDEPENDENT AUDITORS' REPORT

To the Shareholder and Board of Directors of
RGA Americas Reinsurance Company, Ltd.:

We have audited the accompanying consolidated financial statements of RGA Americas Reinsurance Company, Ltd. and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the related consolidated statements of income, comprehensive income, shareholder's equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits 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 from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

As discussed in Note 1, results of the Company may not be indicative of those of a stand-alone entity, as the Company is a member of a controlled group of affiliated companies. Our opinion is not modified with respect to this matter.

A handwritten signature in cursive script that reads "Deloitte & Touche LLP". The signature is written in dark ink on a light-colored background.

April 15, 2021

RGA AMERICAS REINSURANCE COMPANY, LTD.
CONSOLIDATED BALANCE SHEETS
(in thousands of U.S. dollars, except share data)

	December 31, 2020	December 31, 2019
Assets		
Fixed maturity securities:		
Available-for-sale at fair value (amortized cost of \$19,693,053 and \$16,753,403; allowance for credit losses of \$1,610 at December 31, 2020)	\$ 23,581,923	\$ 19,323,601
Equity securities, at fair value	40,928	217,278
Policy loans	12,219	12,868
Funds withheld at interest	12,491,434	12,177,713
Short-term investments	18,182	20,950
Other invested assets	1,738,411	1,424,849
Total investments	<u>37,883,097</u>	<u>33,177,259</u>
Cash and cash equivalents	1,327,509	625,540
Accrued investment income	203,809	183,018
Premiums receivable	1,118,231	1,315,561
Reinsurance ceded receivables	1,745,839	1,642,139
Deferred policy acquisition costs	1,844,251	1,810,657
Other reinsurance balances	883,304	636,039
Affiliated notes receivable	—	75,000
Receivable from parent and affiliates	28,137	11,983
Other assets	655,332	673,104
Total assets	<u>\$ 45,689,509</u>	<u>\$ 40,150,300</u>
Liabilities and Shareholder's Equity		
Future policy benefits	\$ 21,213,105	\$ 18,889,890
Interest-sensitive contract liabilities	9,664,254	9,218,361
Other policy claims and benefits	3,285,811	3,203,662
Other reinsurance balances	868,056	524,340
Securities lending obligation	95,477	95,079
Income tax liability	157,365	—
Deferred income taxes	1,945,768	1,556,452
Affiliated notes payable	3,847	80,616
Payable to parent and affiliates	27,007	35,066
Other liabilities	184,145	235,686
Total liabilities	<u>37,444,835</u>	<u>33,839,152</u>
Commitments and contingent liabilities (See Note 13)		
Shareholder's Equity:		
Common stock (par value \$1.00 per share; unlimited shares authorized; shares issued: 75,500,000 at December 31, 2020 and 2019)	75,500	75,500
Additional paid-in-capital	894,553	898,366
Retained earnings	4,467,538	3,593,970
Accumulated other comprehensive income	2,807,083	1,743,312
Total shareholder's equity	<u>8,244,674</u>	<u>6,311,148</u>
Total liabilities and shareholder's equity	<u>\$ 45,689,509</u>	<u>\$ 40,150,300</u>

See accompanying notes to consolidated financial statements.

RG A AMERICAS REINSURANCE COMPANY, LTD.
CONSOLIDATED STATEMENTS OF INCOME
(in thousands of U.S. dollars)

	For the years ended December 31,	
	2020	2019
Revenues		
Net premiums	\$ 4,092,832	\$ 3,458,809
Investment income, net of related expenses	1,249,910	1,201,472
Change in value of funds withheld embedded derivatives	503,196	826,857
Investment related gains, net:		
Impairments and change in allowance for credit losses on fixed maturity securities	(1,610)	(126)
Other investment related gains, net	77,321	37,748
Total investment related gains, net	75,711	37,622
Other revenues	277,646	144,272
Total revenues	6,199,295	5,669,032
Benefits and expenses		
Claims and other policy benefits	3,748,641	3,230,612
Interest credited	313,682	333,422
Policy acquisition costs and other insurance expenses	750,593	461,474
Other operating expenses	245,877	276,221
Collateral finance expense	1,470	1,849
Total benefits and expenses	5,060,263	4,303,578
Income before income taxes	1,139,032	1,365,454
Provision for income taxes	264,816	316,723
Net income	<u>\$ 874,216</u>	<u>\$ 1,048,731</u>

See accompanying notes to consolidated financial statements.

RGAMERICAS REINSURANCE COMPANY, LTD.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands of U.S. dollars)

	For the years ended December 31,	
	2020	2019
Comprehensive income		
Net income	\$ 874,216	\$ 1,048,731
Other comprehensive income, net of tax:		
Foreign currency translation adjustments	26,290	80,235
Net unrealized investment gains	1,039,176	986,647
Defined benefit pension and postretirement plan adjustments	(1,695)	(1,413)
Total other comprehensive income, net of tax	<u>1,063,771</u>	<u>1,065,469</u>
Total comprehensive income	<u>\$ 1,937,987</u>	<u>\$ 2,114,200</u>

See accompanying notes to consolidated financial statements.

RG A AMERICAS REINSURANCE COMPANY, LTD.
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY
(in thousands of U.S. dollars)

	Common Stock	Additional Paid- In-Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total
Balance, January 1, 2019	\$ 75,500	\$ 893,518	\$ 2,645,239	\$ 677,843	\$ 4,292,100
Net income	—	—	1,048,731	—	1,048,731
Total other comprehensive income	—	—	—	1,065,469	1,065,469
Equity based compensation	—	4,848	—	—	4,848
Dividends to shareholder	—	—	(100,000)	—	(100,000)
Balance, December 31, 2019	75,500	898,366	3,593,970	1,743,312	6,311,148
Adoption of new accounting standard	—	—	(648)	—	(648)
Net income	—	—	874,216	—	874,216
Total other comprehensive income	—	—	—	1,063,771	1,063,771
Equity based compensation	—	(3,813)	—	—	(3,813)
Balance, December 31, 2020	<u>\$ 75,500</u>	<u>\$ 894,553</u>	<u>\$ 4,467,538</u>	<u>\$ 2,807,083</u>	<u>\$ 8,244,674</u>

See accompanying notes to consolidated financial statements.

RGA AMERICAS REINSURANCE COMPANY, LTD.
CONSOLIDATED STATEMENTS OF CASH FLOW
(in thousands of U.S. dollars)

	For the years ended December 31,	
	2020	2019
Cash flows from operating activities		
Net income	\$ 874,216	\$ 1,048,731
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in operating assets and liabilities:		
Accrued investment income	(15,421)	(19,411)
Premiums receivable and other reinsurance balances	(21,453)	915,213
Reinsurance ceded receivables	(15,715)	(106,217)
Deferred policy acquisition costs	(13,428)	(500,149)
Future policy benefits, other policy claims and benefits, and other reinsurance balances	2,062,380	828,304
Deferred income taxes	89,549	304,662
Receivable from parent and affiliates	(15,945)	(4,645)
Payable to parent and affiliates	(8,059)	9,393
Other assets and other liabilities, net	192,336	9,067
Amortization of net investment premiums, discounts and other	(92,464)	(101,675)
Depreciation and amortization expense	6,547	7,423
Investment related gains, net	(75,711)	(37,622)
Change in value of funds withheld embedded derivatives	(503,196)	(826,857)
Equity based compensation	(3,813)	4,848
Net cash provided by operating activities	<u>2,459,823</u>	<u>1,531,065</u>
Cash flows from investing activities		
Sales of fixed maturity securities available-for-sale	2,398,384	3,269,070
Sales of equity securities	176,904	34,530
Maturities of fixed maturity securities available-for-sale	342,704	155,353
Purchases of fixed maturity securities available-for-sale	(5,101,151)	(5,488,355)
Purchases of equity securities	(3,000)	(213,576)
Principal payments on policy loans	733	773
Cash invested in policy loans	(82)	—
Cash withdrawn from funds withheld at interest	206,566	210,899
Change in short-term investments	8,077	31,614
Change in other invested assets	(257,594)	(324,138)
Purchase of business, net of cash acquired of \$27,374	—	3,561
Net cash used in investing activities	<u>(2,228,459)</u>	<u>(2,320,269)</u>
Cash flows from financing activities		
Dividends to shareholder	—	(100,000)
Purchase of affiliated notes	(50,000)	(75,000)
Repayment of affiliated notes	125,000	450,000
Proceeds from affiliated notes	3,653	38,095
Principal payments of affiliated notes	(81,717)	(21,526)
Change in securities lending obligation	398	(52)
Change in cash collateral for derivative positions and other arrangements	24,830	(471,393)
Deposits on variable annuity contracts	428,537	857,710
Withdrawals on variable annuity contracts	(27,334)	(98,379)
Net cash provided by financing activities	<u>423,367</u>	<u>579,455</u>
Effect of exchange rate changes on cash	47,238	3,383
Change in cash and cash equivalents	<u>701,969</u>	<u>(206,366)</u>
Cash and cash equivalents, beginning of period	625,540	831,906
Cash and cash equivalents, end of period	<u>\$ 1,327,509</u>	<u>\$ 625,540</u>
Supplemental disclosures of cash flow information:		
Interest paid	\$ 807	\$ 1,452
Income taxes (received) paid, net of refunds	34,065	(13,293)
Non-cash investing activities:		
Transfer of invested assets	\$ 93,413	\$ 1,407,958
Purchase of a business:		
Assets acquired, excluding cash acquired	\$ —	\$ 8,304
Liabilities assumed	—	(11,865)
Net cash received on purchase	<u>\$ —</u>	<u>\$ (3,561)</u>

See accompanying notes to consolidated financial statements.

RGA Americas Reinsurance Company, Ltd.
Notes to consolidated financial statements
For the years ended December 31, 2020 and 2019
(in U.S. dollars)

Note 1 BUSINESS AND BASIS OF PRESENTATION

Business

RGA Americas Reinsurance Company, Ltd. ("RGA Americas") was incorporated pursuant to the laws of Barbados on July 2, 1998, and was continued to Bermuda on September 25, 2014, in accordance with the Companies Act 1981. RGA Americas is a wholly owned subsidiary of Reinsurance Group of America, Incorporated ("RGA"), a United States of America ("U.S.") insurance holding company, formed on December 31, 1992. As of December 31, 2020, all outstanding shares of RGA Americas were owned by RGA. The consolidated financial statements herein include the assets, liabilities, and results of operations of RGA Americas and its wholly owned subsidiaries, RGA Atlantic Reinsurance Company Ltd. ("RGA Atlantic"), RGA Life Reinsurance Company of Canada ("RGA Canada"), RGA South African Holdings (Pty) Ltd. ("RGA South Africa"), RGA International Reinsurance Company dac ("RGA International"), Leidsche Leven Holding B.V. ("Leidsche"), RGA Australian Holdings Pty Limited ("RGA Australia"), OmniLife Insurance Company, Limited ("OmniLife"), Parkway Financial LLC ("Parkway"), RGA Americas Real Estate Investments LLC, and RGA Americas Investments LLC (collectively, the "Company"). Intercompany balances and transactions have been eliminated.

Since the Company is a member of a controlled group of affiliated companies, its results may not be indicative of those of a stand-alone entity.

The Company is engaged in providing traditional reinsurance, which includes individual and group life and health, disability, and critical illness reinsurance. The Company also provides financial solutions, which includes longevity reinsurance, asset-intensive products, primarily annuities, financial reinsurance, and capital solutions. In addition, the Company engages in direct insurance via its subsidiaries, Leidsche and OmniLife.

Reinsurance is an arrangement under which an insurance company, the reinsurer, agrees to indemnify another insurance company, the ceding company, for all or a portion of the insurance risks underwritten by the ceding company. Reinsurance is designed to:

- (i) reduce the net amount at risk on individual risks, thereby enabling the ceding company to increase the volume of business it can underwrite, as well as increase the maximum risk it can underwrite on a single risk;
- (ii) enhance the ceding company's financial strength and surplus position;
- (iii) stabilize operating results by leveling fluctuations in the ceding company's loss experience; and
- (iv) assist the ceding company in meeting applicable regulatory requirements.

Basis of Presentation

The consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The most significant estimates include those used in determining deferred policy acquisition costs ("DAC"), premiums receivable, future policy benefits, incurred but not reported claims ("IBNR"), income taxes, valuation of investments and investment impairments, and valuation of embedded derivatives. Actual results could differ materially from the estimates and assumptions used by management.

The accompanying consolidated financial statements include the accounts of RGA Americas and its subsidiaries, all of which are wholly owned. Entities in which the Company has significant influence over the operating and financing decisions but are not required to be consolidated are reported under the equity method of accounting. A portion of the Company's reinsurance receivables and policy liabilities are associated with affiliated companies, and the Company relies on affiliated companies for services. See [Note 12 - "Related-Party Transactions"](#) for further details.

The ongoing COVID-19 global pandemic continues to cause increases in mortality, morbidity and other insurance risks, as well as significant disruption in the international and U.S. economies and financial markets, and may continue to adversely impact, the Company's results of operations, financial condition and cash flows. The risks may have manifested, and may continue to manifest, in the financial statements in the areas of, among others:

- (i) investments: increased risk of loss on investments due to default or deterioration in credit quality or value;

- (ii) insurance liabilities and related balances, such as, potential changes to assumptions regarding investment returns, mortality, morbidity and policyholder behavior which are reflected in insurance liabilities and certain related balances (e.g., DAC, IBNR, etc.); and
- (iii) other assets and liabilities.

The extent to which the Company's future results continue to be affected by COVID-19 will largely depend on, among other factors, country-specific circumstances, measures by public and private institutions, COVID-19's impact on all other causes of death and the timing of effective treatments and/or a vaccine for COVID-19. Given these many variables, the Company is unable to predict the future impact of the pandemic on its results of operations, financial condition and cash flows.

There were no subsequent events that would require disclosure or adjustments to the accompanying consolidated financial statements through the date the consolidated financial statements were issued.

Note 2 SIGNIFICANT ACCOUNTING POLICIES AND PRONOUNCEMENTS

Investments

Fixed Maturity Securities

Fixed maturity securities classified as available-for-sale are reported at fair value and are so classified based upon the possibility that such securities could be sold prior to maturity if that action enables the Company to execute its investment philosophy and appropriately match investment results to operating and liquidity needs.

Unrealized gains and losses on fixed maturity securities classified as available-for-sale, less applicable deferred income taxes as well as related adjustments to DAC, if applicable, are reflected as a direct charge or credit to accumulated other comprehensive income ("AOCI") in shareholder's equity.

Investment income is recognized as it accrues or is legally due. Realized gains and losses on sales of investments are included in investment related gains, net, as are impairments and change in allowance for credit losses. The cost of investments sold is primarily determined based upon the specific identification method.

Equity Securities

Equity securities are carried at fair value and realized and unrealized gains and losses are included in investment related gains, net.

Policy Loans

Policy loans are reported at the unpaid principal balance. Interest income on such loans is recorded as earned using the contractually agreed-upon interest rate. These policy loans present no credit risk because the amount of the loan cannot exceed the obligation due the ceding company upon the death of the insured or surrender of the underlying policy.

Funds Withheld at Interest

Funds withheld at interest represent amounts contractually withheld by ceding companies in accordance with reinsurance agreements. For agreements written on a modified coinsurance ("modco") basis and agreements written on a coinsurance funds withheld basis, assets that support the net statutory reserves or as defined in the treaty, are withheld and legally owned by the ceding company. Interest, recorded in investment income, net of related expenses in the consolidated statements of income, accrues to these assets at calculated rates as defined by the treaty terms.

Short-term Investments

Short-term investments represent investments with remaining maturities of one year or less, but greater than three months, at the time of acquisition and are stated at estimated fair value or amortized cost, which approximates estimated fair value. Interest on short-term investments is recorded in investment income, net of related expenses.

Other Invested Assets

In addition to derivative contracts discussed below, other invested assets include lifetime mortgages, contractholder-directed investments, mortgage loans on real estate, limited partnership interests and joint ventures (other than operating joint ventures). Limited partnership interests, which based on their nature and structure do not meet the characteristics of an equity security under applicable accounting standards, are primarily carried at cost. Joint ventures are reported using the equity method of accounting.

The Company holds beneficial interests in lifetime mortgages in the United Kingdom. Lifetime mortgages represent loans provided to individuals 55 years of age and older secured by the borrower's residence. Lifetime mortgages are comparable to a home equity loan by allowing the borrower to utilize the equity in their home as collateral. The amount of the loan is dependent on the appraised value of the home at the time of origination, the borrower's age and interest rate. Unlike a home equity loan, no

payment of principal or interest is required until the death of the borrower or sale of the home. Lifetime mortgages may also be either fully funded at origination, or the borrower can request periodic funding similar to a line of credit. Lifetime mortgages are subject to risks, including market, credit, interest rate, liquidity, operational, reputational and legal risks. Lifetime mortgages are carried at unpaid principal balances, net of any unamortized premium or discount, unamortized balance of loan origination fees and expenses, and valuation allowances. Interest income is accrued on the principal amount of the lifetime mortgage based on its contractual interest rate.

The fair value option ("FVO") was elected for contractholder-directed investments supporting unit-linked variable annuity type liabilities that do not qualify for presentation and reporting as separate accounts. Changes in estimated fair value of these securities are included in investment income, net of related expenses.

Mortgage loans on real estate are carried at unpaid principal balances, net of any unamortized premium or discount, unamortized balance of loan origination fees and expenses, and valuation allowances. Interest income is accrued on the principal amount of the mortgage loan based on its contractual interest rate. Amortization of premiums, discounts, and loan origination fees is recorded using the effective yield method. The Company accrues interest on loans until it is probable the Company will not receive interest or the loan is 90 days past due. Interest income, amortization of premiums, accretion of discounts, amortization of loan origination fees and prepayment fees are reported in investment income, net of related expenses.

Securities Borrowing, Lending and Repurchase Agreements

The Company participates in securities borrowing programs whereby securities, which are not reflected on the Company's consolidated balance sheets, are borrowed from an affiliated party. The Company is required to maintain a minimum of 102% of the fair value, or par value under certain programs, of the borrowed securities as collateral. The collateral generally consists of rights to reinsurance treaty cash flows. If cash flows from the reinsurance treaties are insufficient to maintain the minimum collateral requirement, the Company may substitute cash or securities to meet the requirement.

The Company participates in a securities lending program whereby securities, reflected as investments on the Company's consolidated balance sheets, are loaned to an affiliated party. The Company receives cash and securities as collateral, in an amount equal to a minimum of 102% of the fair value of the securities lent. The securities received as collateral are not reflected on the Company's consolidated balance sheets. The cash received is reflected in the Company's consolidated balance sheets, offset by a payable included in securities lending obligation on the consolidated balance sheets.

The Company participates in repurchase/reverse repurchase programs in which securities, reflected as investments on the Company's consolidated balance sheets, are pledged to third parties. In return, the Company receives securities from third parties, which are not reflected on the Company's consolidated balance sheets. The Company is required to pledge securities with a minimum fair value of 100% to 105% of the market value of the security received.

The Company participates in a repurchase program in which securities, reflected as investments on an affiliate's consolidated balance sheets, are pledged to the Company. In return, the Company pays cash to the affiliate, which is reflected in the Company's consolidated balance sheets, offset by a receivable, included in other assets on the consolidated balance sheets. The affiliate is required to maintain a minimum collateral balance with a fair value of 102% of the cash received.

The Company participates in a repurchase/reverse repurchase program in which securities, reflected as investments on an affiliate's consolidated balance sheets, are pledged to the Company. In return, the Company pledges securities to the affiliate, which is reflected in the Company's consolidated balance sheets offset by a receivable, included in other assets on the consolidated balance sheets. Both the Company and the affiliate are required to pledge securities with a minimum fair value that is 100% of the market value of the security received.

Allowance for Credit Losses and Impairments

Fixed Maturity Securities

The Company identifies fixed maturity securities that could result in a credit loss by monitoring market events that could impact issuers' credit ratings, business climates, management changes, litigation, government actions and other similar factors. The Company also monitors late payments, pricing levels, rating agency actions, key financial ratios, financial statements, revenue forecasts and cash flow projections as indicators of credit issues.

The Company reviews all securities on a case-by-case basis to determine whether a decline in value exists and whether an allowance for credit losses or impairment for non-credit losses should be recognized. The Company considers relevant facts and circumstances in evaluating whether a security is impaired due to credit or non-credit components. Relevant facts and circumstances considered include: (1) the reasons for the decline in fair value; (2) the issuer's financial position and access to capital; and (3) the Company's intent to sell a security or whether it is more likely than not it will be required to sell the security before the recovery of its amortized cost that, in some cases, may extend to maturity.

Beginning on January 1, 2020, with the Company's adoption of *Financial Instruments - Credit Losses*, credit losses are recognized through an allowance account. Prior to January 1, 2020, credit losses were recognized as a reduction to the amortized cost. Credit impairments and changes in the allowance for credit losses on fixed maturity securities are reflected in investment related gains, net on the consolidated statements of income. Non-credit impairment losses are recognized in AOCI. See additional discussion on the effect of the adoption of the standard on the Company's consolidated financial statements in the New Accounting Pronouncements portion of this note.

Impairment losses on fixed maturity securities recognized in the financial statements are dependent on the facts and circumstances related to the specific security. If the Company intends to sell a security or it is more likely than not that it would be required to sell a security before the recovery of its amortized cost, less any recorded credit loss, it recognizes an impairment loss in investment related gains, net for the difference between amortized cost and fair value.

The Company estimates the amount of the credit loss component of a fixed maturity security impairment as the difference between amortized cost and the present value of the expected cash flows of the security. The Company excludes accrued interest from the amortized cost and the present value of the expected cash flows of the security. The present value is determined using the best estimate cash flows discounted at the effective interest rate implicit to the security at the date of purchase or the current yield to accrete an asset-backed or floating rate security. The techniques and assumptions for establishing the best estimate cash flows vary depending on the type of security. The asset-backed securities' cash flow estimates are based on security-specific facts and circumstances that may include collateral characteristics, expectations of delinquency and default rates, loss severity and prepayment speeds and structural support, including subordination and guarantees

The Company writes off uncollectible fixed maturity securities when (1) it has sufficient information to determine that the issuer of the security is insolvent or (2) it has received notice that the issuer of the security has filed for bankruptcy, and the collectability of the asset is expected to be adversely impacted by the bankruptcy.

In periods after an impairment loss is recognized for non-credit loss components on a fixed maturity security, the Company will report the impaired security as if it had been purchased on the date it was impaired and will continue to estimate the present value of the estimated cash flows of the security.

Other Invested Assets

Beginning on January 1, 2020, with the Company's adoption of *Financial Instruments - Credit Losses*, valuation allowances on mortgage loans are computed on an expected loss basis using a model that utilizes probability of default and loss given default methods over the lifetime of the loan. Within the reasonable and supportable forecast period (i.e. typically two years), valuation allowances for mortgage loans are established based on several pool-level loan assumptions, defaults and loss severity, loss expectations for loans with similar risk characteristics and industry statistics. These evaluations are revised as conditions change and new information becomes available. The evaluation also includes the impact of expected changes in future macro-economic conditions. The Company reverts to historical loss information for periods beyond which it believes it is able to develop or obtain reasonable and supportable forecasts of future economic conditions. See additional discussion on the effect of the adoption of the standard on the Company's consolidated financial statements in the New Accounting Pronouncements portion of this note.

Prior to January 1, 2020, valuation allowances on mortgage loans were computed on an incurred loss basis based upon several loan factors, including the Company's historical experience for loan losses, defaults and loss severity, loss expectations for loans with similar risk characteristics and industry statistics. These evaluations were revised as conditions changed and new information became available. In addition to historical experience, management considered qualitative factors that included the impact of changing macro-economic conditions, which may or may not have been reflected in the loan portfolio performance, and the quality of the loan portfolio.

Any interest accrued or received on the net carrying amount of the impaired loan is included in investment income or applied to the principal of the loan, depending on the assessment of the collectability of the loan. Mortgage loans deemed to be uncollectible or that have been foreclosed are charged off against the valuation allowances and subsequent recoveries, if any, are credited to the valuation allowances. Changes in valuation allowances are reported in investment related gains, net on the consolidated statements of income.

The Company considers its cost method investments for impairment when the carrying value of these investments exceeds the net asset value. The Company takes into consideration the severity and duration of this excess when deciding if the cost method investment is impaired. For equity method investments (including real estate joint ventures), the Company considers financial and other information provided by the investee, other known information and inherent risks in the underlying investments, as well as future capital commitments, in determining whether an impairment has occurred.

Derivative Instruments

Overview

The Company utilizes a variety of derivative instruments including swaps, options, forwards and futures, primarily to manage or hedge interest rate risk, credit risk, inflation risk, foreign currency risk, market volatility and various other market risks associated with its business. The Company does not invest in derivatives for speculative purposes. It is the Company's policy to enter into derivative contracts primarily with highly rated parties. See [Note 4 - "Derivative Instruments"](#) for additional detail on the Company's derivative positions.

Accounting and Financial Statement Presentation of Derivatives

Derivatives are carried on the Company's consolidated balance sheets primarily in other invested assets or other liabilities, at fair value. Certain derivatives are subject to master netting provisions and reported as a net asset or liability. On the date a derivative contract is executed, the Company designates the derivative as (1) a fair value hedge, (2) a cash flow hedge, (3) a net investment hedge in a foreign operation or (4) free-standing derivatives held for other risk management purposes, which primarily involve managing asset or liability risks associated with the Company's reinsurance treaties that do not qualify for hedge accounting.

Changes in the fair value of free-standing derivative instruments, which do not receive accounting hedge treatment, are primarily reflected in investment related gains, net.

Changes in the fair value of non-investment free-standing derivative instruments (e.g. longevity swaps), which do not receive accounting hedge treatment, are reflected in other revenues.

Hedge Documentation and Hedge Effectiveness

To qualify for hedge accounting, at the inception of the hedging relationship, the Company formally documents its risk management objective and strategy for undertaking the hedging transaction, as well as its designation of the hedge as either (i) a fair value hedge; (ii) a cash flow hedge; or (iii) a hedge of a net investment in a foreign operation. In this documentation, the Company sets forth how the hedging instrument is expected to hedge the designated risks related to the hedged item and sets forth the method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness and the method that will be used to measure ineffectiveness. A derivative designated as a hedging instrument must be assessed as being highly effective in offsetting the designated risk of the hedged item. Hedge effectiveness is formally assessed at inception and periodically throughout the life of the designated hedging relationship.

Under a fair value hedge, changes in the fair value of the hedging derivative, including amounts measured as ineffective, and changes in the fair value of the hedged item related to the designated risk being hedged, are reported within investment related gains, net. The fair values of the hedging derivatives are exclusive of any accruals that are separately reported in the consolidated statements of income within investment income or other operating expenses to match the location of the hedged item.

Under a cash flow hedge, changes in the fair value of the hedging derivative measured as effective are reported within AOCI and the deferred gains or losses on the derivative are reclassified into the consolidated statements of income when the Company's earnings are affected by the variability in cash flows of the hedged item. The fair values of the hedging derivatives are exclusive of any accruals that are separately reported in the consolidated statements of income within investment income or other operating expenses to match the location of the hedged item.

In a hedge of a net investment in a foreign operation, changes in the fair value of the hedging derivative that are measured as effective are reported within AOCI consistent with the translation adjustment for the hedged net investment in the foreign operation. Changes in the fair value of the hedging instrument measured as ineffective are reported within investment related gains, net.

The Company discontinues hedge accounting prospectively when: (i) it is determined that the derivative is no longer highly effective in offsetting changes in the estimated fair value or cash flows of a hedged item; (ii) the derivative expires, is sold, terminated, or exercised; (iii) it is no longer probable that the hedged forecasted transaction will occur; or (iv) the derivative is de-designated as a hedging instrument.

When hedge accounting is discontinued because it is determined that the derivative is not highly effective, the derivative continues to be carried in the consolidated balance sheets at fair value, with changes in fair value recognized in investment related gains, net. The carrying value of the hedged asset or liability under a fair value hedge is no longer adjusted for changes in its estimated fair value due to the hedged risk, and the cumulative adjustment to its carrying value is amortized into income over the remaining life of the hedged item. Provided the hedged forecasted transaction occurrence is still probable, the changes in estimated fair value of derivatives recorded in other comprehensive income ("OCI") related to discontinued cash flow hedges

are released into the consolidated statements of income when the Company's earnings are affected by the variability in cash flows of the hedged item.

When hedge accounting is discontinued because it is no longer probable that the forecasted transactions will occur on the anticipated date or within two months of that date, the derivative continues to be carried in the consolidated balance sheets at its estimated fair value, with changes in estimated fair value recognized currently in investment related gains, net. Deferred gains and losses of a derivative recorded in OCI pursuant to the discontinued cash flow hedge of a forecasted transaction that is no longer probable are recognized immediately in investment related gains, net.

In all other situations in which hedge accounting is discontinued, the derivative is carried at its estimated fair value in the consolidated balance sheets, with changes in its estimated fair value recognized in the current period as investment related gains, net.

Embedded Derivatives

The Company reinsures certain annuity products that contain terms that are deemed to be embedded derivatives, primarily variable annuities with guaranteed minimum benefits. The Company assesses reinsurance contract terms to identify embedded derivatives, which are required to be bifurcated under the general accounting principles for *Derivatives and Hedging*. If the contract is not reported for in its entirety at fair value and it is determined that the terms of the embedded derivative are not clearly and closely related to the economic characteristics of the host contract, and that a separate instrument with the same terms would qualify as a derivative instrument, the embedded derivative is bifurcated from the host contract and accounted for separately.

Embedded derivatives are carried on the consolidated balance sheets at fair value in the same line item as the host contract. Changes in the fair value of embedded derivatives associated with variable annuity guaranteed minimum benefits are reflected in investment related gains, net on the consolidated statements of income. See "Interest-Sensitive Contract Liabilities" below for additional information on embedded derivatives related to variable annuities. The Company has implemented an economic hedging strategy to mitigate the volatility associated with its reinsurance of variable annuity guaranteed minimum benefits. The hedging strategy is designed such that changes in the fair value of the hedge contracts, primarily futures, swap contracts and options, move in the opposite direction of changes in the fair value of the embedded derivatives. While the Company actively manages its hedging program, the hedges that are in place may not be totally effective in offsetting the embedded derivative changes due to the many variables that must be managed and the Company may see a corresponding increase or decrease in the net liability. The Company has elected not to assess this hedging strategy for hedge accounting treatment.

Additionally, reinsurance treaties written on a modco or funds withheld basis are subject to the general accounting principles for *Derivatives and Hedging* related to embedded derivatives. Management believes the embedded derivative feature in each of these reinsurance treaties is similar to a total return swap on the assets held by the ceding companies. The valuation of embedded derivatives is sensitive to the investment credit spread environment. Changes in the embedded derivatives caused by changes in investment credit spreads are also impacted by the application of a credit valuation adjustment ("CVA"). The fair value calculation of an embedded derivative in an asset position utilizes a CVA based on the ceding company's credit risk. Conversely, the fair value calculation of an embedded derivative in a liability position utilizes a CVA based on the Company's credit risk. Generally, an increase in investment credit spreads, ignoring changes in the CVA, will have a negative impact on the fair value of the embedded derivative (decrease in income). The fair value of the embedded derivatives is included in the funds withheld at interest line item on the consolidated balance sheets. The change in the fair value of the embedded derivatives is recorded in change in value of funds withheld embedded derivatives on the consolidated statements of income.

The Company has entered into various financial reinsurance treaties on a funds withheld and modco basis. These treaties do not transfer significant insurance risk and are recorded on a deposit method of accounting with the Company earning a net fee. As a result of the experience refund provisions contained in these treaties, the value of the embedded derivatives in these contracts is currently considered immaterial. The Company monitors the performance of these treaties on a quarterly basis. Significant adverse performance or losses on these treaties may result in a loss associated with the embedded derivative.

Fair Value Measurements

General accounting principles for *Fair Value Measurements and Disclosures* define fair value, establish a framework for measuring fair value, establish a fair value hierarchy based on the inputs used to measure fair value and enhance disclosure requirements for fair value measurements. In compliance with these principles, the Company has categorized its assets and liabilities, based on the priority of the inputs to the valuation technique, into a three level hierarchy or separately for assets measured using the net asset value ("NAV"). The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1), the second highest priority to quoted prices in markets that are not active or inputs that are observable either directly or indirectly (Level 2) and the lowest priority to unobservable inputs (Level 3).

If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the asset or liability.

See [Note 5 - "Fair Value of Assets and Liabilities"](#) for further details on the Company's assets and liabilities recorded at fair value.

Cash and Cash Equivalents

Cash and cash equivalents include cash on deposit and highly liquid debt instruments purchased with an original maturity of three months or less.

Premiums Receivable

Premiums are accrued when due and in accordance with information received from the ceding company. When the Company enters into a new reinsurance agreement, it records accruals based on the terms of the reinsurance treaty. Similarly, when a ceding company fails to report information on a timely basis, the Company records accruals based on the terms of the reinsurance treaty as well as historical experience. Other management estimates include adjustments for increased in force on existing treaties, lapsed premiums given historical experience, the financial health of specific ceding companies, collateral value and the legal right of offset on related amounts (i.e. allowances and claims) owed to the ceding company. Under the legal right of offset provisions in its reinsurance treaties, the Company can withhold payments for allowances and claims from unpaid premiums. Based on its review of these factors and historical experience, the Company did not believe a provision for doubtful accounts was necessary as of December 31, 2020 or 2019.

Reinsurance Ceded Receivables

The Company generally reports retrocession activity on a gross basis. Amounts paid or deemed to have been paid for reinsurance are reflected in reinsurance ceded receivables. The cost of reinsurance related to long-duration contracts is recognized over the terms of the reinsured policies on a basis consistent with the reporting of those policies.

Deferred Policy Acquisition Costs

Costs of acquiring new business, which vary with and are directly related to the production of new business, have been deferred to the extent that such costs are deemed recoverable from future premiums or gross profits. Such costs include commissions and allowances as well as certain costs of policy issuance and underwriting. Non-commission costs related to the acquisition of new and renewal insurance contracts may be deferred only if they meet the following criteria:

- Incremental direct costs of a successful contract acquisition
- Portions of employees' salaries and benefits directly related to time spent performing specified acquisition activities for a contract that has been acquired or renewed
- Other costs directly related to the specified acquisition or renewal activities that would not have been incurred had that acquisition contract transaction not occurred

The Company tests the recoverability for each year of business at issue before establishing additional DAC. The Company also performs annual tests to establish that DAC are expected to remain recoverable, and if financial performance significantly deteriorates to the point where a deficiency exists, a cumulative charge to current operations will be recorded. No such adjustments related to DAC recoverability were made in 2020 or 2019.

DAC related to traditional life insurance contracts are amortized with interest over the premium-paying period of the related policies in proportion to the ratio of individual period premium revenues to total anticipated premium revenues over the life of the policy. Such anticipated premium revenues are estimated using the same assumptions used for computing liabilities for future policy benefits.

DAC related to interest-sensitive life and investment-type policies are amortized over the lives of the policies, in proportion to the gross profits realized from mortality, investment income less interest credited, and expense margins.

Other Reinsurance Balances

The Company assumes and retrocedes financial reinsurance contracts that do not expose it to a reasonable possibility of loss from insurance risk. These contracts are reported as deposits and are included in other reinsurance balance assets and/or liabilities. The amount of revenue reported in other revenues on these contracts represents fees and the cost of insurance under the terms of the reinsurance agreement. Assets and liabilities are reported on a net or gross basis, depending on the specific details within each treaty. Reinsurance agreements reported on a net basis, where a legal right of offset exists, are generally included in other reinsurance balances on the consolidated balance sheets. Balances resulting from the assumption and/or subsequent transfer of benefits and obligations resulting from cash flows related to variable annuities have also been classified as other reinsurance balance assets and/or liabilities. Other reinsurance assets are included in other reinsurance balances within total assets, while other reinsurance liabilities are included in other reinsurance balances within total liabilities on the consolidated balance sheets.

Affiliated Note Receivable/Payable

Affiliated notes receivable/payable includes cash loaned to/borrowed from affiliated companies. Refer to [Note 12 - "Related-Party Transactions"](#) for further details.

Receivable From/Payable To Parent and Affiliates

Receivable from/payable to parent and affiliates is primarily comprised of non-reinsurance related receivables/payables. See [Note 12 - "Related-Party Transactions"](#) for further details about transactions with affiliated companies.

Other Assets

Other assets primarily include repo assets, surplus notes receivable, deferred tax assets, capitalized assets, right-of-use assets and operating joint ventures. Capitalized assets are stated at cost, less accumulated depreciation and amortization. Carrying values are reviewed periodically for indicators of impairment in value.

Operating Joint Ventures

The Company has made investments in certain joint ventures that are strategic in nature and made other than for the sole purpose of generating investment income. These investments are reported under the equity method of accounting and are included in other assets. The Company's share of earnings from these joint ventures is reported in other revenues on the consolidated statements of income. The Company's investments in operating joint ventures do not have a material effect on the Company's results of operations and financial condition, and as a result no additional disclosures have been presented.

Future Policy Benefits

Liabilities for future benefits on life policies are established in an amount adequate to meet the estimated future obligations on policies in force. Liabilities for future policy benefits under long-duration life insurance policies have been computed based upon expected investment yields, mortality and withdrawal (lapse) rates, and other assumptions. These assumptions include a margin for adverse deviation and vary with the characteristics of the plan of insurance, year of issue, age of insured, and other appropriate factors. The mortality and withdrawal assumptions are based on the Company's experience as well as industry experience and standards. In establishing reserves for future policy benefits, the Company assigns policy liability assumptions to particular timeframes (eras) in such a manner as to be consistent with the underlying assumptions and economic conditions at the time the risks are assumed. The Company maintains a consistent approach to setting the provision for adverse deviation between eras.

Liabilities for future benefits on longevity business, including annuities in the payout phase, are established in an amount adequate to meet the estimated future obligations on policies in force. Liabilities for future benefits related to the longevity business, including annuities in the payout phase, have been calculated using expected mortality, investment yields, and other assumptions. These assumptions include a margin for adverse deviation and vary with the characteristics of the plan of insurance, year of issue, age of insured, and other appropriate factors. The mortality assumptions are based on the Company's experience as well as industry experience and standards. A deferred profit liability is established when the gross premium exceeds the net premium.

The Company periodically reviews actual and anticipated experience compared to the assumptions used to establish policy benefits. The Company establishes premium deficiency reserves if actual and anticipated experience indicates that existing policy liabilities together with the present value of future gross premiums will not be sufficient to cover the present value of future benefits, settlement and maintenance costs and to recover unamortized acquisition costs. Anticipated investment income is considered in the calculation of premium deficiency losses for short-duration contracts. The premium deficiency reserve is established by a charge to income, as well as a reduction in unamortized acquisition costs and, to the extent there are no unamortized acquisition costs, an increase in future policy benefits.

The reserving process includes normal periodic reviews of assumptions used and adjustments of reserves to incorporate the refinement of the assumptions. Any such adjustments relate only to policies assumed in recent periods and the adjustments are reflected by a cumulative charge or credit to income.

The Company reinsures disability products in various markets. Liabilities for future benefits on disability policies' active lives are established in an amount adequate to meet the estimated future obligations on policies in force. These reserves are the amounts that, with the additional premiums to be received and interest thereon compounded annually at certain assumed rates, are calculated to be sufficient to meet the various policy and contract obligations as they mature.

The Company establishes future policy benefits for guaranteed minimum death benefits ("GMDB") relating to the reinsurance of certain variable annuity contracts by estimating the expected value of death benefits in excess of the projected account balance and recognizing the excess proportionally over the accumulation period based on total expected assessments. The Company regularly evaluates estimates used and adjusts the additional liability balance, with a related charge or credit to claims and other policy benefits, if actual experience or other evidence suggests that earlier assumptions should be revised. The

assumptions used in estimating the GMDB liabilities are consistent with those used for amortizing DAC, and are thus subject to the same variability and risk. The Company's GMDB liabilities at December 31, 2020 and 2019 were not material.

Interest-Sensitive Contract Liabilities

Liabilities for future benefits on interest-sensitive life and investment-type contract liabilities are carried at the accumulated contract holder values without reduction for potential surrender or withdrawal charges. The Company reinsures asset-intensive products, including annuities. The liabilities under asset-intensive insurance contracts or reinsurance contracts reinsured on a coinsurance basis are included in interest-sensitive contract liabilities on the consolidated balance sheets. Asset-intensive contracts principally include individual fixed annuities in the accumulation phase, individual variable annuities, and group fixed annuities. Interest-sensitive contract liabilities are equal to (i) policy account values, which consist of an accumulation of gross premium payments; (ii) credited interest less expenses, mortality charges, and withdrawals; and (iii) fair value adjustments relating to business combinations. Liabilities for immediate annuities are calculated as the present value of the expected cash flows, with the locked-in discount rate determined such that there is no gain or loss at inception. Additionally, certain annuity contracts the Company reinsures contain terms, such as guaranteed minimum benefits and equity participation options, which are deemed to be embedded derivatives and are accounted for based on the general accounting principles for *Derivatives and Hedging*.

The Company establishes liabilities for guaranteed minimum living benefits relating to certain variable annuity products as follows:

- Guaranteed minimum income benefits ("GMIB") provide the contract holder, after a specified period of time determined at the time of issuance of the variable annuity contract, with a minimum level of income (annuity) payments. Under the reinsurance treaty, the Company makes a payment to the ceding company equal to the GMIB net amount-at-risk at the time of annuitization and thus these contracts meet the net settlement criteria of the general accounting principles for *Derivatives and Hedging* and the Company assumes no mortality risk. Accordingly, the GMIB is considered an embedded derivative, which is measured at fair value separately from the host variable annuity product.
- Guaranteed minimum withdrawal benefits ("GMWB") guarantee the contract holder a return of their purchase payment via partial withdrawals, even if the account value is reduced to zero, provided that the contract holder's cumulative withdrawals in a contract year do not exceed a certain limit. The initial guaranteed withdrawal amount is equal to the initial benefit base as defined in the contract (typically, the initial purchase payments plus applicable bonus amounts). The GMWB is also an embedded derivative, which is measured at fair value separately from the host variable annuity product.
- Guaranteed minimum accumulation benefits ("GMAB") provide the contract holder, after a specified period of time determined at the time of issuance of the variable annuity contract, with a minimum accumulation of their purchase payments even if the account value is reduced to zero. The initial guaranteed accumulation amount is equal to the initial benefit base as defined in the contract (typically, the initial purchase payments plus applicable bonus amounts). The GMAB is also an embedded derivative, which is measured at fair value separately from the host variable annuity product.

For GMIB, GMWB and GMAB, the initial benefit base is increased by additional purchase payments made within a certain time period and decreased by benefits paid and/or withdrawal amounts. After a specified period of time, the benefit base may also increase as a result of an optional reset as defined in the contract.

The fair values of the GMIB, GMWB and GMAB embedded derivative liabilities are reflected in interest-sensitive contract liabilities on the consolidated balance sheets and are calculated based on actuarial and capital market assumptions related to the projected cash flows, including benefits and related contract charges over the lives of the contracts. These projected cash flows incorporate expectations concerning policyholder behavior, such as lapses, withdrawals and benefit selections, and capital market assumptions such as interest rates and equity market volatilities. In measuring the fair value of GMIBs, GMWBs and GMABs, the Company attributes a portion of the fees collected from the policyholder equal to the present value of expected future guaranteed minimum income, withdrawal and accumulation benefits (at inception). The changes in fair value are reported in investment related gains, net. Any additional fees represent "excess" fees and are reported in other revenues on the consolidated statements of income. These variable annuity guaranteed living benefits may be more costly than expected in volatile or declining equity markets or falling interest rate markets, causing an increase in interest-sensitive contract liabilities, negatively affecting net income.

The Company reviews its estimates of actuarial liabilities for interest-sensitive contract liabilities and compares them with its actual experience. Differences between actual experience and the assumptions used in pricing these guarantees and benefits and in the establishment of the related liabilities result in variances in profit and could result in losses. The effects of changes in such estimated liabilities are included in the results of operations in the period in which the changes occur.

Other Policy Claims and Benefits

Claims payable for IBNR losses are determined using case-basis estimates and lag studies of past experience. The time lag from the date of the claim or death to when the ceding company reports the claim to the Company can vary significantly by ceding company, business segment and product type. IBNR claims are estimates on an undiscounted basis, using actuarial estimates of historical claims expense, adjusted for current trends and conditions. These estimates are continually reviewed and the ultimate liability may vary significantly from the amount recognized, which are reflected in claims and other policy benefits in the period in which they are determined.

Securities Lending Obligation

The Company occasionally enters into securities borrowing and securities lending arrangements with several affiliated companies. The Company's obligation to return the securities or cash collateral, if any, is recorded as a securities lending obligation in the consolidated balance sheets. See "Securities Borrowing, Lending and Repurchase Agreements" above, [Note 3 - "Investments"](#) and [Note 12 - "Related-Party Transactions"](#) for further details on the Company's securities borrowing and securities lending arrangements.

Other Liabilities

Other liabilities primarily include investments in transit, cash collateral received on derivative positions, derivative liabilities, lease liability, and employee benefits.

Income Taxes

The Company provides for federal and foreign income taxes currently payable, as well as those deferred due to temporary differences between the tax basis of assets and liabilities and the reported amounts, and are recognized in net income or in certain cases in OCI. The Company's accounting for income taxes represents management's best estimate of various events and transactions considering the laws enacted as of the reporting date. The Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform") creates additional complexity due to various provisions that require management judgment and assumptions, which are subject to change.

Deferred tax assets and liabilities are measured by applying the relevant jurisdictions' enacted tax rate for the period in which the temporary differences are expected to reverse to the temporary difference change for that period. The Company will establish a valuation allowance if management determines, based on available information, that it is more likely than not that deferred income tax assets will not be realized. The Company has deferred tax assets including those related to foreign tax credits and net operating losses. The Company has projected its ability to utilize its U.S. and foreign deferred tax assets and has determined that all of the U.S. assets including losses are expected to be utilized and established a valuation allowance on the portion of the foreign deferred tax assets the Company believes more likely than not will not be realized.

Significant judgment is required in determining whether valuation allowances should be established as well as the amount of such allowances. When making such a determination, consideration is given to, among other things, the following:

- (i) taxable income in prior carryback years;
- (ii) future reversals of existing taxable temporary differences;
- (iii) future taxable income exclusive of reversing temporary differences and carryforwards; and
- (iv) tax planning strategies.

Any such changes could significantly affect the amounts reported in the consolidated financial statements in the year these changes occur.

The Company reports uncertain tax positions in accordance with GAAP. In order to recognize the benefit of an uncertain tax position, the position must meet the more likely than not criteria of being sustained. Unrecognized tax benefits due to tax uncertainties that do not meet the more likely than not criteria are included within income tax liability and are charged to earnings in the period that such determination is made. The Company classifies interest related to tax uncertainties as interest expense whereas penalties related to tax uncertainties are classified as a component of income tax.

See [Note 8 - "Income Tax"](#) for further discussion.

Foreign Currency Translation

Assets, liabilities and results of foreign operations are recorded based on the functional currency of each foreign operation. The determination of the functional currency is based on economic facts and circumstances pertaining to each foreign operation. The Company's material functional currencies are the U.S. dollar, Canadian dollar, British pound, Australian dollar, Euro, Hong Kong dollar, and South African rand. The translation of the functional currency into U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using weighted-

average exchange rates during each year. Gains or losses, net of applicable deferred income taxes, resulting from such translation are included in accumulated currency translation adjustments in AOCI until the underlying functional currency operation is sold or substantially liquidated.

Recognition of Revenues and Related Expenses - Long-Duration Products

Life and health premiums are recognized as revenue when due from the insured, and are reported net of amounts retroceded. Benefits and expenses are reported net of amounts retroceded and are associated with earned premiums so that profits are recognized over the life of the related contract. This association is accomplished through the provision for future policy benefits and the amortization of DAC. Other revenues includes items such as treaty recapture fees, fees associated with financial reinsurance and policy changes on interest-sensitive and investment-type products that the Company reinsures. Any fees that are collected in advance of the period benefited are deferred and recognized over the period benefited.

For certain reinsurance transactions involving in force blocks of business, the ceding company pays a premium equal to the initial required reserve (future policy benefit). In such transactions, for income statement presentation, the Company nets the expense associated with the establishment of the reserve against the premiums from the transaction.

Revenues for interest-sensitive and investment-type products consist of investment income, policy charges for the cost of insurance, policy administration, and surrenders that have been assessed against policy account balances during the period. Interest-sensitive contract liabilities for these products represent policy account balances before applicable surrender charges. Policy benefits and claims that are charged to expenses include claims incurred in the period in excess of related policy account balances and interest credited to policy account balances. Interest is credited to policyholder account balances according to terms of the policies or contracts.

For each of its reinsurance contracts, the Company must determine if the contract provides indemnification against loss or liability relating to insurance risk, in accordance with GAAP. The Company must review all contractual features, particularly those that may limit the amount of insurance risk to which the Company is subject or features that delay the timely reimbursement of claims. If the Company determines that a contract does not expose it to a reasonable possibility of a significant loss from insurance risk, the Company records the contract on a deposit method of accounting with any net amount receivable reflected as an asset within other reinsurance balances, and any net amount payable reflected as a liability within other reinsurance balances. Fees earned on the contracts are reflected as other revenues, rather than premiums.

Recognition of Revenues and Related Expenses - Short-Duration Products

The Company provides reinsurance of medical, disability, life and other products for a fixed period of short-duration, typically one to three years. Under the short-duration insurance accounting model:

- Premiums are recognized over the coverage period in proportion to the amount of insurance protection provided.
- Claims or benefits are recognized when insured events occur, based on the ultimate cost to settle the claim, and are adjusted to reflect changes in estimates during the life of the contract. The estimated cost to settle the claim is based on actuarial assumptions for similar claims. The Company also establishes an IBNR liability based on historical reporting patterns.
- Eligible DAC are capitalized and amortized in proportion to premium.

Equity Based Compensation

RGA issues stock awards included in its incentive compensation plans. The fair value of the awards is expensed over the performance or service period, which generally corresponds to the vesting period, and is recognized as an increase to additional paid-in-capital in shareholder's equity. Stock-based compensation expense is reflected in other operating expenses in the consolidated statements of income. The Company recognized an immaterial amount of equity compensation expense in 2020 and 2019.

New Accounting Pronouncements

Changes to the general accounting principles are established by the Financial Accounting Standards Board ("FASB") in the form of accounting standards updates to the FASB Accounting Standards Codification™. Accounting standards updates not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on the Company's consolidated financial statements.

Description	Date of Adoption	Effect on the Consolidated Financial Statements
Standards adopted:		
<p><i>Leases</i> This new standard, based on the principle that entities should recognize assets and liabilities arising from leases, does not significantly change the lessees' recognition, measurement and presentation of expenses and cash flows from the previous accounting standard. Leases are classified as finance or operating. The new standard's primary change is the requirement for entities to recognize a lease liability for payments and a right-of-use asset representing the right to use the leased asset during the term of operating lease arrangements. Lessees are permitted to make an accounting policy election to not recognize the asset and liability for leases with a term of twelve months or less. Lessors' accounting is largely unchanged from the previous accounting standard. In addition, the new standard expands the disclosure requirements of lease arrangements. Early adoption is permitted.</p>	January 1, 2019	This guidance was adopted by applying the optional transition method. The adoption of the standard did not have a material impact on the Company's results of operations or financial position. The adoption of the updated guidance resulted in the Company recognizing a right-of-use asset and lease liability of \$22.2 million included in other assets and other liabilities, respectively, in the consolidated balance sheets.
<p><i>Derivatives and Hedging</i> This updated guidance improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and make certain targeted improvements to simplify the application of the hedge accounting in current GAAP related to the assessment of hedge effectiveness. Early adoption is permitted.</p>	January 1, 2019	This guidance was adopted by applying a modified retrospective approach to existing hedging relationships as of the date of adoption. The adoption of the new standard did not have a material impact on the Company's results of operations or financial position. Upon adoption of the guidance, the Company recorded an immaterial adjustment to retained earnings as of the beginning of the first reporting period in which the guidance was effective and modified some disclosures.
<p><i>Financial Instruments - Credit Losses</i> This guidance adds to GAAP an impairment model, known as the current expected credit loss ("CECL") model that is based on expected losses rather than incurred losses. For traditional and other receivables, held-to-maturity debt securities, loans and other instruments entities will be required to use the new forward-looking "expected loss" model that generally will result in earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses similar to what they do today, except the losses will be recognized through an allowance for credit losses and adjusted each period for changes in credit risks. Early adoption is permitted.</p>	January 1, 2020	For asset classes within the scope of the CECL model, this guidance was adopted through a cumulative-effect adjustment to retained earnings (that is, a modified-retrospective approach). For available-for-sale debt securities, this guidance was applied prospectively. The allowance for credit losses increased when this guidance was adopted to include expected losses over the lifetime of commercial mortgages and other loans, including reasonable and supportable forecasts and expected changes in future economic conditions. The overall impact was an approximate \$1.0 million increase in the allowance for credit losses. This increase was reflected as a decrease to opening retained earnings, net of income taxes, as of January 1, 2020.
<p><i>Fair Value Measurement</i> This guidance is part of the FASB's disclosure framework project and eliminates certain disclosure requirements for fair value measurement, requires entities to disclose new information and modifies existing disclosure requirements. Early adoption is permitted.</p>	January 1, 2020	<p>Certain disclosure changes in the new guidance were applied prospectively in the year of adoption. The remaining changes in the new guidance were applied retrospectively to all periods presented in the year of adoption.</p> <p>The Company adopted, as of December 31, 2019, the guidance that removed the requirements relating to transfers between fair value hierarchy levels and certain disclosures about valuation processes for Level 3 fair value measurements. The Company adopted the remainder of the guidance on January 1, 2020. The adoption of the new guidance was not material to the Company's financial position.</p>
<p><i>Reference Rate Reform</i> This guidance eases the potential burden in accounting for, or recognizing the effects of, reference rate reform on financial reporting, which includes the transition away from the London Interbank Offered Rate ("LIBOR"). The Accounting Standards Update provides optional expedients and exceptions for applying GAAP modification to contracts and hedge accounting relationships affected by reference rate reform on financial reporting. Under the new guidance, a change in the reference rate for a contract that meets certain criteria will be accounted for as a continuation of that contract rather than the creation of a new contract. The new guidance applies to debt, insurance contracts, leases, derivative contracts and other arrangements.</p>	January 1, 2020	The reference rate reform is not expected to have material accounting consequences. The Company has established a team that is currently assessing the effects of the discontinuation of LIBOR on existing contracts that extend beyond 2021, by analyzing contractual fallback provisions, evaluating alternative rate ramifications and assessing the effects on current hedging strategies, systems and operations.

Description	Anticipated Date of Adoption	Effect on the Consolidated Financial Statements
Standards not yet adopted:		
<i>Financial Services - Insurance</i> This guidance significantly changes how insurers account for long-duration insurance contracts. The new guidance also significantly expands the disclosure requirements of long-duration insurance contracts. The new guidance will be effective for annual and interim reporting periods beginning January 1, 2023. Below are the most significant areas of change:	January 1, 2023	See each significant area of change below for the method of adoption and expected impact to the Company's results of operations and financial position.
<u>Cash flow assumptions for measuring liability for future policy benefits</u> The new guidance requires insurers to review, and if necessary, update the cash flow assumptions used to measure liabilities for future policy benefits periodically. The change in the liability estimate as a result of updating cash flow assumptions will be recognized in net income.		<u>Cash flow assumptions for measuring liability for future policy benefits</u> The Company will likely adopt this guidance on a modified retrospective basis as of the earliest period presented in the year of adoption. The Company is currently evaluating the impact of this amendment on its results of operations and financial position but anticipates the updated guidance will likely have a material impact.
<u>Discount rate assumption for measuring liability for future policy benefits</u> The new guidance requires insurers to update the discount rate assumption used to measure liabilities for future policy benefits at each reporting period, and the discount rate utilized must be based on an upper-medium grade fixed income instrument yield. The change in the liability estimate as a result of updating the discount rate assumption will be recognized in OCI.		<u>Discount rate assumption for measuring liability for future policy benefits</u> The Company will likely adopt this guidance on a modified retrospective basis as of the earliest period presented in the year of adoption. The Company is currently evaluating the impact of this amendment on its results of operations and financial position but anticipates the updated guidance will likely have a material impact.
<u>Market risk benefits</u> The new guidance created a new category of benefit features called market risk benefits that will be measured at fair value with changes in fair value attributable to a change in the instrument-specific credit risk recognized in OCI.		<u>Market risk benefits</u> The Company will adopt this guidance on a retrospective basis as of the earliest period presented in the year of adoption. The Company is currently evaluating the impact of this amendment on its results of operations and financial position but anticipates the updated guidance will likely have a material impact.
<u>Amortization of DAC and other balances</u> The new guidance requires DAC and other balances to be amortized on a constant level basis over the expected term of the related contracts.		<u>Amortization of DAC and other balances</u> The Company will likely adopt this guidance on a modified retrospective basis as of the earliest period presented in the year of adoption. The Company is currently evaluating the impact of this amendment on its results of operations and financial position but anticipates the updated guidance will likely have a material impact.

Note 3 INVESTMENTS

Fixed Maturity Securities Available-for-Sale

The Company holds various types of fixed maturity securities available-for-sale and classifies them as corporate securities ("Corporate"), Canadian and Canadian provincial government securities ("Canadian government"), residential mortgage-backed securities ("RMBS"), asset-backed securities ("ABS"), commercial mortgage-backed securities ("CMBS"), U.S. government and agencies ("U.S. government"), state and political subdivisions, and other foreign government, supranational and foreign government-sponsored enterprises ("Other foreign government"). RMBS, ABS and CMBS are collectively "structured securities".

The following tables provide information relating to investments in fixed maturity securities by type as of December 31, 2020 and 2019 (dollars in thousands):

December 31, 2020:	Amortized Cost	Allowance for Credit Losses	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total
Available-for-sale:						
Corporate	\$ 12,543,253	\$ 1,279	\$ 1,633,812	\$ 14,159	\$ 14,161,627	60.0 %
Canadian government	3,036,396	—	1,985,468	8	5,021,856	21.3
RMBS	129,967	—	3,532	213	133,286	0.6
ABS	368,020	—	3,441	3,182	368,279	1.6
CMBS	291,316	331	16,089	2,387	304,687	1.3
U.S. government	56,393	—	7,743	—	64,136	0.3
State and political subdivisions	163,006	—	13,970	255	176,721	0.7
Other foreign government	3,104,702	—	273,102	26,473	3,351,331	14.2
Total fixed maturity securities	<u>\$ 19,693,053</u>	<u>\$ 1,610</u>	<u>\$ 3,937,157</u>	<u>\$ 46,677</u>	<u>\$ 23,581,923</u>	<u>100.0 %</u>

December 31, 2019:	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	% of Total
Available-for-sale:					
Corporate	\$ 10,659,918	\$ 809,474	\$ 14,155	\$ 11,455,237	59.4 %
Canadian government	2,874,563	1,591,037	68	4,465,532	23.1
RMBS	170,094	2,855	131	172,818	0.9
ABS	277,551	1,882	526	278,907	1.4
CMBS	273,026	6,333	866	278,493	1.4
U.S. government	89,666	5,281	81	94,866	0.5
State and political subdivisions	121,029	3,637	1,887	122,779	0.6
Other foreign government	2,287,556	170,060	2,647	2,454,969	12.7
Total fixed maturity securities	<u>\$ 16,753,403</u>	<u>\$ 2,590,559</u>	<u>\$ 20,361</u>	<u>\$ 19,323,601</u>	<u>100.0 %</u>

The Company enters into various collateral arrangements with counterparties that require both the pledging and acceptance of fixed maturity securities as collateral. Pledged fixed maturity securities are included in fixed maturity securities, available-for-sale in the consolidated balance sheets. Fixed maturity securities received as collateral are held in separate custodial accounts and are not recorded on the Company's consolidated balance sheets. Subject to certain constraints, the Company is permitted by contract to sell or repledge collateral it receives; however, as of December 31, 2020 and 2019, none of the collateral received had been sold or repledged. The Company also holds assets in trust to satisfy collateral requirements under derivative transactions and reinsurance treaties. The following table includes fixed maturity securities pledged and received as collateral and assets in trust held to satisfy collateral requirements under derivative transactions and reinsurance treaties as of December 31, 2020 and 2019 (dollars in thousands):

	2020		2019	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities pledged as collateral	\$ 81,381	\$ 92,300	\$ 54,525	\$ 58,094
Fixed maturity securities received as collateral	n/a	525,520	n/a	287,519
Assets in trust held to satisfy collateral requirements	8,399,335	9,868,043	8,825,886	9,736,088

Of the assets in trust shown above, the Company held \$1,139.6 million and \$1,118.2 million in estimated fair values for the benefit of a related party at December 31, 2020 and 2019, respectively. Of the assets in trust shown above at December 31, 2019, the Company held \$807.0 million in estimated fair values for the benefit of a subsidiary. At December 31, 2020, the Company held \$1,663.2 million in estimated fair values for the benefit of its subsidiaries; however, this amount is excluded from the assets in trust shown above.

The Company monitors its concentrations of financial instruments on an ongoing basis and mitigates credit risk by maintaining a diversified investment portfolio that limits exposure to any one issuer. The Company's exposure to concentrations of credit risk from single issuers greater than 10% of the Company's shareholder's equity as of December 31, 2020 and 2019 is as follows (dollars in thousands):

	2020		2019	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Fixed maturity securities guaranteed or issued by:				
Canadian province of Quebec	\$ 1,259,830	\$ 2,425,758	\$ 1,160,413	\$ 2,116,367
Canadian province of Ontario	1,047,378	1,521,284	1,007,712	1,372,829
Government of Japan	854,389	837,558	304,714	323,693

The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale as of December 31, 2020 are shown by contractual maturity in the table below (dollars in thousands). Actual maturities can differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Structured securities are shown separately in the table below as they are not due at a single maturity date.

	Amortized Cost	Estimated Fair Value
Available-for-sale:		
Due in one year or less	\$ 630,484	\$ 637,935
Due after one year through five years	3,285,676	3,543,687
Due after five years through ten years	4,884,537	5,537,944
Due after ten years	10,103,053	13,056,105
Structured securities	789,303	806,252
Total	\$ 19,693,053	\$ 23,581,923

Corporate Fixed Maturity Securities

The tables below show the major sectors of the Company's corporate fixed maturity holdings as of December 31, 2020 and 2019 (dollars in thousands):

December 31, 2020:

	Amortized Cost	Estimated Fair Value	% of Total
Finance	\$ 5,186,468	\$ 5,784,977	40.9 %
Industrial	5,755,788	6,518,030	46.0
Utility	1,600,997	1,858,620	13.1
Total	\$ 12,543,253	\$ 14,161,627	100.0 %

December 31, 2019:

	Amortized Cost	Estimated Fair Value	% of Total
Finance	\$ 4,526,364	\$ 4,819,102	42.1 %
Industrial	4,747,226	5,122,692	44.7
Utility	1,386,328	1,513,443	13.2
Total	\$ 10,659,918	\$ 11,455,237	100.0 %

Allowance for Credit Losses and Impairments - Fixed Maturity Securities Available-for-Sale

As discussed in [Note 2 - "Significant Accounting Policies and Pronouncements"](#), allowances for credit losses on fixed maturity securities are recognized in investment related gains, net on the consolidated statements of income. For these securities, the net amount recognized represents the difference between the amortized cost of the security and the net present value of its projected future cash flows discounted at the effective interest rate implicit in the fixed maturity security prior to the allowance for credit losses. Any remaining difference between the fair value and amortized cost is recognized in AOCI.

The following table presents the rollforward of the allowance for credit losses in fixed maturity securities by type for the year ended December 31, 2020 (dollars in thousands):

	Corporate	CMBS	Total
Balance, beginning of period	\$ —	\$ —	\$ —
Credit losses recognized on securities for which credit losses were not previously recorded	1,279	331	1,610
Balance, end of period	\$ 1,279	\$ 331	\$ 1,610

Unrealized Losses for Fixed Maturity Securities Available-for-Sale

The following table presents the total gross unrealized losses for the 284 and 409 fixed maturity securities as of December 31, 2020 and 2019, where the estimated fair value had declined and remained below amortized cost by the indicated amount (dollars in thousands):

	2020		2019	
	Gross Unrealized Losses	% of Total	Gross Unrealized Losses	% of Total
Less than 20%	\$ 42,288	90.6 %	\$ 17,260	84.8 %
20% or more for less than six months	2,442	5.2	—	—
20% or more for six months or greater	1,947	4.2	3,101	15.2
Total	\$ 46,677	100.0 %	\$ 20,361	100.0 %

The Company's determination of whether a decline in value necessitates the recording of an allowance for credit losses includes an analysis of whether the issuer is current on its contractual payments, evaluating whether it is probable that the Company will

be able to collect all amounts due according to the contractual terms of the security and analyzing the overall ability of the Company to recover the amortized cost of the investment.

The following tables present the estimated fair values and gross unrealized losses for fixed maturity securities that have estimated fair values below amortized cost as of December 31, 2020 and 2019 (dollars in thousands). These investments are presented by class and grade of security, as well as the length of time the related fair value has remained below amortized cost.

December 31, 2020:	Less than 12 months		12 months or greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Investment grade securities:						
Corporate	\$ 428,871	\$ 9,643	\$ 17,633	\$ 264	\$ 446,504	\$ 9,907
Canadian government	1,303	8	—	—	1,303	8
RMBS	21,902	197	13,439	16	35,341	213
ABS	159,143	3,013	11,331	169	170,474	3,182
CMBS	64,864	1,561	—	—	64,864	1,561
State and political subdivisions	1,980	20	2,046	235	4,026	255
Other foreign government	686,153	25,209	—	—	686,153	25,209
Total investment grade securities	1,364,216	39,651	44,449	684	1,408,665	40,335
Below investment grade securities:						
Corporate	93,340	3,140	16,909	1,112	110,249	4,252
CMBS	787	826	—	—	787	826
Other foreign government	6,046	198	10,980	1,066	17,026	1,264
Total below investment grade securities	100,173	4,164	27,889	2,178	128,062	6,342
Total fixed maturity securities	\$ 1,464,389	\$ 43,815	\$ 72,338	\$ 2,862	\$ 1,536,727	\$ 46,677

December 31, 2019:	Less than 12 months		12 months or greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Investment grade securities:						
Corporate	\$ 894,892	\$ 8,465	\$ 181,033	\$ 831	\$ 1,075,925	\$ 9,296
Canadian government	5,499	68	—	—	5,499	68
RMBS	27,135	96	15,254	35	42,389	131
ABS	96,207	393	14,367	133	110,574	526
CMBS	92,840	866	—	—	92,840	866
U.S. government	9,877	81	—	—	9,877	81
State and political subdivisions	66,688	1,693	2,102	194	68,790	1,887
Other foreign government	172,392	2,165	11,912	40	184,304	2,205
Total investment grade securities	1,365,530	13,827	224,668	1,233	1,590,198	15,060
Below investment grade securities:						
Corporate	66,457	3,983	27,750	876	94,207	4,859
Other foreign government	11,589	116	8,475	326	20,064	442
Total below investment grade securities	78,046	4,099	36,225	1,202	114,271	5,301
Total fixed maturity securities	\$ 1,443,576	\$ 17,926	\$ 260,893	\$ 2,435	\$ 1,704,469	\$ 20,361

The Company has no intention to sell, nor does it expect to be required to sell, the securities outlined in the table above, as of the dates indicated. However, unforeseen facts and circumstances may cause the Company to sell fixed maturity securities in the ordinary course of managing its portfolio to meet certain diversification, credit quality and liquidity guidelines. Changes in unrealized losses are primarily driven by changes in interest rates.

Investment Income, Net of Related Expenses

Major categories of investment income, net of related expenses, consist of the following (dollars in thousands):

	2020	2019
Fixed maturity securities available-for-sale	\$ 687,682	\$ 604,482
Equity securities	2,679	3,110
Policy loans	399	304
Funds withheld at interest	527,866	549,250
Short-term investments and cash and cash equivalents	1,705	6,307
Other invested assets	65,962	69,805
Investment income	1,286,293	1,233,258
Investment expense	(36,383)	(31,786)
Investment income, net of related expenses	<u>\$ 1,249,910</u>	<u>\$ 1,201,472</u>

Investment Related Gains, Net

Investment related gains, net, consist of the following (dollars in thousands):

	2020	2019
Fixed maturity securities available for sale:		
Impairments and change in allowance for credit losses	\$ (1,610)	\$ (126)
Gain on investment activity	52,084	37,627
Loss on investment activity	(23,533)	(7,422)
Net gains (losses) on equity securities	(3,527)	1,235
Other impairment losses and change in mortgage loan provision	(1,261)	(1,057)
Derivatives and other, net	53,558	7,365
Total investment related gains, net	<u>\$ 75,711</u>	<u>\$ 37,622</u>

As of December 31, 2020, the Company held non-income producing securities with amortized costs, net of allowances, of \$5.4 million and estimated fair values of \$4.6 million. As of December 31, 2019, the Company held non-income producing securities with amortized costs of \$0.4 million and estimated fair values of \$0.2 million. Generally, securities are non-income producing when principal or interest is not paid primarily as a result of bankruptcies or credit defaults, but also include securities where amortization has been discontinued.

For the year ended December 31, 2020, there were no security purchases from affiliates for cash. For the year ended December 31, 2019, there were security purchases from affiliates for cash with estimated fair values of \$8.2 million at the time of transfer. For the year ended December 31, 2020, there were security sales to affiliates for cash with amortized costs of \$68.0 million and estimated fair values at the time of transfer of \$68.6 million. For the year ended December 31, 2019, there were no security sales to affiliates for cash.

Securities Borrowing, Lending, and Repurchase Agreements

The following table includes the amount of borrowed securities, loaned securities and securities received as collateral as part of the securities lending program, and repurchased/reverse repurchased securities pledged and received and cash loaned and received as of December 31, 2020 and 2019 (dollars in thousands):

	2020		2019	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Borrowed securities	\$ 117,795	\$ 161,178	\$ 153,960	\$ 184,678
Securities lending:				
Securities loaned	88,526	98,318	87,947	93,003
Securities received	n/a	94,000	n/a	94,000
Repurchase program/reverse repurchase program:				
Securities pledged	602,661	648,866	324,207	346,053
Securities received	n/a	1,000,720	n/a	748,464
Cash loaned	357,000	357,000	397,000	397,000
Cash received	900	900	1,054	1,054

The following tables present information on the Company's securities lending and repurchase/reverse repurchase transactions as of December 31, 2020 and 2019 (dollars in thousands). Collateral associated with certain borrowed securities is not included within the tables as the collateral pledged to each counterparty is the right to reinsurance treaty cash flows.

	December 31, 2020				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Securities lending transactions:					
Corporate	\$ —	\$ —	\$ —	\$ 98,318	\$ 98,318
Total	—	—	—	98,318	98,318
Repurchase/reverse repurchase transactions:					
Corporate	—	—	—	355,517	355,517
State and political subdivisions	—	—	—	1,674	1,674
Other foreign government	—	—	—	291,675	291,675
Cash	—	—	—	357,000	357,000
Total	—	—	—	1,005,866	1,005,866
Total transactions	\$ —	\$ —	\$ —	\$ 1,104,184	\$ 1,104,184
Gross amount of recognized liabilities for securities lending and repurchase/reverse repurchase transactions in preceding table					\$ 1,095,620
Amounts related to agreements not included in offsetting disclosure					\$ 8,564

	December 31, 2019				
	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Securities lending transactions:					
Corporate	\$ —	\$ —	\$ —	\$ 93,003	\$ 93,003
Total	—	—	—	93,003	93,003
Repurchase transactions:					
Corporate	—	—	—	237,490	237,490
State and political subdivisions	—	—	—	1,570	1,570
Other foreign government	—	—	—	106,993	106,993
Cash	—	—	—	397,000	397,000
Total	—	—	—	743,053	743,053
Total transactions	\$ —	\$ —	\$ —	\$ 836,056	\$ 836,056
Gross amount of recognized liabilities for securities lending and repurchase transactions in preceding table					\$ 843,518
Amounts related to agreements not included in offsetting disclosure					\$ 7,462

The Company has elected to offset amounts recognized as receivables and payables resulting from the repurchase/reverse repurchase programs. After the effect of offsetting, there was no liability presented on the consolidated balance sheets as of December 31, 2020. After the effect of offsetting, the net amount presented on the consolidated balance sheets was a liability of \$1 million as of December 31, 2019. As of December 31, 2020 and 2019, the Company recognized payables resulting from cash received as collateral associated with repurchase/reverse repurchase agreements. Amounts owed to and due from the counterparties may be settled in cash or offset, in accordance with the agreements.

Policy Loans

The majority of policy loans are associated with one reinsurance agreement with an affiliated company. These policy loans present no credit risk as the amount of the loan cannot exceed the obligation due to the ceding company upon the death of the insured or surrender of the underlying policy. The provisions of the treaties in force and the underlying policies determine the policy loan interest rates. The Company earns a spread between the interest rate earned on policy loans and the interest rate credited to corresponding liabilities.

Funds Withheld at Interest

As of December 31, 2020, \$11.6 billion of the funds withheld at interest balance is associated with affiliated companies. In the event of a ceding company's insolvency, the Company would need to assert a claim on the assets supporting its reserve liabilities. However, the risk of loss to the Company is mitigated by its ability to offset amounts it owes the ceding company for claims or allowances against amounts owed to the Company from the ceding company.

Other Invested Assets

Other invested assets include lifetime mortgages, derivative contracts, FVO contractholder-directed unit-linked investments and mortgage loans on real estate. Other invested assets also include limited partnership interests and joint ventures (other than operating joint ventures), which are included in Other in the table below. The allowance for credit losses for lifetime mortgages was \$1.8 million and \$1.7 million as of December 31, 2020 and 2019. Carrying values of these assets as of December 31, 2020 and 2019 are as follows (dollars in thousands):

	2020	2019
Lifetime mortgages	\$ 935,323	\$ 774,946
Derivatives	168,851	134,851
FVO contractholder-directed unit-linked investments	289,476	259,634
Mortgage loans on real estate	303,011	237,492
Other	41,750	17,926
Total other invested assets	<u>\$ 1,738,411</u>	<u>\$ 1,424,849</u>

Note 4 DERIVATIVE INSTRUMENTS

Accounting for Derivative Instruments and Hedging Activities

See [Note 2 - "Significant Accounting Policies and Pronouncements"](#) for a detailed discussion of the accounting treatment for derivative instruments, including embedded derivatives and [Note 5 - "Fair Value of Assets and Liabilities"](#) for additional disclosures related to the fair value hierarchy for derivative instruments, including embedded derivatives.

Types of Derivatives Used by the Company

Credit Derivatives

The Company sells protection under single name credit default swaps and credit default swap index tranches to diversify its credit risk exposure in certain portfolios and, in combination with purchasing securities, to replicate characteristics of similar investments based on the credit quality and term of the credit default swap. Credit default triggers for indexed reference entities and single name reference entities are defined in the contracts. The Company's maximum exposure to credit loss equals the notional value for credit default swaps. In the event of default of a referencing entity, the Company is typically required to pay the protection holder the full notional value less a recovery amount determined at auction.

Equity Derivatives

Exchange-traded equity futures are used primarily to economically hedge liabilities embedded in certain variable annuity products. With exchange-traded equity futures transactions, the Company agrees to purchase or sell a specified number of contracts, the value of which is determined by the relevant stock indices, and to post variation margin on a daily basis in an amount equal to the difference between the daily estimated fair values of those contracts. The Company enters into exchange-traded equity futures with regulated futures commission merchants that are members of the exchange.

Equity index options are used by the Company primarily to hedge minimum guarantees embedded in certain variable annuity products. To hedge against adverse changes in equity indices volatility, the Company buys put options. The contracts are net settled in cash based on differentials in the indices at the time of exercise and the strike price.

Foreign Currency Derivatives

Foreign currency swaps are used by the Company to reduce the risk from fluctuations in foreign currency exchange rates associated with its assets and liabilities denominated in foreign currencies. With a foreign currency swap transaction, the Company agrees with another party to exchange, at specified intervals, the difference between one currency and another at a forward exchange rate calculated by reference to an agreed upon principal amount. The principal amount of each currency is exchanged at the termination of the currency swap by each party. The Company uses foreign currency swaps in hedges of net investments in foreign operations ("NIFO") and non-qualifying hedge relationships.

Foreign currency forwards are used by the Company to reduce the risk from fluctuations in foreign currency exchange rates associated with its assets and liabilities denominated in foreign currencies. With a foreign currency forward transaction, the Company agrees with another party to deliver a specified amount of an identified currency at a specified future date. The price is agreed upon at the time of the contract and payment for such a contract is made in a different currency at the specified future date. The Company uses foreign currency forwards in hedges of NIFO and non-qualifying hedge relationships.

Interest Rate Derivatives

Interest rate swaps are used by the Company primarily to reduce market risks from changes in interest rates, to alter interest rate exposure arising from mismatches between assets and liabilities (duration mismatches) and to manage the risk of cash flows of

liabilities that are variable based on a benchmark rate. With an interest rate swap, the Company agrees with another party to exchange, at specified intervals, the difference between two rates, which can be either fixed-rate or floating-rate interest amounts, tied to an agreed-upon notional principal amount. These transactions are executed pursuant to master agreements that provide for a single net payment or individual gross payments at each due date. The Company utilizes interest rate swaps in cash flow and non-qualifying hedging relationships.

Other Derivatives

Consumer price index ("CPI") swaps are used by the Company primarily to economically hedge liabilities embedded in certain insurance products where value is directly affected by changes in a designated benchmark consumer price index. With a CPI swap transaction, the Company agrees with another party to exchange the actual amount of inflation realized over a specified period of time for a fixed amount of inflation determined at inception. These transactions are executed pursuant to master agreements that provide for a single net payment or individual gross payments to be made by the counterparty at each due date. Most of these swaps will require a single payment to be made by one counterparty at the maturity date of the swap.

The Company has entered into longevity swaps in the form of out-of-the-money options, which provide protection against changes in mortality improvement to retirement plans and insurers of such plans. With a longevity swap transaction, the Company agrees with another party to exchange a proportion of a notional value. The proportion is determined by the difference between a predefined benefit, and the realized benefit plus the future expected benefit, calculated by reference to a population index for a fixed premium.

The Company has certain embedded derivatives that are required to be separated from their host contracts and reported as derivatives. Host contracts include reinsurance treaties structured on a modco or funds withheld basis. Additionally, the Company reinsures variable annuity contracts with benefits that are considered embedded derivatives, including GMWB, GMAB, and GMIB treaties. The Company's utilization of a CVA did not have a material effect on the change in fair value of its embedded derivatives for the years ended December 31, 2020 and 2019.

Summary of Derivative Positions

Derivatives, except for embedded derivatives and longevity swaps, are included in other invested assets or other liabilities, at fair value. Longevity swaps, which have been discontinued or matured in 2019, are included in other assets or other liabilities, at fair value. Embedded derivative liabilities on modco or funds withheld arrangements are included with the host contract in funds withheld at interest, at fair value. Embedded derivative liabilities on variable annuity products are included on the consolidated balance sheets with the host contract in interest-sensitive contract liabilities, at fair value. The following table presents the notional amounts and gross fair value of derivative instruments prior to taking into account the netting effects of master netting agreements as of December 31, 2020 and 2019 (dollars in thousands):

	Primary Underlying Risk	Notional Amount	December 31, 2020		December 31, 2019		
			Carrying Value/ Fair Value		Carrying Value/ Fair Value		
			Assets	Liabilities	Assets	Liabilities	
Derivatives not designated as hedging instruments:							
Interest rate swaps	Interest rate	\$ 959,484	\$ 126,382	\$ 3,202	\$ 795,700	\$ 87,961	\$ 5,457
Financial futures	Equity	258,160	—	—	307,173	—	—
Foreign currency swaps	Foreign currency	149,698	—	18,006	149,698	—	9,324
Foreign currency forwards	Foreign currency	346,724	4,024	1,633	175,000	936	—
CPI swaps	CPI	477,500	10,787	14,739	311,165	—	17,804
Credit default swaps	Credit	1,260,600	11,360	79	1,030,600	1,342	445
Equity options	Equity	394,545	29,305	—	364,166	15,373	—
Embedded derivatives in:							
Modco or funds withheld arrangements		—	1,177,720	—	—	671,071	—
Variable annuity products		—	—	154,827	—	—	162,912
Total non-hedging derivatives		3,846,711	1,359,578	192,486	3,133,502	776,683	195,942
Derivatives designated as hedging instruments:							
Interest rate swaps	Foreign currency/ Interest rate	367,000	2,176	—	100,000	—	702
Foreign currency swaps	Foreign currency	119,664	2,821	680	159,987	7,066	122
Foreign currency forwards	Foreign currency	1,254,735	9,531	15,131	1,094,403	28,441	1,574
Total hedging derivatives		1,741,399	14,528	15,811	1,354,390	35,507	2,398
Total derivatives		\$ 5,588,110	\$ 1,374,106	\$ 208,297	\$ 4,487,892	\$ 812,190	\$ 198,340

Cash Flow Hedges

Certain derivative instruments are designated as cash flow hedges when they meet the requirements of the general accounting principles for *Derivatives and Hedging*. The Company designates and accounts for the following as cash flow hedges: (i) certain interest rate swaps, in which the cash flows of assets and liabilities are variable based on a benchmark rate; and (ii) certain interest rate swaps, in which the cash flows of assets are denominated in different currencies, commonly referred to as cross-currency swaps.

The following table presents the components of AOCI, before income tax, and the consolidated income statement classification where the gain or loss is recognized related to cash flow hedges for the years ended December 31, 2020 and 2019 (dollars in thousands):

	Amounts Included in AOCI
Balance, January 1, 2019	\$ —
Gains (losses) deferred in OCI	(2,982)
Balance, December 31, 2019	(2,982)
Gains (losses) deferred in OCI	11,326
Balance, December 31, 2020	\$ 8,344

As of December 31, 2020, there are no material amounts recorded in AOCI that are expected to be reclassified to earnings during the next twelve months.

The following table presents the effect of derivatives in cash flow hedging relationships on the consolidated statements of income and the consolidated statements of shareholder's equity for the years ended December 31, 2020 and 2019 (dollars in thousands):

Derivative Type	Gains (Losses) Deferred in OCI	Gains (Losses) Reclassified into Income from OCI		
		Investment Related Gains (Losses)	Investment Income	Interest Expense
For the year ended December 31, 2020:				
Interest rate	\$ 10,766	\$ —	\$ —	\$ —
Foreign currency/interest rate	560	—	—	—
Total	\$ 11,326	\$ —	\$ —	\$ —
For the year ended December 31, 2019:				
Interest rate	\$ (2,982)	\$ —	\$ —	\$ —
Total	\$ (2,982)	\$ —	\$ —	\$ —

For the years ended December 31, 2020 and 2019, there were no amounts reclassified into earnings relating to instances in which the Company discontinued cash flow hedge accounting because the forecasted transaction did not occur by the anticipated date or within the additional time period permitted by the authoritative guidance for the accounting for derivatives and hedging.

Hedges of Net Investments in Foreign Operations

The Company uses foreign currency swaps and foreign currency forwards to hedge a portion of its net investment in certain foreign operations against adverse movements in exchange rates. The following table illustrates the Company's NIFO hedges for the years ended December 31, 2020 and 2019 (dollars in thousands):

Type of NIFO Hedge	Derivative Gains (Losses) Deferred in AOCI	
	For the years ended December 31,	
	2020	2019
Foreign currency swaps	\$ (651)	\$ (5,936)
Foreign currency forwards	(29,706)	(24,243)
Total	\$ (30,357)	\$ (30,179)

The cumulative foreign currency translation recorded in AOCI related to these hedges was a loss of \$2.6 million and a gain of \$27.7 million as of December 31, 2020 and 2019, respectively. If a hedged foreign operation was sold or substantially liquidated, the amounts in AOCI would be reclassified to the consolidated statements of income. A pro rata portion would be reclassified upon partial sale of a hedged foreign operation. There were no sales or substantial liquidations of NIFO that would have required the reclassification of gains or losses from AOCI into investment income during the periods presented.

Non-qualifying Derivatives and Derivatives for Purposes Other Than Hedging

The Company uses various other derivative instruments for risk management purposes that either do not qualify or have not been qualified for hedge accounting treatment. The gain or loss related to the change in fair value for these derivative instruments is recognized in investment related gains, net in the consolidated statements of income, except where otherwise noted.

A summary of the effect of non-hedging derivatives, including embedded derivatives, on the Company's consolidated statements of income for the years ended December 31, 2020 and 2019 is as follows (dollars in thousands):

Type of Non-hedging Derivative	Consolidated Statements of Income Location of Gains (Losses)	Gains (Losses) for the Years Ended December 31,	
		2020	2019
Interest rate swaps	Investment related gains, net	\$ 56,252	\$ 58,520
Financial futures	Investment related gains, net	(46,794)	(46,050)
Foreign currency swaps	Investment related gains, net	(6,520)	(656)
Foreign currency forwards	Investment related gains, net	5,342	1,166
CPI swaps	Investment related gains, net	10,204	(11,973)
Credit default swaps	Investment related gains, net	14,775	25,520
Equity options	Investment related gains, net	363	(38,908)
Longevity swaps	Other revenues	—	6,032
Subtotal		33,622	(6,349)
Embedded derivatives in:			
Modco or funds withheld arrangements	Change in value of funds withheld embedded derivatives	503,196	826,857
Variable annuity products	Investment related gains, net	8,085	5,013
Total non-hedging derivatives		\$ 544,903	\$ 825,521

Credit Derivatives

The following table presents the estimated fair value, maximum amount of future payments and weighted average years to maturity of credit default swaps sold by the Company as of December 31, 2020 and 2019 (dollars in thousands):

Rating Agency Designation of Referenced Credit Obligations ⁽¹⁾	2020			2019		
	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps ⁽²⁾	Weighted Average Years to Maturity ⁽³⁾	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps ⁽²⁾	Weighted Average Years to Maturity ⁽³⁾
AAA/AA+/AA/AA-/A+/A-						
Single name credit default swaps	\$ 10,445	\$ 211,000	20.0	\$ 340	\$ 56,000	1.3
Subtotal	10,445	211,000	20.0	340	56,000	1.3
BBB+/BBB/BBB-						
Single name credit default swaps	731	62,000	2.3	1,000	102,000	1.9
Credit default swaps referencing indices	105	987,600	3.9	(443)	872,600	4.7
Subtotal	836	1,049,600	3.8	557	974,600	4.4
Total	\$ 11,281	\$ 1,260,600	6.5	\$ 897	\$ 1,030,600	4.2

(1) The rating agency designations are based on ratings from Standard and Poor's ("S&P").

(2) Assumes the value of the referenced credit obligations is zero.

(3) The weighted average years to maturity of the credit default swaps is calculated based on weighted average notional amounts.

Netting Arrangements and Credit Risk

Certain of the Company's derivatives are subject to enforceable master netting arrangements and reported as a net asset or liability in the consolidated balance sheets. The Company nets all derivatives that are subject to such arrangements.

The Company has elected to include all derivatives, except embedded derivatives, in the tables below, irrespective of whether they are subject to an enforceable master netting arrangement or a similar agreement. See [Note 3 - "Investments"](#) for information regarding the Company's securities borrowing, lending, and repurchase/reverse repurchase programs. See "Embedded Derivatives" above for information regarding the Company's bifurcated embedded derivatives.

The following table provides information relating to the netting of the Company's derivative instruments as of December 31, 2020 and 2019 (dollars in thousands):

	Gross Amounts Recognized	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets		Net Amount
				Financial Instruments ⁽¹⁾	Cash Collateral Pledged/Received	
December 31, 2020:						
Derivative assets	\$ 196,386	\$ (27,535)	\$ 168,851	\$ (500)	\$ (38,662)	\$ 129,689
Derivative liabilities	53,470	(27,535)	25,935	(83,792)	(22,040)	(79,897)
December 31, 2019:						
Derivative assets	\$ 141,119	\$ (6,268)	\$ 134,851	\$ —	\$ (43,882)	\$ 90,969
Derivative liabilities	35,428	(6,268)	29,160	(44,674)	(27,590)	(43,104)

(1) Includes initial margin posted to a central clearing partner.

The Company may be exposed to credit-related losses in the event of non-performance by counterparties to derivative financial instruments. Generally, the credit exposure of the Company's derivative contracts is limited to the fair value and accrued interest of non-collateralized derivative contracts in an asset position at the reporting date. As of December 31, 2020, the Company had credit exposure of \$19 million.

Derivatives may be exchange-traded or they may be privately negotiated contracts, which are referred to as over-the-counter ("OTC") derivatives. Certain of the Company's OTC derivatives are cleared and settled through central clearing counterparties ("OTC cleared") and others are bilateral contracts between two counterparties. The Company manages its credit risk related to OTC derivatives by entering into transactions with creditworthy counterparties, maintaining collateral arrangements and through the use of master netting agreements that provide for a single net payment to be made by one counterparty to another at each due date and upon termination. The Company is only exposed to the default of the central clearing counterparties for OTC cleared derivatives, and these transactions require initial and daily variation margin collateral postings. Exchange-traded derivatives are settled on a daily basis, thereby reducing the credit risk exposure in the event of non-performance by counterparties to such financial instruments.

Note 5 FAIR VALUE OF ASSETS AND LIABILITIES

Fair Value Measurement

General accounting principles for *Fair Value Measurements and Disclosures* define fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. These principles also establish a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value and describes three levels of inputs that may be used to measure fair value:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. Active markets are defined as having the following characteristics for the measured asset/liability: (i) many transactions, (ii) current prices, (iii) price quotes not varying substantially among market makers, (iv) narrow bid/ask spreads and (v) most information publicly available. The Company's Level 1 assets and liabilities are traded in active exchange markets.

Level 2 - Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or market standard valuation techniques and assumptions that use significant inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Such observable inputs include benchmarking prices for similar assets in active, liquid markets, quoted prices in markets that are not active and observable yields and spreads in the market. The Company's Level 2 assets and liabilities include investment securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts whose values are determined using market standard valuation techniques. Level 2 valuations are generally obtained from third party pricing services for identical or comparable assets or liabilities or through the use of valuation methodologies using observable market inputs. Prices from servicers are validated through analytical reviews and assessment of current market activity.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the related assets or liabilities. Level 3 assets and liabilities include those whose value is determined using market standard valuation techniques described above. When observable inputs are not available, the market standard techniques for determining the estimated fair value of certain securities that trade infrequently, and therefore have little transparency, rely on inputs that are significant to the estimated fair value and that are not observable in the market or cannot be derived principally from or corroborated by observable market data. These unobservable inputs can be based in large part on management judgment or estimation and cannot be supported by reference to market activity. Even though unobservable, management believes these inputs are based on assumptions deemed appropriate given the circumstances and consistent with what other market participants would use when pricing similar assets and liabilities. Prices are determined using valuation methodologies such as discounted cash flow models and other similar techniques that require management's judgment or estimation in

developing inputs that are consistent with those other market participants would use when pricing similar assets and liabilities. Non-binding broker quotes, which are utilized when pricing service information is not available, are reviewed for reasonableness based on the Company's understanding of the market, and are generally considered Level 3. Under certain circumstances, based on its observations of transactions in active markets, the Company may conclude the prices received from independent third party pricing services or brokers are not reasonable or reflective of market activity. In those instances, the Company would apply internally developed valuation techniques to the related assets or liabilities. Additionally, the Company's embedded derivatives, all of which are associated with reinsurance treaties, and longevity swaps are classified in Level 3 since their values include significant unobservable inputs.

When inputs used to measure the fair value of an asset or liability fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement in its entirety, except for fair value measurements using NAV. For example, a Level 3 fair value measurement may include inputs that are observable (Levels 1 and 2) and unobservable (Level 3). Therefore, gains and losses for such assets and liabilities categorized within Level 3 may include changes in fair value that are attributable to both observable inputs (Levels 1 and 2) and unobservable inputs (Level 3).

Assets and Liabilities by Hierarchy Level

Assets and liabilities measured at fair value on a recurring basis as of December 31, 2020 and 2019 are summarized below (dollars in thousands):

	Total	Fair Value Measurements Using:		
		Level 1	Level 2	Level 3
December 31, 2020:				
Assets:				
Fixed maturity securities - available-for-sale:				
Corporate	\$ 14,161,627	\$ —	\$ 13,438,392	\$ 723,235
Canadian government	5,021,856	—	5,021,856	—
RMBS	133,286	—	133,286	—
ABS	368,279	—	331,560	36,719
CMBS	304,687	—	249,515	55,172
U.S. government	64,136	57,499	6,637	—
State and political subdivisions	176,721	—	176,721	—
Other foreign government	3,351,331	—	3,345,575	5,756
Total fixed maturity securities - available-for-sale	23,581,923	57,499	22,703,542	820,882
Equity securities	40,928	36,752	—	4,176
Funds withheld at interest - embedded derivatives & other	1,233,685	—	—	1,233,685
Cash equivalents	153,167	153,167	—	—
Short-term investments	16,345	3,552	8,658	4,135
Other invested assets:				
Derivatives	168,851	—	168,851	—
FVO contractholder-directed unit-linked investments	289,476	223,555	65,921	—
Total other invested assets	458,327	223,555	234,772	—
Total	\$ 25,484,375	\$ 474,525	\$ 22,946,972	\$ 2,062,878
Liabilities:				
Interest-sensitive contract liabilities - embedded derivatives	\$ 154,827	\$ —	\$ —	\$ 154,827
Other liabilities:				
Derivatives	25,935	—	25,935	—
Total	\$ 180,762	\$ —	\$ 25,935	\$ 154,827

December 31, 2019:

	Total	Fair Value Measurements Using:		
		Level 1	Level 2	Level 3
Assets:				
Fixed maturity securities - available-for-sale:				
Corporate	\$ 11,455,237	\$ —	\$ 11,097,317	\$ 357,920
Canadian government	4,465,532	—	3,761,464	704,068
RMBS	172,818	—	167,111	5,707
ABS	278,907	—	278,907	—
CMBS	278,493	—	233,659	44,834
U.S. government	94,866	88,628	6,238	—
State and political subdivisions	122,779	—	122,779	—
Other foreign government	2,454,969	—	2,449,579	5,390
Total fixed maturity securities - available-for-sale	19,323,601	88,628	18,117,054	1,117,919
Equity securities	217,278	213,192	—	4,086
Funds withheld at interest - embedded derivatives	671,071	—	—	671,071
Cash equivalents	78,566	78,566	—	—
Short-term investments	11,522	4,100	7,422	—
Other invested assets:				
Derivatives	134,851	—	134,851	—
FVO contractholder-directed unit-linked investments	259,634	206,962	52,672	—
Total other invested assets	394,485	206,962	187,523	—
Total	\$ 20,696,523	\$ 591,448	\$ 18,311,999	\$ 1,793,076
Liabilities:				
Interest-sensitive contract liabilities - embedded derivatives	\$ 162,912	\$ —	\$ —	\$ 162,912
Other liabilities:				
Derivatives	29,160	—	29,160	—
Total	\$ 192,072	\$ —	\$ 29,160	\$ 162,912

The Company may utilize information from third parties, such as pricing services and brokers, to assist in determining the fair value for certain assets and liabilities; however, management is ultimately responsible for all fair values presented in the Company's consolidated financial statements. This includes responsibility for monitoring the fair value process, ensuring objective and reliable valuation practices and pricing of assets and liabilities, and approving changes to valuation methodologies and pricing sources. The selection of the valuation technique(s) to apply considers the definition of an exit price and the nature of the asset or liability being valued and significant expertise and judgment is required.

The Company performs initial and ongoing analysis and review of the various techniques utilized in determining fair value to ensure that they are appropriate and consistently applied, and that the various assumptions are reasonable. The Company analyzes and reviews the information and prices received from third parties to ensure that the prices represent a reasonable estimate of the fair value and to monitor controls around pricing, which includes quantitative and qualitative analysis and is overseen by the Company's investment and accounting personnel. Examples of procedures performed include, but are not limited to, review of pricing trends, comparison of a sample of executed prices of securities sold to the fair value estimates, comparison of fair value estimates to management's knowledge of the current market, and ongoing confirmation that third party pricing services use, wherever possible, market-based parameters for valuation. In addition, the Company utilizes both internal and external cash flow models to analyze the reasonableness of fair values utilizing credit spread and other market assumptions, where appropriate. As a result of the analysis, if the Company determines there is a more appropriate fair value based upon the available market data, the price received from the third party is adjusted accordingly. The Company also determines if the inputs used in estimated fair values received from pricing services are observable by assessing whether these inputs can be corroborated by observable market data.

For assets and liabilities reported at fair value, the Company utilizes, when available, fair values based on quoted prices in active markets that are regularly and readily obtainable. Generally, these are very liquid investments and the valuation does not require management judgment. When quoted prices in active markets are not available, fair value is based on market valuation techniques, market comparable pricing and the income approach. The use of different techniques, assumptions and inputs may have a material effect on the estimated fair values of the Company's securities holdings. For the periods presented, the application of market standard valuation techniques applied to similar assets and liabilities has been consistent.

The methods and assumptions the Company uses to estimate the fair value of assets and liabilities measured at fair value on a recurring basis are summarized below.

Fixed Maturity Securities - The fair values of the Company's publicly-traded fixed maturity securities are generally based on prices obtained from independent pricing services. Prices from pricing services are sourced from multiple vendors, and a

vendor hierarchy is maintained by asset type based on historical pricing experience and vendor expertise. The Company generally receives prices from multiple pricing services for each security, but ultimately uses the price from the vendor that is highest in the hierarchy for the respective asset type. To validate reasonableness, prices are periodically reviewed as explained above. Consistent with the fair value hierarchy described above, securities with quotes from pricing services are generally reflected within Level 2, as they are primarily based on observable pricing for similar assets and/or other market observable inputs. If the pricing information received from third party pricing services is not reflective of market activity or other inputs observable in the market, the Company may challenge the price through a formal process with the pricing service.

If the Company ultimately concludes that pricing information received from the independent pricing service is not reflective of fair value, non-binding broker quotes are used, if available. If the Company concludes that the values from both pricing services and brokers are not reflective of fair value, an internally developed valuation may be prepared; however, this occurs infrequently. Internally developed valuations or non-binding broker quotes are also used to determine fair value in circumstances where vendor pricing is not available. These valuations may use significant unobservable inputs, which reflect the Company's assumptions about the inputs that market participants would use in pricing the asset. Observable market data may not be available in certain circumstances such as market illiquidity and credit events related to the security. Pricing service overrides, internally developed valuations and non-binding broker quotes are generally based on significant unobservable inputs and are reflected as Level 3 in the valuation hierarchy.

The inputs used in the valuation of corporate and government securities include, but are not limited to standard market observable inputs that are derived from, or corroborated by, market observable data including market yield curve, duration, call provisions, observable prices and spreads for similar publicly traded or privately placed issues that incorporate the credit quality and industry sector of the issuer. For internal pricing of private placements and structured securities, valuation is based primarily on matrix pricing or other similar techniques using standard market inputs including spreads for actively traded securities, spreads off benchmark yields, expected prepayment speeds and volumes, current and forecasted loss severity, rating, weighted average coupon, weighted average maturity, average delinquency rates, geographic region, debt service coverage ratios and issuance-specific information including, but not limited to: collateral type, payment terms of the underlying assets, payment priority within the tranche, structure of the security, deal performance and vintage of loans.

When observable inputs are not available, the market standard valuation techniques for determining the estimated fair value of certain types of securities that trade infrequently, and therefore have little or no price transparency, rely on inputs that are significant to the estimated fair value that are not observable in the market or cannot be derived principally from or corroborated by observable market data, such as market illiquidity. Other significant unobservable inputs used in the fair value measurement of the Company's private debt investments include a multiple of earnings before interest, taxes, depreciation and amortization ("EBITDA"). These unobservable inputs can be based in large part on management judgment or estimation, and cannot be supported by reference to market activity. Even though unobservable, these inputs are based on assumptions deemed appropriate given the circumstances and are believed to be consistent with what other market participants would use when pricing such securities.

Embedded Derivatives & Other - The fair value of embedded derivative liabilities, including those calculated by third parties, are monitored through the use of attribution reports to quantify the effect of underlying sources of fair value change, including capital market inputs based on policyholder account values, interest rates and short-term and long-term implied volatilities, from period to period. Actuarial assumptions are based on experience studies performed internally in combination with available industry information and are reviewed on a periodic basis, at least annually.

For embedded derivative liabilities associated with the underlying products in reinsurance treaties, primarily variable annuity treaties, the Company utilizes a discounted cash flow model, which includes an estimate of future equity option purchases and an adjustment for a CVA. The variable annuity embedded derivative calculations are performed by third parties based on methodology and input assumptions provided by the Company. To validate the reasonableness of the resulting fair value, the Company's internal actuaries perform reviews and analytical procedures on the results. The capital market inputs to the model, such as equity indexes, short-term equity volatility and interest rates, are generally observable. The valuation also requires certain significant inputs, which are generally not observable and accordingly, the valuation is considered Level 3 in the fair value hierarchy.

The fair value of embedded derivatives associated with funds withheld reinsurance treaties is determined based upon a total return swap technique with reference to the fair value of the investments held by the ceding company that support the Company's funds withheld at interest asset with an adjustment for a CVA. The fair value of the underlying assets is generally based on market observable inputs using industry standard valuation techniques. The valuation also requires certain significant inputs, which are generally not observable and accordingly, the valuation is considered Level 3 in the fair value hierarchy.

Other assets elected at fair value include assets where inputs are not observable in the market and are considered Level 3 in the fair value hierarchy.

Equity Securities - Equity securities consist principally of exchange-traded funds and preferred stock of publicly and privately traded companies. The fair values of publicly traded equity securities are primarily based on quoted market prices in active markets and are classified within Level 1 in the fair value hierarchy. Non-binding broker quotes and internally developed evaluations for equity securities are generally based on significant unobservable inputs and are reflected as Level 3 in the fair value hierarchy.

Credit Valuation Adjustment - The Company uses a structural default risk model to estimate a CVA. The input assumptions are a combination of externally derived and published values (default threshold and uncertainty), market inputs (interest rate, RGA equity price per share, RGA debt per share, RGA equity price volatility) and insurance industry data (loss given default), adjusted for market recoverability.

Cash Equivalents and Short-Term Investments - Cash equivalents and short-term investments include money market instruments and other highly liquid debt instruments. Money market instruments are generally valued using unadjusted quoted prices in active markets that are accessible for identical assets and are primarily classified as Level 1. The fair value of certain other cash equivalents and short-term investments, such as bonds with original maturities twelve months or less, are based upon other market observable data and are typically classified as Level 2. However, certain short-term investments may incorporate significant unobservable inputs resulting in a Level 3 classification. Various time deposits, certificates of deposit and sweeps carried as cash equivalents or short-term investments are not measured at estimated fair value and therefore are excluded from the tables presented.

FVO Contractholder-Directed Unit-Linked Investments - FVO contractholder-directed investments supporting unit-linked variable annuity type liabilities primarily consist of exchange-traded funds and, to a lesser extent, fixed maturity securities and cash and cash equivalents. The fair values of the exchange-traded securities are primarily based on quoted market prices in active markets and are classified within Level 1 of the hierarchy. The fair value of the fixed maturity contractholder-directed securities is determined on a basis consistent with the methodologies described above for fixed maturity securities and are classified within Level 2 of the hierarchy.

Derivative Assets and Derivative Liabilities - All of the derivative instruments utilized by the Company, except for longevity swaps, are classified within Level 2 on the fair value hierarchy. These derivatives are principally valued using an income approach. Valuations of interest rate contracts are based on present value techniques, which utilize significant inputs that may include the swap yield curve, LIBOR basis curves, and repurchase rates. Valuations of foreign currency contracts are based on present value techniques, which utilize significant inputs that may include the swap yield curve, LIBOR basis curves, currency spot rates, and cross currency basis curves. Valuations of credit contracts are based on present value techniques, which utilize significant inputs that may include the swap yield curve, credit curves, and recovery rates. Valuations of equity market contracts are based on present value techniques, which utilize significant inputs that may include the swap yield curve, spot equity index levels, and dividend yield curves. Valuations of equity market contracts, option-based, are based on option pricing models, which utilize significant inputs that may include the swap yield curve, spot equity index levels, dividend yield curves, and equity volatility.

Longevity Swaps - The Company utilizes a discounted cash flow model to estimate the fair value of longevity swaps. The fair value of these swaps includes an accrual for premiums payable and receivable. Some inputs to the valuation model are generally observable, such as interest rates and actual population mortality experience. The valuation also requires significant inputs that are generally not observable and, accordingly, the valuation is considered Level 3 in the fair value hierarchy. There were no longevity swaps held by the Company as of December 31, 2020 and 2019.

Quantitative Information Regarding Internally-Priced Assets and Liabilities

The following table presents quantitative information about significant unobservable inputs used in Level 3 fair value measurements that are developed internally by the Company as of December 31, 2020 and 2019 (dollars in thousands):

[Table of Contents](#)

Assets:	Estimated Fair Value		Valuation Technique	Unobservable Input	Range (Weighted Average)	
	2020	2019			2020	2019
Corporate	\$ 2,161	\$ 150,739	Market comparable securities	Liquidity premium	—	0-1% (1%)
				EBITDA multiple	5.2x-6.7x (5.5x)	5.2x-7.1x (6.4x)
Other foreign government	—	5,390	Market comparable securities	Liquidity premium	—	1 %
Equity securities	—	4,086	Market comparable securities	Liquidity premium	—	4 %
Funds withheld at interest - embedded derivatives	1,177,720	671,071	Total return swap	Mortality	0-100% (3%)	0-100% (2%)
				Lapse	0-35% (13%)	0-35% (13%)
				Withdrawal	0-5% (3%)	0-5% (3%)
				CVA	0-5% (1%)	0-5% (1%)
				Crediting rate	2-4% (2%)	2-4% (2%)
Liabilities:						
Interest-sensitive contract liabilities - embedded derivatives - variable annuities	\$ 154,827	\$ 162,912	Discounted cash flow	Mortality	0-100% (2%)	0-100% (1%)
				Lapse	0-25% (4%)	0-25% (5%)
				Withdrawal	0-7% (5%)	0-7% (5%)
				CVA	0-5% (1%)	0-5% (1%)
				Long-term volatility	0-27% (13%)	0-27% (12%)

Changes in Level 3 Assets and Liabilities

Assets and liabilities transferred into Level 3 are due to a lack of observable market transactions and price information. Transfers out of Level 3 are primarily the result of the Company obtaining observable pricing information or a third party pricing quotation that appropriately reflects the fair value of those assets and liabilities.

The reconciliations for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) are as follows (dollars in thousands):

	Fixed maturity securities - available-for-sale					Funds withheld at interest-embedded derivatives & other	Interest-sensitive contract liabilities embedded derivatives
	Corporate	Foreign govt	Structured securities	Equity securities	Short-term investments		
For the year ended December 31, 2020:							
Fair value, beginning of period	\$ 357,920	\$ 709,458	\$ 50,541	\$ 4,086	\$ —	\$ 671,071	\$ (162,912)
Total gains/losses (realized/unrealized)							
Included in earnings, net:							
Investment income, net of related expenses	198	—	(3)	—	—	(3,834)	—
Investment related gains, net	(1,117)	—	(46)	90	—	—	8,085
Change in value of funds withheld embedded derivatives	—	—	—	—	—	503,196	—
Included in other comprehensive income	12,242	366	1,703	—	—	3,239	—
Other revenues	—	—	—	—	—	—	—
Purchases ⁽¹⁾	397,235	—	48,656	—	4,146	60,192	—
Sales ⁽¹⁾	(11,026)	—	—	—	—	(179)	—
Settlements ⁽¹⁾	(36,213)	—	(3,812)	—	(11)	—	—
Transfers into Level 3	3,996	—	559	—	—	—	—
Transfers out of Level 3	—	(704,068)	(5,707)	—	—	—	—
Fair value, end of period	\$ 723,235	\$ 5,756	\$ 91,891	\$ 4,176	\$ 4,135	\$ 1,233,685	\$ (154,827)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period							
Included in earnings, net:							
Investment income, net of related expenses	\$ 41	\$ —	\$ (3)	\$ —	\$ —	\$ (3,840)	\$ —
Investment related gains, net	(1,279)	—	(46)	90	—	—	8,085
Change in value of funds withheld embedded derivatives	—	—	—	—	—	503,196	—
Included in other comprehensive income	10,110	366	1,703	—	—	3,239	—

For the year ended December 31, 2019:

	Fixed maturity securities - available-for-sale				Funds withheld at interest- embedded derivatives	Other assets - longevity swaps	Interest- sensitive contract liabilities embedded derivatives
	Corporate	Foreign govt	Structured securities	Equity securities			
Fair value, beginning of period	\$ 165,988	\$528,124	\$ 987	\$ 3,701	\$ (185,211)	\$ 9,449	\$ (167,925)
Total gains/losses (realized/unrealized)							
Included in earnings, net:							
Investment income, net of related expenses	(42)	14,548	(44)	—	—	—	—
Investment related gains, net	14	—	—	385	—	—	5,013
Change in value of funds withheld embedded derivatives	—	—	—	—	826,857	—	—
Included in other comprehensive income	7,265	161,786	2,323	—	29,425	(239)	—
Other revenues	—	—	—	—	—	6,032	—
Purchases ⁽¹⁾	192,887	5,000	49,730	—	—	—	—
Sales ⁽¹⁾	(4,571)	—	—	—	—	—	—
Settlements ⁽¹⁾	(3,621)	—	(2,455)	—	—	(15,242)	—
Fair value, end of period	\$ 357,920	\$709,458	\$ 50,541	\$ 4,086	\$ 671,071	\$ —	\$ (162,912)
Total gains/losses (realized/unrealized) recorded for the period relating to those Level 3 assets and liabilities that were still held at the end of the period							
Included in earnings, net:							
Investment income, net of related expenses	\$ (47)	\$ 14,548	\$ (44)	\$ —	\$ —	\$ —	\$ —
Investment related gains, net	—	—	—	385	—	—	5,013
Change in value of funds withheld embedded derivatives	—	—	—	—	826,857	—	—

(1) The amount reported within purchases, sales and settlements is the purchase price (for purchases) and the sales/settlement proceeds (for sales and settlements) based upon the actual date purchased or sold/settled. Items purchased and sold/settled in the same period are excluded from the rollforward. The Company had no issuances during the period.

Nonrecurring Fair Value Measurements

The Company did not have any assets measured at estimated fair value on a nonrecurring basis at December 31, 2020 or 2019.

Fair Value of Financial Instruments

The following table presents the carrying amounts and estimated fair values of the Company's financial instruments, which were not measured at fair value on a recurring basis, as of December 31, 2020 and 2019 (dollars in thousands). This table excludes any payables or receivables for collateral under repurchase agreements and other transactions. The estimated fair value of the excluded amount approximates carrying value as they equal the amount of cash collateral received/paid.

[Table of Contents](#)

December 31, 2020:	Carrying Value ⁽¹⁾	Estimated Fair Value	Fair Value Measurement Using:			
			Level 1	Level 2	Level 3	NAV
Assets:						
Policy loans	\$ 12,219	\$ 12,219	\$ —	\$ 12,219	\$ —	\$ —
Funds withheld at interest	11,257,749	11,257,749	—	—	11,257,749	—
Cash and cash equivalents	1,174,342	1,174,342	1,174,342	—	—	—
Short-term investments	1,837	1,837	1,837	—	—	—
Other invested assets	1,255,791	1,321,985	5,281	—	1,304,530	12,174
Accrued investment income	203,809	203,809	—	203,809	—	—
Liabilities:						
Interest-sensitive contract liabilities	\$ 8,599,472	\$ 9,848,844	\$ —	\$ —	\$ 9,848,844	\$ —
December 31, 2019:						
Assets:						
Policy loans	\$ 12,868	\$ 12,868	\$ —	\$ 12,868	\$ —	\$ —
Funds withheld at interest	11,506,642	11,506,642	—	—	11,506,642	—
Cash and cash equivalents	546,974	546,974	546,974	—	—	—
Short-term investments	9,428	9,428	9,428	—	—	—
Other invested assets	1,030,364	1,035,331	4,704	—	1,019,349	11,278
Accrued investment income	183,018	183,018	—	183,018	—	—
Liabilities:						
Interest-sensitive contract liabilities	\$ 8,214,009	\$ 8,869,864	\$ —	\$ —	\$ 8,869,864	\$ —

(1) Carrying values presented herein may differ from those in the Company's consolidated balance sheets because certain items within the respective financial statement captions may be measured at fair value on a recurring basis.

Policy Loans - Policy loans typically carry an interest rate that is adjusted annually based on an observable market index and therefore carrying value approximates fair value. The valuation of policy loans is considered Level 2 in the fair value hierarchy.

Funds Withheld at Interest - The carrying value of funds withheld at interest approximates fair value. Ceding companies use a variety of sources and pricing methodologies, which are not transparent to the Company and may include significant unobservable inputs, to value the securities that are held in distinct portfolios, therefore the valuation of these funds withheld assets are considered Level 3 in the fair value hierarchy.

Cash and Cash Equivalents and Short-term Investments - The carrying values of cash and cash equivalents and short-term investments approximate fair values due to the short-term maturities of these instruments and are considered Level 1 in the fair value hierarchy.

Other Invested Assets - This primarily includes limited partnership interests accounted for using the cost method, cash collateral, lifetime mortgages, and mortgage loans on real estate. The fair value of limited partnership interests and other investments accounted for using the cost method is determined using the NAV of the Company's ownership interest as provided in the financial statements of the investees. The fair value of the Company's purchase agreement is considered to be the carrying value and considered to be Level 3 in the fair value hierarchy. The fair value of the Company's cash collateral is considered to be the carrying value and considered to be Level 1 in the fair value hierarchy. The fair value of the Company's lifetime mortgage loan portfolio, considered Level 3 in the fair value hierarchy, is estimated by discounting cash flows, both principal and interest, using a risk-free rate plus an illiquidity premium. The cash flow analysis considers future expenses, changes in property prices, and actuarial analysis of borrower behavior, mortality and morbidity. The fair value of mortgage loans on real estate is estimated by discounting cash flows, both principal and interest, using current interest rates for mortgage loans with similar credit ratings and similar remaining maturities. As such, inputs include current treasury yields and spreads, which are based on the credit rating and average life of the loan, corresponding to the market spreads. The valuation of mortgage loans on real estate is considered Level 3 in the fair value hierarchy.

Accrued Investment Income - The carrying value for accrued investment income approximates fair value as there are no adjustments made to the carrying value. This is considered Level 2 in the fair value hierarchy.

Interest-Sensitive Contract Liabilities - The carrying and fair values of interest-sensitive contract liabilities reflected in the table above exclude contracts with significant mortality risk. The fair value of the Company's interest-sensitive contract liabilities utilizes a market standard technique with both capital market inputs and policyholder behavior assumptions, as well as cash values adjusted for recapture fees. The capital market inputs to the model, such as interest rates, are generally observable. Policyholder behavior assumptions are generally not observable and may require use of significant management judgment. The valuation of interest-sensitive contract liabilities is considered Level 3 in the fair value hierarchy.

Note 6 REINSURANCE

In the normal course of business, the Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding reinsurance to other insurance or reinsurance companies under excess coverage and coinsurance contracts.

Retrocession reinsurance treaties do not relieve the Company from its obligations to direct writing companies. Failure of retrocessionaires to honor their obligations could result in losses to the Company. The Company regularly evaluates the financial condition of the insurance and reinsurance companies from which it assumes and to which it cedes reinsurance. Consequently, allowances would be established for amounts deemed uncollectible. At December 31, 2020 and 2019, no allowances were deemed necessary.

Retrocessions are arranged through the Company's retrocession pools for amounts in excess of the Company's retention limit. As of December 31, 2020, all rated retrocession pool participants followed by the A.M. Best Company were rated "A-(excellent)" or better.

Included in the total reinsurance ceded receivables balances were \$400.1 million and \$283.2 million of claims recoverable, of which \$224.7 million and \$178.0 million were with affiliates, as of December 31, 2020 and 2019, respectively.

The effect of reinsurance on net premiums is as follows for the years ended December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Reinsurance assumed:		
Affiliated	\$ 1,079,661	\$ 994,067
Non-affiliated	4,195,053	3,612,735
Total reinsurance assumed	<u>5,274,714</u>	<u>4,606,802</u>
Direct insurance issued:		
Non-affiliated	31,778	44,893
Total direct insurance issued	<u>31,778</u>	<u>44,893</u>
Reinsurance retroceded:		
Affiliated	(729,696)	(731,810)
Non-affiliated	(483,964)	(461,076)
Total reinsurance retroceded	<u>(1,213,660)</u>	<u>(1,192,886)</u>
Net premiums	<u>\$ 4,092,832</u>	<u>\$ 3,458,809</u>

The effect of reinsurance on claims and other policy benefits is as follows for the years ended December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Reinsurance assumed:		
Affiliated	\$ 950,914	\$ 1,005,646
Non-affiliated	3,728,656	3,192,513
Total reinsurance assumed	<u>4,679,570</u>	<u>4,198,159</u>
Direct insurance issued:		
Non-affiliated	27,831	28,402
Total direct insurance issued	<u>27,831</u>	<u>28,402</u>
Reinsurance retroceded:		
Affiliated	(530,778)	(597,026)
Non-affiliated	(427,982)	(398,923)
Total reinsurance retroceded	<u>(958,760)</u>	<u>(995,949)</u>
Claims and other policy benefits	<u>\$ 3,748,641</u>	<u>\$ 3,230,612</u>

The effect of reinsurance on life insurance in force is shown in the following schedule as of December 31, 2020 and 2019 (dollars in millions):

	2020	2019
Life insurance in force assumed:		
Affiliated	\$ 326,073	\$ 237,324
Non-affiliated	1,538,920	1,526,418
Total life insurance in force assumed	<u>1,864,993</u>	<u>1,763,742</u>
Direct life insurance in force:		
Non-affiliated	12,238	24,595
Total direct life insurance in force	<u>12,238</u>	<u>24,595</u>
Life insurance in force retroceded:		
Affiliated	(313,995)	(266,871)
Non-affiliated	(37,946)	(35,782)
Total life insurance in force retroceded	<u>(351,941)</u>	<u>(302,653)</u>
Life insurance in force net:		
Affiliated	12,078	(29,547)
Non-affiliated	1,513,212	1,515,231
Total life insurance in force net	<u>\$ 1,525,290</u>	<u>\$ 1,485,684</u>
Assumed/net percentage	122.27%	118.72 %

At December 31, 2020 and 2019, respectively, the Company provided approximately \$2,263.4 million and \$1,673.3 million of financial reinsurance, as measured by pre-tax statutory surplus, risk based capital and other financial reinsurance structures, to other insurance companies under financial reinsurance or capital solutions transactions to assist ceding companies in meeting applicable regulatory requirements. Generally, such financial reinsurance is provided by the Company committing cash or assuming insurance liabilities, which are collateralized by future profits on the reinsured business. The Company earns a fee based on the amount of net outstanding financial reinsurance.

Reinsurance treaties, whether facultative or automatic, may provide for recapture rights on the part of the ceding company. Recapture rights permit the ceding company to reassume all or a portion of the risk formerly ceded to the reinsurer after an agreed-upon period of time, generally 10 years, or in some cases due to changes in the financial condition or ratings of the reinsurer. Recapture of business previously ceded does not affect premiums ceded prior to the recapture of such business but would reduce premiums in subsequent periods. Additionally, some reinsurance treaties give the ceding company the right to require the Company to place assets in trust for their benefit to support the ceding company's statutory reserve credits, in the event of a downgrade of the Company's credit ratings and or other statutory measure to specified levels, generally non-investment grade levels, or if minimum levels of financial condition are not maintained. As of December 31, 2020, the Company was not required to post additional collateral and did not have a reinsurance treaty recaptured as a result of credit downgrade or defined statutory measure decline.

Note 7 DEFERRED POLICY ACQUISITION COSTS

The following reflects the amounts of policy acquisition costs deferred and amortized as of December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Balance, beginning of year	\$ 1,810,657	\$ 1,299,786
Capitalization	217,796	609,353
Amortization (including interest)	(204,431)	(116,849)
Foreign currency translation	20,229	18,367
Balance, end of year	<u>\$ 1,844,251</u>	<u>\$ 1,810,657</u>

Some reinsurance agreements involve reimbursing the ceding company for allowances and commissions in excess of first-year premiums. These amounts represent acquisition costs and are capitalized to the extent deemed recoverable from the future premiums and amortized against future profits of the business. This type of agreement presents a risk to the extent that the business lapses faster than originally anticipated, resulting in future profits being insufficient to recover the Company's investment.

Note 8 INCOME TAX

The U.S. consolidated tax return includes the operations of RGA and all eligible subsidiaries. The Company's foreign subsidiaries are taxed under applicable local statutes.

Under current Bermuda law, the Company is not required to pay taxes in Bermuda on either income or capital gains. The Company has received an undertaking from the Minister of Finance in Bermuda that in the event of income or capital gains taxes being imposed, the Company will be exempted from such taxes until March 31, 2035. RGA Americas has made the

Internal Revenue Code Section 953(d) election to be taxed as a United States domestic corporation for purposes of United States corporate tax.

RGA Atlantic is domiciled in Barbados. As of December 31, 2020, RGA Atlantic was licensed to conduct business as an Exempt Insurance Company. RGA Atlantic was subject to taxation in accordance with section 29 under the provisions of the Exempt Insurance Act of Barbados and is liable to tax at zero percent for 2020. During 2018 Barbados amended legislation to comply with the Organisation for Economic Cooperating and Development Base Erosion Profit Shifting Action 5 so as to not be considered a jurisdiction with harmful tax practices. The amendment included the abolishment of the Exempt Insurance Company status but allowed for a grandfathering of the status until June 2021 if current exempt insurance companies submitted a notification of grandfathering by December 31, 2018. RGA Atlantic submitted the notification to the Financial Services Commission in order to continue to be treated as an Exempt Insurance Company through June 2021. The Company has not booked any provision for income taxes related to the legislation. RGA Atlantic received a Class 1 license and will be taxed at 0% under the Insurance (Amendment) Act of Barbados.

RGA Atlantic, RGA Canada, RGA South Africa, RGA International, Leidsche, RGA Australia, and OmniLife are Controlled Foreign Corporations ("CFC") for U.S. federal income tax purposes and file Form 5471 - Information Return of U.S. Persons With Respect to Certain Foreign Corporations. These CFCs are not subject to U.S. income taxes directly but are subject to tax as a CFC under subchapter N, Subpart F of the U.S. Internal Revenue Code. Further RGA Canada, RGA South Africa, RGA International, Leidsche, RGA Australia, and OmniLife are subject to Global Intangible Low-Taxed Income ("GILTI") in the U.S. Any U.S. tax liability generated under Subpart F or GILTI would be borne by its parent company, RGA Americas, and therefore could be considered a current or deferred tax liability of RGA Americas.

The provision for income tax expense for the years ended December 31, 2020 and 2019 consists of the following (dollars in thousands):

	2020	2019
Current income tax expense (benefit)	\$ 175,267	\$ 12,061
Deferred income tax expense (benefit)	89,549	304,662
Total provision for income taxes	<u>\$ 264,816</u>	<u>\$ 316,723</u>

The Company's effective tax rate differed from the U.S. federal income tax statutory rate of 21% as a result of the following for the years ended December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Tax provision at U.S. statutory rate	\$ 239,197	\$ 286,745
Increase (decrease) in income taxes resulting from:		
Valuation allowance	21,109	45,733
Differences in tax basis in foreign jurisdictions	(32,053)	(22,987)
Subpart F for non-full inclusion companies	468	1,029
Foreign tax credits	(1,398)	(510)
GILTI, net of credits	12,908	—
Tax rate differences on income in other jurisdictions	12,686	4,378
Equity based compensation	—	704
Return to provision adjustments	(2,686)	(2,175)
Amounts related to uncertain tax positions	3,298	5,227
Corporate rate changes	13,882	431
Other, net	(2,595)	(1,852)
Total provision for income taxes	<u>\$ 264,816</u>	<u>\$ 316,723</u>
Effective tax rate	<u>23.3 %</u>	<u>23.2 %</u>

The effective tax rate for 2020 was higher than 21% primarily as a result of income earned in jurisdictions with tax rates higher than the U.S., GILTI tax primarily due to RGA Canada's income, and a change in the corporate tax rate in the United Kingdom. These increases were partially offset by foreign bases differences in Australia. The effective tax rate for 2019 was higher than 21% primarily as a result of valuation allowance increases in various jurisdictions and tax expense related to uncertain tax positions which were partially offset by foreign basis differences.

Total income taxes for the years ended December 31, 2020 and 2019 were as follows (dollars in thousands):

	2020	2019
Provision for income taxes	\$ 264,816	\$ 316,723
Income tax from OCI:		
Foreign currency translation	(7,305)	1,660
Net unrealized holding gains on debt and equity securities recognized for financial reporting purposes	292,423	285,083
Unrealized pension and post retirement	(614)	(509)
Total income tax provided	<u>\$ 549,320</u>	<u>\$ 602,957</u>

The tax effects of temporary differences that give rise to significant portions of the deferred income tax assets and liabilities at December 31, 2020 and 2019 are presented in the following tables (dollars in thousands):

	2020	2019
Deferred income tax assets:		
Nondeductible accruals	\$ 8,775	\$ 7,137
Net operating loss carryforwards	220,839	297,759
Tax credit carryforwards	34,023	29,045
Other	—	578
Subtotal	263,637	334,519
Valuation allowance	(212,694)	(176,684)
Total deferred income tax assets	<u>50,943</u>	<u>157,835</u>
Deferred income tax liabilities:		
Deferred acquisition costs	275,362	121,502
Policy reserves and other reinsurance liabilities	1,103,801	1,101,556
Invested assets	278,196	177,659
Outside basis difference foreign subsidiaries	296,183	263,268
Foreign currency translation	24,974	32,894
Other	651	—
Total deferred income tax liabilities	1,979,167	1,696,879
Net deferred income tax liabilities	<u>\$ 1,928,224</u>	<u>\$ 1,539,044</u>
Balance sheet presentation of net deferred income tax liabilities:		
Included in other assets	\$ 17,544	\$ 17,408
Included in deferred income taxes	1,945,768	1,556,452
Net deferred income tax liabilities	<u>\$ 1,928,224</u>	<u>\$ 1,539,044</u>

As of December 31, 2020, the valuation allowance against deferred tax assets was approximately \$212.7 million. During 2020, there was a \$20.0 million increase to the valuation allowance related to the tax losses of RGA Australia. RGA Australia's tax loss primarily relates to income on internal retrocession that is not taxable in RGA Australia. The RGA Australia deferred tax asset has been reduced to the amount more likely than not to be realized considering the projected future earnings.

As of December 31, 2019, the valuation allowance against deferred tax assets was approximately \$176.7 million. During 2019, there was a \$44.5 million increase to the valuation allowance related to the tax losses of RGA Australia. RGA Australia's tax loss primarily relates to income on internal retrocession that is not taxable in RGA Australia. The RGA Australia deferred tax asset has been reduced to the amount more likely than not to be realized considering the projected future earnings. This increase was partially offset by a release of a valuation allowance in New Zealand due to taxable income in recent years.

The following table presents consolidated net operating losses ("NOL") as of December 31, 2020 (dollars in thousands):

	2020
NOL with no expiration and with no valuation allowance	\$ 71,304
NOL with a full valuation allowance	49,158
NOL with no expiration and a partial valuation allowance	645,920
Total NOL carryforwards	<u>\$ 766,382</u>

These NOLs, other than the NOLs for which there is a valuation allowance, are expected to be utilized in the normal course of business during the period allowed for carryforwards and in any event, are not expected to be lost, due to the application of tax planning strategies that management would utilize.

As of December 31, 2020, the Company had foreign tax credit carryforwards of \$32 million associated with RGA International for which there is a full valuation allowance.

The earnings of substantially all of the Company's foreign subsidiaries have been permanently reinvested in foreign operations. The Company has provided for future tax on the full inclusion companies where the Company cannot assert permanent reinvestment. At December 31, 2020 and 2019, the financial reporting basis in excess of the tax basis for which no deferred taxes have been recognized was approximately \$1,933.5 million and \$1,555.2 million, respectively. As U.S. Tax Reform generally eliminates U.S. federal income taxes on dividends from foreign subsidiaries, the Company does not expect to incur material income taxes if these funds were repatriated.

During 2020 and 2019, the Company made federal and foreign tax payments of approximately \$40.8 million and \$14.0 million, respectively. During 2020 and 2019, the Company received federal and foreign tax refunds of approximately \$6.7 million and \$27.4 million, respectively.

The Company files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. The Company is under continuous examination by the Internal Revenue Service and is subject to audit by taxing authorities in other foreign jurisdictions in which the Company has significant business operations. The income tax years under examination vary by jurisdiction. The Company is no longer subject to U.S. federal income tax examinations by the Internal Revenue Service for years prior to 2017, Canadian tax authorities for years prior to 2016 and with a few exceptions, the Company is no longer subject to state and foreign income tax examinations by tax authorities for years prior to 2015.

As of December 31, 2020, the Company's total amount of unrecognized tax benefits is \$10.4 million and the total amount of unrecognized tax benefits that are permanent in nature that would affect the effective tax rate, if recognized, is \$10.4 million. Management believes there will be no material impact to the Company's effective tax rate related to unrecognized tax benefits over the next 12 months.

A reconciliation of the beginning and ending amount of unrecognized tax benefits for the years ended December 31, 2020 and 2019 is as follows (dollars in thousands):

	Total Unrecognized Tax Benefits	
	2020	2019
Beginning balance, January 1	\$ 6,389	\$ 1,261
Additions for tax positions of prior years	684	2,344
Additions for tax positions of current year	3,299	2,964
Payments on deposit	—	(180)
Ending balance, December 31	<u>\$ 10,372</u>	<u>\$ 6,389</u>

The Company recognized interest expense associated with uncertain tax positions in 2020 and 2019 of \$0.3 million and \$0.3 million, respectively. As of December 31, 2020 and 2019, the Company had \$1.2 million and \$0.9 million, respectively, of accrued interest related to unrecognized tax benefits. There are no penalties accrued as of December 31, 2020 or December 31, 2019.

Note 9 EMPLOYEE BENEFIT PLANS

RGA Canada sponsors an unfunded non-contributory defined benefit pension plan ("Pension Plan") for certain eligible employees. The benefits under the Pension Plan, which is a non-qualified plan, are generally based on years of service and compensation levels. For non-qualified plans, there are no required funding levels. Effective January 1, 2020, the Pension Plan was closed to new employees.

A December 31 measurement date is used for the Pension Plan. The status of the Pension Plan as of December 31, 2020 and 2019 is summarized below (dollars in thousands):

	Pension Benefits	
	2020	2019
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 15,189	\$ 12,154
Service cost	822	841
Interest cost	477	497
Actuarial losses	2,655	2,058
Benefits paid	(333)	(1,018)
Foreign exchange translations and other adjustments	493	657
Benefit obligation at end of year	<u>\$ 19,303</u>	<u>\$ 15,189</u>
	Pension Benefits	
	2020	2019
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ —	\$ —
Employer contributions	333	1,018
Benefits paid and expenses	(333)	(1,018)
Fair value of plan assets at end of year	<u>\$ —</u>	<u>\$ —</u>
Funded status at end of year	<u>\$ (19,303)</u>	<u>\$ (15,189)</u>
	2020	2019
Aggregate fair value of plan assets	\$ —	\$ —
Aggregate projected benefit obligations	19,303	15,189
Under funded	<u>\$ (19,303)</u>	<u>\$ (15,189)</u>
	Pension Benefits	
	2020	2019
Amounts recognized in AOCI:		
Net actuarial loss	\$ 7,494	\$ 5,185
Net prior service cost	—	—
Total	<u>\$ 7,494</u>	<u>\$ 5,185</u>

The following table presents information for the Pension Plan with a projected benefit obligation in excess of plan assets as of December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Projected benefit obligation	\$ 19,303	\$ 15,189
Fair value of plan assets	—	—

The following table presents information for the Pension Plan with an accumulated benefit obligation in excess of plan assets as of December 31, 2020 and 2019 (dollars in thousands):

	2020	2019
Accumulated benefit obligation	\$ 16,383	\$ 12,911
Fair value of plan assets	—	—

The components of net periodic benefit cost, included in other operating expenses on the consolidated statements of income, and other changes in plan assets and benefit obligations recognized in OCI were as follows (dollars in thousands):

	Pension Benefits	
	2020	2019
Net periodic benefit cost:		
Service cost	\$ 822	\$ 841
Interest cost	477	497
Amortization of net actuarial losses	559	335
Net periodic benefit cost	1,858	1,673
Other changes in plan assets and benefit obligations recognized in OCI:		
Net actuarial losses	2,655	2,058
Amortization of net actuarial losses	(559)	(335)
Foreign exchange translations and other adjustments	213	199
Total recognized in OCI	2,309	1,922
Total recognized in net periodic benefit cost and OCI	\$ 4,167	\$ 3,595

During 2021, RGA Canada expects to contribute \$0.3 million to the Pension Plan.

The following benefit payments, which reflect expected future service as appropriate, are expected to be paid (dollars in thousands):

	Pension Benefits
2021	\$ 256
2022	508
2023	478
2024	384
2025	540
2026-2030	10,288

Assumptions

Weighted average assumptions used to determine the accumulated benefit obligation and net benefit cost or income for the years ended December 31, 2020 and 2019 were as follows:

	Pension Benefits	
	2020	2019
Discount rate used to determine benefit obligation	2.20 %	3.10 %
Discount rate used to determine net benefit cost or income	3.10 %	3.80 %
Rate of compensation increases	3.75 %	3.75 %

Savings and Investment Plans

Certain subsidiaries of RGA Americas also sponsor savings and investment plans under which a portion of employee contributions are matched. Subsidiary contributions to these plans were \$3.6 million and \$3.2 million in 2020 and 2019, respectively.

Note 10 FINANCIAL CONDITION AND NET INCOME ON A STATUTORY BASIS

The foreign insurance subsidiaries of RGA Americas prepare their statutory financial statements in conformity with statutory accounting practices prescribed or permitted by the local regulatory authority, which vary materially from statements prepared in accordance with GAAP. The differences between statutory financial statements and financial statements prepared in accordance with GAAP vary between jurisdictions.

Statutory net income and capital and surplus of the Company's insurance subsidiaries, determined in accordance with statutory accounting practices prescribed by the local regulatory authority are as follows (dollars in thousands):

	Statutory Capital & Surplus		Statutory Net Income (Loss)	
	2020	2019	2020	2019
RGA Atlantic	\$ 1,441,213	\$ 1,511,267	\$ 175,176	\$ 242,592
RGA Canada	886,043	713,063	152,433	(225,243)
RGA South Africa	81,792	97,540	(11,168)	11,416
RGA International	1,459,812	1,087,000	52,467	37,000
Leidsche	45,620	42,383	(2,801)	(4,140)
RGA Australia	534,698	447,248	41,835	15,096
OmniLife	118,687	17,650	(84,930)	(6,003)

The Company's foreign insurance subsidiaries prepare financial statements in accordance with local regulatory requirements. The regulatory authorities in these foreign jurisdictions establish some form of minimum regulatory capital and surplus requirements. All of the Company's foreign insurance subsidiaries have regulatory capital and surplus that exceed the local minimum requirements. These requirements do not represent a significant constraint for the payment of dividends by the Company's foreign insurance companies.

Note 11 SHAREHOLDER'S EQUITY

The Company is authorized to issue an unlimited number of \$1.00 par value common shares. The Company had issued 75.5 million common shares with a stated value of \$75.5 million as of December 31, 2020 and 2019.

The Company is registered under the Bermuda Insurance Act 1978 (the "Act") and amendments thereto and related regulations, which require that the Company maintain a minimum solvency margin. The minimum solvency margin required at December 31, 2020 and 2019 is the greater of \$8.0 million or 2% of the first \$500 million of statutory assets of the Company plus 1.5% of statutory assets of the Company above \$500 million. The Company is required to calculate an enhanced capital requirement ("ECR") and target capital level ("TCL") as prescribed by or under rules made under Section 6A of the Act, which are additional capital and surplus requirements to the minimum solvency margin. The Company's ECR is the higher of the Bermuda Solvency Capital Requirement ("BSCR") model and the minimum margin of solvency. The TCL is calculated as 120% of the ECR. As of December 31, 2020 and 2019, the Company has met the requirements. As of December 31, 2020 and 2019, statutory capital and surplus of the Company was \$8,220.6 million and \$6,283.3 million, respectively.

The Bermuda Monetary Authority considers prepaid and fixed assets non-admitted assets. As non-admitted assets, such balances were reflected as a reduction of statutory surplus, and reinsurance assets and liabilities were presented net of reinsurance.

The Company did not pay any dividends in 2020. In 2019, the Company paid a \$100 million dividend to RGA.

Note 12 RELATED-PARTY TRANSACTIONS

The Company transacts business with affiliated companies on a regular basis. These transactions primarily consist of reinsurance agreements, notes with affiliates, securities lending agreements, administrative service agreements, investment management agreements, and the Company may purchase or sell securities with affiliated companies. The table below contains material related-party reinsurance transactions, other than those previously disclosed, as of December 31, 2020 and 2019 (in thousands):

	2020	2019
Future policy benefits	\$ 6,583,018	\$ 6,727,310
Interest-sensitive contract liabilities	7,485,743	7,657,063

The Company issued a note payable to RGA Capital LLC on June 22, 2016 for AUD\$60 million, with a maturity date of June 30, 2021. The note was repaid in full in 2020.

RGA established an intercompany revolving credit facility where certain subsidiaries, including the Company, can lend to or borrow from each other and from RGA in order to manage capital and liquidity more efficiently. The intercompany revolving credit facility, which is a series of demand loans among RGA and its affiliates, is permitted under applicable insurance laws. This facility reduces overall borrowing costs by allowing RGA and its affiliates to access internal cash resources instead of incurring third-party transaction costs. The lendings and borrowings under the intercompany revolving credit facility included the following notes:

The Company issued a note payable to RGA International Division Sydney Office Pty Limited with a maturity date of September 16, 2025. The outstanding note balance at December 31, 2020 is \$3.8 million.

The Company purchased a note payable from RGA on December 30, 2019 for \$75 million, with a maturity date of January 6, 2020. The note was repaid in full in 2020.

The Company issued a note payable to RGA Global Reinsurance Company, Ltd. on December 19, 2019 for CAD\$50 million. The note was repaid in full in 2020.

See [Note 3 - "Investments"](#) for information on security purchases and sales with affiliated companies.

During 2020, RGA established an intercompany derivative cash collateral pool where RGA and certain subsidiaries, including the Company, pool derivative cash collateral into a single concentration account held by an affiliated company. This derivative cash collateral pool allows the Company to lend or borrow cash from the concentration account in order to more efficiently meet its collateral obligations under its respective derivative transactions. The Company is paid or charged an arm's length interest rate based on its net loan balance with the concentration account. As of December 31, 2020, the Company had an amount due from affiliates of \$19.3 million under the concentration agreement.

The Company regularly transacts business with affiliates under various service agreements and investment management agreements. For the year ended December 31, 2020, the Company had \$21.2 million payable to affiliates associated with these agreements.

The Company also participates in securities lending transactions with affiliates. For the year ended December 31, 2020, the amounts due to affiliates under these agreements was \$95.5 million.

Note 13 COMMITMENTS, CONTINGENCIES AND GUARANTEES

Commitments

Funding of Investments

The Company's commitments to fund investments as of December 31, 2020 and 2019 are presented in the following table (dollars in thousands):

	2020	2019
Limited partnership interests and joint ventures	\$ 158,945	\$ 151,776
Mortgage loans on real estate	53,901	12,784
Bank loans and private placements	34,994	40,402
Lifetime mortgages	42,874	86,909

The Company anticipates that the majority of its current commitments will be invested over the next three years; however, these commitments could become due any time at the request of the counterparties. Bank loans and private placements are included in fixed maturity securities available-for-sale.

The Company has a liability for expected credit losses associated with unfunded commitments of approximately \$0.3 million as of December 31, 2020, which is included in other liabilities on the Company's consolidated balance sheets.

Letters of Credit

In the ordinary course of business, the Company provides letters of credit as security to cover liabilities relating to reinsurance agreements. The total amount of letters of credit outstanding at December 31, 2020 and 2019, was \$24.9 million and \$69.4 million, respectively, of which \$20.0 million and \$23.0 million, respectively, was for the benefit of a related party. RGA is the guarantor to these letters of credit as of December 31, 2020 and 2019.

Contingencies

Litigation

The Company is subject to litigation in the normal course of its business; however, the Company currently has no material litigation. A legal reserve is established when the Company is notified of an arbitration demand or litigation or is notified that an arbitration demand or litigation is imminent, it is probable that the Company will incur a loss as a result and the amount of the probable loss is reasonably capable of being estimated.

Guarantees

Other Guarantees

The Company has issued guarantees to third parties on behalf of its subsidiaries for the payment of amounts due under certain reinsurance treaties, securities borrowing and repurchase arrangements, financing arrangements and office lease obligations, whereby if a subsidiary fails to meet an obligation, the Company or one of its other subsidiaries will make a payment to fulfill the obligation. In limited circumstances, treaty guarantees are granted to ceding companies in order to provide them additional security, particularly in cases where the Company's subsidiary is relatively new, unrated, or not of a significant size, relative to the ceding company. Liabilities supported by the treaty guarantees, before consideration for any legally offsetting amounts due from the guaranteed party are reflected on the Company's consolidated balance sheets in a policy related liability. Potential guaranteed amounts of future payments will vary depending on production levels and underwriting results. Guarantees related to securities borrowing and repurchase arrangements provide additional security to third parties should a subsidiary fail to provide securities when due. The Company's guarantees issued as of December 31, 2020 and 2019 are reflected in the following table (dollars in thousands):

	2020	2019
Treaty guarantees	\$ 225.1	\$ 187.9
Treaty guarantees, net of assets in trust	225.1	187.9
Financing arrangements	—	41.5

Note 14 COMPREHENSIVE INCOME

The following tables present the components of the Company's other comprehensive income for the years ended December 31, 2020 and 2019 (dollars in thousands):

For the year ended December 31, 2020:	Before-Tax Amount	Tax (Expense) Benefit	After-Tax Amount
Foreign currency translation adjustments, change arising during year	\$ 18,985	\$ 7,305	\$ 26,290
Unrealized gains on investments: ⁽¹⁾			
Unrealized net holding gains arising during the year	1,356,332	(298,779)	1,057,553
Less: Reclassification adjustment for net gains realized in net income	24,733	(6,356)	18,377
Net unrealized gains	<u>1,331,599</u>	<u>(292,423)</u>	<u>1,039,176</u>
Unrealized pension and postretirement benefits:			
Net gain (loss) arising during the year	(2,309)	614	(1,695)
Unrealized pension and postretirement benefits, net	(2,309)	614	(1,695)
Other comprehensive income	<u>\$ 1,348,275</u>	<u>\$ (284,504)</u>	<u>\$ 1,063,771</u>

For the year ended December 31, 2019:	Before-Tax Amount	Tax (Expense) Benefit	After-Tax Amount
Foreign currency translation adjustments, change arising during year	\$ 81,895	\$ (1,660)	\$ 80,235
Unrealized gains on investments: ⁽¹⁾			
Unrealized net holding gains arising during the year	1,301,195	(291,451)	1,009,744
Less: Reclassification adjustment for net gains realized in net income	29,465	(6,368)	23,097
Net unrealized gains	<u>1,271,730</u>	<u>(285,083)</u>	<u>986,647</u>
Unrealized pension and postretirement benefits:			
Net gain (loss) arising during the year	(1,922)	509	(1,413)
Unrealized pension and postretirement benefits, net	(1,922)	509	(1,413)
Other comprehensive income	<u>\$ 1,351,703</u>	<u>\$ (286,234)</u>	<u>\$ 1,065,469</u>

(1) Includes cash flow hedges. See [Note 4 - "Derivative Instruments"](#) for additional information on cash flow hedges.

The balances of and changes in each component of AOCI for the years ended December 31, 2020 and 2019 were as follows (dollars in thousands):

	Accumulated Currency Translation Adjustments	Unrealized Appreciation of Investments ⁽¹⁾	Pension and Postretirement Benefits	Accumulated Other Comprehensive Income
Balance, January 1, 2019	\$ (272,166)	\$ 952,402	\$ (2,393)	\$ 677,843
OCI before reclassifications	80,235	1,009,744	(1,659)	1,088,320
Amounts reclassified from AOCI	—	(23,097)	246	(22,851)
Balance, December 31, 2019	<u>(191,931)</u>	<u>1,939,049</u>	<u>(3,806)</u>	<u>1,743,312</u>
OCI before reclassifications	26,290	1,057,553	(2,105)	1,081,738
Amounts reclassified from AOCI	—	(18,377)	410	(17,967)
Balance, December 31, 2020	<u>\$ (165,641)</u>	<u>\$ 2,978,225</u>	<u>\$ (5,501)</u>	<u>\$ 2,807,083</u>

(1) Includes cash flow hedges of \$8 thousand and \$(3) thousand as of December 31, 2020 and 2019, respectively. See [Note 4 - "Derivative Instruments"](#) for additional information on cash flow hedges.

The following table presents the amounts of AOCI reclassifications for the years ended December 31, 2020 and 2019 (dollars in thousands):

[Table of Contents](#)

Details about AOCI Components	Amount Reclassified from AOCI		Affected Line Item in Statements of Income
	2020	2019	
Net unrealized investment gains:			
Net unrealized gains on available-for-sale securities	\$ 24,733	\$ 29,465	Investment related gains, net
Provision for income taxes	(6,356)	(6,368)	
Net unrealized gains, net of tax	<u>\$ 18,377</u>	<u>\$ 23,097</u>	
Amortization of defined benefit plan items:			
Actuarial losses	(559)	(335)	(1)
Provision for income taxes	149	89	
Amortization of defined benefit plans, net of tax	<u>\$ (410)</u>	<u>\$ (246)</u>	
Total reclassifications for the period	<u>\$ 17,967</u>	<u>\$ 22,851</u>	

(1) See [Note 9 - "Employee Benefit Plans"](#) for information on employee benefit plans.