

**Hannover Life Reassurance Company of
America (Bermuda) Ltd.**

Consolidated Financial Statements

(With Report of Independent Auditors Thereon)

December 31, 2022 and 2021



Report of Independent Auditors

To the Management and Board of Directors of Hannover Life Reassurance Company of America (Bermuda) Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Hannover Life Reassurance Company of America (Bermuda) Ltd. and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2022 and 2021, and the related consolidated statements of income, of comprehensive income (loss), of changes in stockholder's equity and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for 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.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern for at least, but not limited to, twelve months from the end of the reporting period, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial



likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

PricewaterhouseCoopers LLP

May 12, 2023

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Table of Contents

	Page
Report of Independent Auditors	1–2
Consolidated Balance Sheets	3
Consolidated Statements of Income	4
Consolidated Statements of Comprehensive Income (Loss)	5
Consolidated Statements of Changes in Shareholder's Equity	6
Consolidated Statements of Cash Flows	7
Notes to the Consolidated Financial Statements	8–47

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Consolidated Balance Sheets

As of December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	Note	2022	2021
Assets			
Cash and cash equivalents	7	\$ 46,553	\$ 84,629
Fixed-income securities - available for sale	6,7	3,062,456	4,246,909
Other invested assets - available for sale	6,7	94,460	59,609
Loan receivable	6	319,916	336,080
Equity securities	7	73,549	57,198
Short-term investments	7	-	-
Participating interest other companies	8	8,873	9,113
Total investments and cash under own management		3,605,806	4,793,538
Funds withheld	9	2,279,400	2,477,489
Contract deposit assets	10	469,300	476,191
Reinsurance recoverables	15	165,946	178,080
Claim recoverables	15	68,618	66,708
Derivative asset—at fair value through profit and loss	7,11	21,584	26,972
Accounts receivable	12	833,058	784,446
Deferred acquisition costs	13	437,763	439,831
Current income tax receivable	21	-	39,572
Other assets	14	25,298	33,732
Total assets		\$ 7,906,775	\$ 9,316,559
Liabilities			
Claims reserves	15	\$ 1,236,800	\$ 1,374,578
Benefit reserves	15	1,598,194	1,785,420
Contract deposit liabilities	15	2,445,593	2,646,670
Funds held	9	203,598	223,402
Derivative liability –no hedge accounting	7,11	19,992	29,185
Accounts payable	12	131,253	118,937
Current income tax liability		13,849	
Deferred tax liability	21	32,429	226,815
Other liabilities	14	362,425	363,579
Loans and borrowings	16	373,000	450,500
Total liabilities		6,417,134	7,219,086
Shareholder's equity			
Authorized, issued and fully paid, 2,500,000 shares of \$1 par value each	17	2,500	2,500
Additional paid-in capital		1,561,405	1,483,905
Retained earnings		373,142	407,243
Accumulated other comprehensive (loss) income	17	(447,406)	203,825
Total shareholder's equity		1,489,641	2,097,473
Total liabilities and shareholder's equity		\$ 7,906,775	\$ 9,316,559

The accompanying notes form an integral part of these financial statements.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Consolidated Statements of Income

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	Note	2022	2021
Gross written premium	18	\$ 2,038,929	\$ 2,039,521
Ceded written premium		(124,758)	(122,510)
Change unearned premium reserve - net	4.1	(117)	462
Net premium earned		1,914,054	1,917,473
Ordinary investment income	19	148,528	157,054
Realised gains and (losses) on derivatives - net	19	13,371	16,521
Unrealised gains and (losses) on derivatives - net	19	649	(17,724)
Insurance derivative income	19	36,841	32,150
Other investment expenses	19	(18,159)	(39,604)
Interest income on funds withheld and contract deposits	19	94,219	353,529
Interest expense on funds withheld and contract deposits	19	(57,945)	(228,621)
Net investment income		217,504	273,305
Total revenues		2,131,557	2,190,778
Claims and claims expenses	4.13	(2,102,778)	(2,360,283)
Change in benefit reserves	15	175,209	189,845
Commission and brokerage, change in deferred acquisition costs-Assumed	4.11	(225,196)	(195,823)
Commission and brokerage, change in deferred acquisition costs-Ceded	4.11	11,514	(7,806)
Administrative expenses		(96,698)	(95,982)
Total expenses		(2,237,948)	(2,470,049)
Other income and expenses	20	312,040	365,627
Finance costs	16	(17,406)	(19,516)
Income before taxes		188,244	66,840
Income tax expense	21	(41,346)	(14,164)
Net income		\$ 146,900	\$ 52,676

The accompanying notes form an integral part of these financial statements.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	2022	2021
Net income	\$ 146,900	\$ 52,676
Other comprehensive gain (loss)		
Items that may be subsequently classified to net income		
Change in fair value of fixed income securities -available-for-sale	(814,538)	(185,078)
Tax expense	163,307	38,867
<i>Net change in fair value of fixed income securities—available—for-sale</i>	<i>(651,231)</i>	<i>(146,211)</i>
Other comprehensive (loss) gain for the year	(651,231)	(146,211)
Total comprehensive (loss) income for the year	(504,331)	(93,535)
Total comprehensive (loss) income attributable to:		
Equity holder of the Company	<u>\$ (504,331)</u>	<u>\$ (93,535)</u>

The accompanying notes form an integral part of these financial statements.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Consolidated Statements of Changes in Shareholder's Equity

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	Note	Share Capital	Retained	Additional Paid in Capital	Accumulated Other Comprehensive Income/(Loss)	Total Equity
At January 1, 2021		\$ 2,500	\$ 534,567	\$ 1,483,905	\$ 350,036	\$ 2,371,008
Net income for the year	17	-	52,676	-	-	52,676
Net change in fair value of fixed income securities—available—for—sale	17	-	-	-	(146,211)	(146,211)
Dividends paid during the year	17	-	(180,000)	-	-	(180,000)
At December 31, 2021		\$ 2,500	\$ 407,243	\$ 1,483,905	\$ 203,825	\$ 2,097,473
At January 1, 2022		\$ 2,500	\$ 407,243	\$ 1,483,905	\$ 203,825	\$ 2,097,473
Net income for the year	17	-	146,900	-	-	146,900
Net change in fair value of fixed income securities—available—for—sale	17	-	-	-	(651,231)	(651,231)
Additional paid-in capital	17	-	-	77,500	-	77,500
Dividends paid during the year	17	-	(181,000)	-	-	(181,000)
At December 31, 2022		\$ 2,500	\$ 373,142	\$ 1,561,405	\$ (447,406)	\$ 1,489,641

The accompanying notes form an integral part of these financial statements.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Consolidated Statements of Cash Flows

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	<u>2022</u>	<u>2021</u>
Cash flows from operating activities		
Net income	\$ 146,900	\$ 52,676
Adjustments for non-cash items in net income		
Net realised (gains) losses on investments	(5,630)	(16,521)
Net realised (gains) losses on derivatives	(7,740)	-
Net unrealised (gains) losses on derivatives	35,389	32,217
Net unrealised (gains) losses on derivatives	(23,713)	(4,244)
Amortisation of investments	(3,413)	363
Amortisation of non related to investments	9,980	2,825
Amortisation of deferred acquisition costs	3,211	2,567
Accrued interests	2,110	(2,825)
Changes in:		
Deferred acquisition costs	(1,143)	(1,772)
Funds withheld	178,285	495,841
Contract deposits	(194,186)	(85,157)
Accounts receivable and payables	(36,164)	(35,346)
Other assets and liabilities (net)	(181,307)	6,478
Benefit and claim reserve (net)	(314,781)	(68,782)
Tax assets, provision for taxes, and other provisions	24,126	3,212
Interest payable	19,214	16,908
Cash flows (used in) provided in operating activities	<u>(348,862)</u>	<u>398,440</u>
Cash flows from investing activities		
Maturities, sales of fixed income securities—available for sale	1,324,972	1,921,368
Purchases of fixed income securities—available for sale	(948,664)	(2,346,869)
Changes in loan receivable	16,164	20,498
Changes in other invested assets	(58,558)	16,732
Cash flows provided in (used in) investing activities	<u>333,914</u>	<u>(388,271)</u>
Cash flows from financing activities		
Repayment of loan interest	(23,127)	(19,388)
Cash flows (used in) financing activities	<u>(23,127)</u>	<u>(19,388)</u>
Cash and cash equivalents at the beginning of the period	84,629	93,848
Change in cash and cash equivalents	(38,075)	(9,219)
Cash and cash equivalents at the end of the period	<u>\$ 46,553</u>	<u>\$ 84,629</u>
Supplementary disclosures on the cash flow information		
Income taxes paid (on balance)	\$ 18,989	\$ (20,800)
Interest received	334,538	554,104
Interest paid	(206,031)	(338,960)
Non-Cash activities during the year not included in the Statement of Cash Flows:		
Dividends	\$ 181,000	\$ 180,000
Notes payable	(181,000)	(180,000)

The accompanying notes form an integral part of these financial statements.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

1. Corporate information

Hannover Life Reassurance Company of America (Bermuda) Ltd. (the “Company” and/or “HLRA Ber”) was incorporated on March 3rd, 2014 under the laws of Bermuda and is licensed as a long-term insurer (Class E), under the Insurance Act 1978 of Bermuda and related regulations, to carry on business as an insurance company. The Company is a wholly owned subsidiary of Hannover Finance, Inc. which is a wholly owned subsidiary of Hannover Re Holdings (UK) Limited, a company incorporated in the United Kingdom, which is wholly owned subsidiary of Hannover Ruck Beteiligung Verwaltungs-GmbH, a company incorporated in Germany, which is wholly owned subsidiary of Hannover Rückversicherung SE (the “Parent Company” or “Hannover Re SE”), a company incorporated in Germany. Hannover Re SE trades internationally under the brand name Hannover Re. Hannover Rückversicherung SE is a publicly traded company, which is majority owned (50.2%) by Talanx AG, which in turn is majority owned (with a stake of 79%) by HDI Haftpflichtverband der Deutschen Industrie V.a.G., a German mutual insurance company. The registered office is located at Canon’s Court, 22 Victoria Street, Hamilton, HM12, Bermuda.

The Company reinsures life, annuity, and health insurance business written by its client companies (cedants). The risks assumed generally reflect the risks inherent in the underlying insurance policies and include mortality risk, longevity risk, morbidity risk, investment risk and lapse and surrender risk. The Company is also assuming insurance risk in alternative forms, including swap contractual form, and then transforming the risk into traditional reinsurance contracts retroceded back to affiliates. The Company may also assume credit risk in respect of its client companies.

As a result of the U.S. Tax Cuts and Jobs Act of 2017 (“TCJA”), the Company and its affiliate, Hannover Life Reassurance Company of America (HLRUS), became subject to a new base erosion minimum tax (BEAT) in 2018. In response to this exposure, the Company restructured its reinsurance treaties during 2018, to recapture all retrocessions from foreign affiliates, and the Company assumed significant blocks of business from HLRUS that HLRUS recaptured from the foreign affiliates. The Company has Certified Reinsurer status from the Florida Office of Insurance Regulation, and a number of other states within the U.S.A.

On November 13, 2020, the Company received from Hannover Finance, Inc. a 100% investment in HLRUS and Sand Lake Re (SLRe) as an equity contribution. The value of the investment and corresponding increase in contributed capital totaled \$364 million.

The transaction was accounted for as an acquisition under common control using the predecessor value method, in accordance with the requirements IFRS 10 “Consolidated Financial Statements”. The consolidated results are reported using the same valuation basis as the Parent Company. There were no shares of stock issued in the transaction.

On December 20, 2021 the Company acquired a 100% ownership of Annuity Reinsurance Cell A1 (“ARCA1”), a segregated account established under Kubera Insurance (SAC), a Bermuda licensed long-term insurer. The Company paid \$10 million for 10,000,000 Segregated Account Shares with a par value of \$1 each issued and fully paid on the transaction effective date. ARCA1 contributed \$11.3 million in assets to the consolidated results, \$1.3 million in contract deposits and \$10 million on other receivables.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Covid-19

The Covid-19 pandemic is ongoing and continues to affect the insurance sector, although the associated uncertainties appear more manageable as a greater proportion of the population is vaccinated or has immunity from prior infection. The available vaccines and advances in the development of additional vaccines and medications continues to improve. Uncertainty remains due to the ongoing potential for the development of adverse variants.

2. Basis of preparation

2.1 Statement of compliance

These financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") and interpretations issued by the International Financial Reporting Interpretations Committee applicable to companies reporting under IFRS. The financial statements comply with IFRS as issued by the International Accounting Standards Board (IASB).

2.2 Basis of measurement

The financial statements have been prepared on the historical cost basis except for the following noted items in the balance sheet: Fixed-income securities-available for sale, Derivative receivable-at fair value through profit and loss. The balance sheet has been presented in order of decreasing liquidity.

2.3 Functional and presentation currency

The financial statements are presented in United States Dollars (USD or \$), which is also the Company's functional currency.

2.4 Use of estimates and judgments

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses shown in the Financial Statements. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Reinsurance assets and liabilities are areas involving a higher degree of judgment and where estimates are significant to the financial statements. This is disclosed further in note 4 of these financial statements.

3. Consolidation

3.1 Consolidation principles

The consolidation is carried out according to the requirements of IFRS 10 "Consolidated Financial Statements" on the basis of a consistent consolidation model for all entities that identifies control as the single basis for verifying the consolidation requirement, irrespective of whether control is substantiated in company law, contractually or economically. The accompanying consolidated financial statements include the accounts of the Company, HLRUS, SLRe and ARCA1.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

3.2 Consolidation of business transactions within the Group

Inter-company transactions, balances, income and expenses on transactions between Group companies are eliminated. Profits and losses resulting from inter-company transactions that are recognized in assets are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Parent.

4. Summary of significant accounting policies

Since 2002, the standards adopted by the International Accounting Standards Board (IASB) have been referred to as “International Financial Reporting Standards (IFRS)”; the standards dating from earlier years still bear the name “International Accounting Standards (IAS)”. Standards are cited in our notes accordingly; in cases where the notes do not make explicit reference to a particular standard, the term IFRS is used. In accordance with the exemption provided by IFRS 4, reinsurance contracts are recognized according to the pertinent provisions of United States Generally Accepted Accounting Principles (US GAAP) as applicable on the date of initial application of IFRS 4 on January 1, 2016. We cite individual insurance-specific standards of US GAAP using the designation “FASB Accounting Standards Codification (ASC)” that was valid at the time.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all years presented unless otherwise stated.

New accounting standards or accounting standards applied for the first time

No amendments to existing standards were applied in the 2022 financial year that had significant implications for the Company’s net assets, financial position or results of operations.

Standards or changes in standards that have not yet entered into force or are not yet applicable

The IASB published IFRS 17 “Insurance Contracts” in May 2017 and issued further amendments and additions to the standard in June 2020 and December 2021. Mandatory initial application of the standard, which was endorsed by the EU in November 2021, was deferred to financial years beginning on or after January 1, 2023.

IFRS 17 replaces the existing transitional arrangements of IFRS 4 and establishes a comprehensive accounting framework for the recognition, measurement and disclosure of insurance contracts, reinsurance contracts and investment contracts with discretionary participation features. In addition, IFRS 17 requires extensive new disclosures in the notes.

The standard introduces three new measurement models, the basis being the “general measurement model” (GMM). The “variable fee approach” (VFA) is a variant of the general measurement model for contracts with direct participation features and is not applicable to reinsurance business. The “premium allocation approach” (PAA) is a simplified method that can be used by insurers and reinsurers when certain criteria are met. The Company’s portfolio contains both contracts that qualify for the premium allocation approach and – predominantly – contracts for which the general measurement model is to be applied. For operational reasons and to achieve consistent and comparable presentation and measurement within the portfolio of

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

insurance and reinsurance contracts, the Company will apply the general measurement model to its entire business.

The general measurement model measures assets and liabilities from reinsurance business by the fulfilment cash flows plus the contractual service margin (CSM). The fulfilment cash flows, for their part, constitute the risk-adjusted present value of the rights and obligations from a reinsurance treaty and are comprised of the estimates of expected future cash flows, their discounting and an explicit risk adjustment for non-financial risks. If the present value of the expected future cash inflows exceeds the present value of the expected future cash outflows plus the risk adjustment, an expected profit exists that is recognized in the contractual service margin. Initial balance sheet recognition of contracts expected to be profitable thus has no effect on profit or loss. The subsequent measurement of the contractual service margin reflects the rendering of a service in the form of insurance contract service. The insurance contract service consists of the payment in case of occurrence of the insured event and the policyholder's participation in income generated on the capital market through investment of paid insurance premiums. An amount is released from the CSM to profit or loss in the corresponding reporting periods for the provision of this service and recognized in the statement of income as part of the insurance revenue. So-called "coverage units" are used to measure this service in a reporting period. These coverage units are based on the quantities of benefits provided in the reporting period relative to those expected to be provided over the contract duration in order to determine the service rendered for the period. We select the coverage units for each insurance transaction in such a way that they optimally reflect the service provided in each case.

However, for groups of contracts where the sum of the present value of expected future cash outflows and the risk adjustment exceeds the present value of the expected future cash inflows, we recognize the loss expected at time of acquisition directly in profit or loss in the so-called "loss component".

The Company will discount all cash flows using currency specific, risk-free yield curves that are adjusted to reflect the respective characteristics of the cash flows and the liquidity of the underlying insurance contracts ("bottom-up approach"). The illiquidity premium used in this context is based on risk-adjusted spreads of corporate and government bonds. These adjustments, which take the form of a supplementary illiquidity premium per currency, satisfy the following requirements/ assumptions:

- The illiquidity of the underlying insurance contracts is defined through the predictability of the resulting cash flows, since the harder it is to predict a cash flow, the less it lends itself to coverage with illiquid assets.
- All characteristics of an insurance contract (or a group of insurance contracts) can be fully described and measured through the characteristics of its resulting cash flows.
- The uncertainties in cash flows that may be caused by volatility in financial market parameters are captured in the estimation of future expected cash flows, instead of implicitly reflecting them through adjustment of the risk-free and completely illiquid yield curve by reducing the illiquidity premium.
- The illiquidity premiums are estimated on the basis of liquidity premiums for financial assets observable on the market that are adjusted to reflect the illiquidity characteristics of the cash

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

flows on the liabilities side. The illiquidity premiums used in this context are based on risk-adjusted spreads of corporate and government bonds.

The non-financial risk adjustment for a group of insurance contracts reflects the amount of compensation needed to carry the uncertainty surrounding the amount and timing of the cash flows that arise out of the non-financial insurance risks. The Company uses a “pricing margin approach” to determine the risk adjustment. This approach refers to the fact that the question of the necessary compensation for the uncertainty of the cash flows is already answered in connection with the premium calculation.

As a general principle, insurance contracts are grouped together and measured on an aggregated level. For this purpose, the first step is to define portfolios containing contracts with similar risks that are managed together. In a second step, these portfolios are to be split into groups of contracts according to profitability criteria and annual cohorts. Under IFRS 17 there is a requirement to group contracts into such time buckets.

The standard must be applied retrospectively unless this is “impracticable” (IFRS 17.C3). In this case, especially if an adequate data basis for retrospective application is not available, it is possible to apply either a modified retrospective approach or a fair value approach on the level of the group of contracts. Using adequately robust information that is available without unreasonable effort, the modified retrospective approach is intended to arrive at an overall result that approximates retrospective application.

Under the fair value approach, the contractual service margin of a group of contracts at the transition date is established as the difference between the fair value of this group calculated according to IFRS 13 and the corresponding fulfilment cash flows calculated according to IFRS 17.

The Company will apply the retrospective and fair value approach, differentiated according to certain groups of contracts.

The application of IFRS 17 will have a number of implications for the structure of the consolidated balance sheet. In addition to the changed technical items under the general measurement model, certain items that are currently reported separately will be eliminated and in future recognized under the reinsurance liabilities in accordance with the general model. This is the case, for example, with the deferred acquisition costs, the reinsurance recoverables and funds withheld.

Furthermore, the standard fundamentally changes the consolidated statement of income and differentiates between the underwriting result, which is composed of the insurance revenue and insurance expense, and the insurance finance income and expenses.

Gross written premium will no longer be disclosed, instead being replaced with insurance revenue that is defined in such a way as to facilitate comparison with the revenue disclosures of other sectors. Neither savings / investment components nor certain ceding commissions can be recognized in the insurance revenue in future. Insurance revenue is instead reported when it is earned by recognizing in each period the change in the liabilities for providing coverage for which the insurance entity receives compensation as well as the part of the premiums that covers acquisition costs.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Insurance finance income and expenses result from discounting effects and financial risks. In accordance with the option granted by IFRS 17 they can either be recognized entirely as profit or loss in the statement of income or in part directly in equity. This “OCI option” can be exercised on the level of individual portfolios and will be utilized by the Company for most of its business.

Changes in assumptions about future cash flows that do not relate to interest rates or financial risks are not recognized directly in the statement of income but are instead booked against the contractual service margin and hence spread across the remaining coverage period. Recognition in profit or loss is only immediate in the case of those groups of insurance contracts that are expected to be loss-making. If this adjustment to the contractual service margin exceeds its carrying amount, a loss component is established analogously to the initial recognition of groups of contracts that are expected to be loss-making and recognized directly in profit or loss. Conversely, it may happen that a contractual service margin is established in the context of subsequent measurement of a group of contracts originally classified as probably loss-making.

Hannover Re’s multi-year, centrally managed IFRS 17 project, in which the implications of the standard – including the interaction with IFRS 9 – for the consolidated financial statement were explored and the necessary implementation steps initiated, continued to move forward in the course of the financial year. The elaboration of the accounting bases and implementation of the extensive requirements in the Company’s processes and systems have been completed, while documentation and analyses remain ongoing. The opening balance sheet and provisional quarterly closings in accordance with IFRS 17 were drawn up in the year under review. Internal quality assurance and the review by the independent auditor continue until the closing date. For this reason, at the date of publication of this consolidated financial statement it is not yet possible to definitively quantify the effects on the Company’s IFRS 17 opening balance sheet and subsequent reporting periods. At the transition date of January 1, 2022, based on the current status of analyses, the initial application of IFRS 17 gives rise to the following changes in the measurement of key items in the balance sheet:

The amount of the technical liabilities and assets changes due to the concepts enshrined in the standard relating to the discounting of future cash flows, the establishment of the contractual service margin, loss components and risk adjustment and other measurement differences compared to IFRS 4 are significant.

The technical liabilities are expected to increase significantly. Reduced by the mitigating effect of deferred taxes, a decline of some \$975 million in the reported equity for the Company can be attributed largely to the transition to measurement according to IFRS 17 rather than IFRS 4. The main driver of this effect is the low level of interest rates prevailing as of January 1, 2022. The difference is significantly smaller over the course of 2022 as interest rates rise.

The reduction in the reported equity is opposed by the establishment of the contractual service margin, representing the present value of expected future profits. For the Company, this will likely exceed the amount of the decrease in reported equity at the transition date.

IFRS 9 “Financial Instruments” will replace IAS 39 “Financial Instruments: Recognition and Measurement”, which is currently used by Hannover Re. IFRS 9 contains new rules for classifying and measuring financial assets, for recognition of impairment based on a new, forward-looking model of the expected losses and for the accounting of general hedge relationships.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Initial mandatory application of the standard was envisaged for annual reporting periods beginning on or after January 1, 2018. However, the IASB published “Amendments to IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts” in September 2016 and “Amendments to IFRS 4: Extension of the Temporary Exemption from Applying IFRS 9” in June 2020. These amendments extended the temporary deferral of initial application of IFRS 9 “Financial Instruments” that had been granted to insurers and reinsurers (“deferral approach”) until January 1, 2023, with the result that IFRS 9 and IFRS 17 will be first applied by the Company at the same time.

In order to be able to take advantage of the temporary deferral, it was necessary to demonstrate the Company’s predominant activity is the issuance of insurance and reinsurance contracts within the scope of IFRS 4. Hannover Re reviewed the application requirements based on the consolidated financial statement as at December 31, 2015 with a positive outcome and decided to make use of the deferral approach. Since the review of the application requirements there has been no change in business activity that would have necessitated a re-evaluation of the predominant activity.

While the retrospective application of IFRS 17 provides for the presentation of comparative information for the 2022 financial year, this is not the case with initial application of IFRS 9. By issuing “Amendment to IFRS 17 Insurance Contracts; Initial Application of IFRS 17 and IFRS 9 – Comparative Information” in December 2021, the IASB therefore introduced a transition option relating to comparative information about financial assets that is presented on initial application of IFRS 17.

This option is intended to help entities avoid temporary accounting mismatches between financial assets and insurance contract liabilities in the 2022 comparative year, thereby improving the usefulness of comparative information for users of financial statements. It allows for an overlay in the classification of financial assets in the comparative period that is presented on initial application of IFRS 17 (“overlay approach”). This overlay makes it possible to classify all financial assets, including those not connected with contracts within the scope of IFRS 17, on a case-by-case basis in the comparative period in a way that corresponds to how the entity expects to classify these assets on initial application of IFRS 9. The Company intends to apply this approach, including the provisions of IFRS 9 regarding impairment losses, consistently to all eligible financial assets.

The Company anticipates implications primarily from the classification of financial assets. The classification is guided, on the one hand, by the cash flow characteristics of the financial assets and, on the other, by the business model used to manage the financial assets. It is anticipated that the portfolio of financial assets measured at fair value through profit or loss will increase as a consequence of the new classification rules. This may lead to greater volatility of results in future financial years.

At the transition date of January 1, 2022 we expect the changeover in the recognition of financial assets to have a negative effect of around \$15.6 million on the amount of equity. This derives primarily from the changeover in the measurement of certain financial assets at amortized cost to measurement at fair value. Disclosures regarding the fair values of financial instruments currently in the portfolio split according to the cash flow criterion as well as disclosures about the credit risks of securities that solely generate payments of principal and interest are provided in Note 6 of the notes to the consolidated financial statement “Investments under own management”.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Further IFRS Amendments and Interpretations:

Published:	Title	Initial Application to Annual Periods Beginning on or After the Following Date:
January/July 2020	Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current and Classification of Liabilities as Current or Non-current – Deferral of Effective Date	January 1, 2023
February 2021	Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies	January 1, 2023
February 2021	Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates	January 1, 2023
May 2021	Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023
September 2022	Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback	January 1, 2024

4.1 Reinsurance contracts

IFRS 4 “Insurance Contracts” represents the outcome of Phase I of the IASB project “Insurance Contracts” and served as a transitional arrangement until the IASB issued IFRS 17. IFRS 4 sets out basic principles for the accounting of insurance contracts. Underwriting business is to be subdivided into insurance and investment contracts. Contracts with a significant insurance risk are considered to be insurance contracts, while contracts without significant insurance risk are to be classified as investment contracts. The standard is also applicable to reinsurance contracts. IFRS 4 contains fundamental rules governing specific circumstances, such as the separation of embedded derivatives and unbundling of deposit components, but it does not set out any more extensive provisions relating to the measurement of insurance and reinsurance contracts. In conformity with the basic rules of IFRS 4 and the IFRS Framework, reinsurance-specific transactions therefore continue to be recognized in accordance with the pertinent provisions of US GAAP (United States Generally Accepted Accounting Principles).

The Company has certain contracts which would be classified as insurance under IFRS 4 but which do not satisfy the risk transfer requirements of FASB ASC 944–20–15 “Financial Services – Insurance”. The Company also reinsures long–duration insurance contracts that are categorized by FASB ASC 944–20–15–26 to –30 “Financial Services – Insurance” as universal life–type insurance contracts. Both these types of contracts are classified as investment contracts and recognized using the “deposit accounting” method. Income and expenses on the underlying contract are recognized on an accruals basis and reported net in the Statements of Income as ‘other income and expenses’ and ‘interest income on funds withheld and contract deposits’ (see note 20). The gross balances are shown as contract deposits assets or liabilities in the Balance Sheets (note 10 and 15).

(a). Premium written

Insurance contracts are classified as either “short–duration” contracts or “long–duration” contracts. The determinative criteria are, among other things, the termination opportunities available to the insurer, the period of risk protection and the scope of the services provided to the insurer in connection with the contract. Premiums from short–duration contracts are accounted for over the period of provision of insurance cover under the underlying contract. Premiums from long–duration contracts are accounted for as these become due from the policy holder. Premiums written include adjustments to premiums written in prior accounting periods. Outward reinsurance premiums are recognized as an expense in accordance with the pattern of risks retroceded.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

(b). Unearned premium

Unearned premium is premium that has already been written but is allocated to future risk periods. Unearned premium is usually earned pro-rata over the length of the contract.

4.2 Investment income and expense

Investment income comprises income from financial assets; including interest income on funds held and contract deposits, available-for-sale assets, assets at fair value through profit or loss, cash and bank deposits. Also included are net realised gains from available-for-sale assets, gains on derivatives, net realised and unrealised gains on assets at fair value through profit or loss and other investment income. Interest income on funds held represents the Company's share of investment income on funds held assets reported by the cedant. Interest income is recognized as it accrues using either the effective interest rate method or the effective yield method depending on the underlying investment terms.

Investment expenses comprise the retrocessionaires' share of interest on funds held assets, realised losses on available-for-sale assets, losses on and costs of derivatives, realised and unrealised losses on assets at fair value through profit or loss, investment management expenses and other investment expenses. The retrocessionaires' share of interest on funds held assets is recognized as it accrues using either the effective interest rate method or the effective yield method depending on the underlying investment terms.

Changes in the fair value of derivatives are included as profits or losses in the Statements of Income in the period in which they arise.

4.3 Other income

Other income includes letter of credit fees received and income on deposit accounted treaties. Income on deposit accounted treaties represents the net income on treaties where the risk transfer between the ceding company and the reinsurer is of subordinate importance. The net profit is recognized on these contracts as other income over the period of the contract.

4.4 Finance costs

Finance costs comprise interest payable on borrowings using the effective interest rate method and are accounted on an accrued basis.

4.5 Non-derivative financial assets

Investments are measured in accordance with IAS 39 'Financial Instruments: Recognition and Measurement'. Purchases and sales of equity and debt securities are recognized on the settlement date, which is when all the risk and rewards of ownership of the asset are transferred.

The Company classifies investments according to the following categories: held-to-maturity, financial assets at fair value through profit or loss, loans and receivables and available-for-sale. The allocation and measurement of investments are determined by the investment intent.

The Company recognizes the purchase and sale of directly held financial assets including derivative financial instruments as at the settlement date. The recognition of fixed-income securities includes apportionable accrued interest.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

(a). *Financial assets classified as held-to-maturity*

Financial assets held-to-maturity are comprised of non-derivative assets that entail fixed or determinable payments on a defined due date and are acquired with the intent and ability to be held until maturity. They are initially recognized at fair value and directly attributable costs. Subsequent to the initial measurement they are measured at amortized cost. The corresponding premiums or discounts are recognized in profit or forming part of the Financial Statements loss across the duration of the instruments using the effective interest rate method.

(b). *Financial assets classified as available-for-sale*

Financial assets classified as available-for-sale are carried at fair value; accrued interest is recognized in this context. Unrealised gains and losses arising out of changes in the fair value of fixed-income securities held as available for sale are recognized within accumulated other comprehensive income/(loss), a component of shareholder's equity. All financial instruments that do not satisfy the criteria for classification as held-to-maturity, loans and receivables, at fair value through profit and loss, or trading are allocated to the category of available-for-sale. The fair value of fixed-income securities is determined primarily by means of prices fixed on publicly quoted markets or exchanges on the basis of "bid" prices. If such financial assets are not quoted on public markets, the fair value is calculated on the basis of the acknowledged effective interest rate method or estimated using other financial assets with similar credit rating, duration and return characteristics. Under the effective interest rate method, the current market interest rate levels in the relevant fixed-interest-rate periods are always taken as a basis.

(c). *Investment income, realised gains and losses, unrealised gains and losses, other investment expenses and income/expenses on funds withheld and contract deposits*

Ordinary investment income comprises income from financial assets, including, available-for-sale assets, and assets/liabilities at fair value through profit and loss and time deposits. Realised gains and losses comprises gains and losses from available-for-sale assets and assets/liabilities at fair value through profit and loss. Unrealised gains and losses comprises unrealised gains and losses from available-for-sale assets and assets/liabilities at fair value through profit and loss. Interest income on funds withheld represents the Company's share of investment income on funds withheld assets reported by the cedant. Interest income is recognized as it accrues using either the effective interest rate method or the effective yield method depending on the underlying investment terms. Investment expenses comprise the retrocessionaires' share of interest on funds withheld assets, losses on and costs of derivatives and investment management expenses. The retrocessionaires' share of interest on funds withheld assets is recognized as it accrues using either the effective interest rate method or the effective yield method depending on the underlying investment terms.

(d). *Impairment loss and reversals*

At each balance sheet date, the Company performs a review of its financial assets for impairments. Impairments on all invested assets are recognized directly in the statements of income. IAS 39 "Financial Instruments: Recognition and Measurement" contains a list of objective, substantial indications for impairments of financial assets. In the case of fixed-income securities, reference is made, in particular, to the rating of the instrument, the rating of the issuer / borrower as well as the individual market assessment in order to establish whether they are impaired. IAS 39 "Financial Instruments: Recognition and Measurement" states that a significant or prolonged decrease in fair value below acquisition cost constitutes objective evidence of

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

impairment. The cumulative loss – measured as the difference between the carrying amount and the current fair value, less any impairment loss on that financial asset previously recognized in profit and loss is removed from accumulated other comprehensive income/loss and recognized as a loss in the Statements of Income. If in a subsequent period the fair value of a fixed-income security that is available for sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in profit and loss, the impairment loss is reversed through profit and loss in the Statements of Income.

4.6 Derivative financial instruments

The Company's derivatives are financial instruments, the fair value of which is derived from underlying instruments such as expected cash flows related to underlying insurance contracts. The Company utilizes a discounted cash flows approach using current best estimate assumptions in order to determine fair value of its derivative assets.

In accordance with IFRS 4, certain derivatives embedded in reinsurance contracts are removed from the underlying insurance contract and accounted for at fair value pursuant to IAS 39.

Certain “modified coinsurance” and “coinsurance funds held” reinsurance treaties, the terms of which include the provision that securities are held as deposits by the ceding companies and payments rendered on the basis of the income from certain securities of the ceding company, have been identified as containing embedded derivatives. It has been determined that the interest-rate risk elements are not clearly and closely related to the underlying reinsurance arrangements. Embedded derivatives consequently result solely from the credit risk of the underlying securities portfolio.

The Company calculates the fair value of the embedded derivatives using the market information available on the valuation date on the basis of a “credit spread” method. Under this method, the derivative is valued at zero on the date when the contract is concluded and its value then fluctuates over time according to changes in the credit spread of the securities.

In accordance with IAS 39, the Company classifies embedded derivatives and derivative instruments that are not accounted for as hedging instruments as held-for-trading and measures them at fair value. The fair value of derivative financial instruments is recognized within ‘Derivative liability – at fair value through profit or loss’ in the Balance Sheets. At inception, the fair value of these instruments is zero with fluctuations in the fair value recognized through profit or loss in the Statements of Income.

4.7 De-recognition of financial assets and liabilities

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control of the financial asset. Any interest in such transferred financial assets that is created or retained by the Company is recognized as a separate asset or liability.

On de-recognition of a financial asset, the difference between the carrying amount of the asset (or the carrying amount allocated to the portion of the asset derecognized) and consideration received (including any new asset obtained less any new liability assumed) is recognized in profit

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

or loss. The Company derecognizes a financial liability when its contractual obligations are discharged, canceled or expire.

4.8 Cash and cash equivalents

Cash and cash equivalents are carried at face value. For purposes of the Statements of Cash Flows, the Company considers all time deposits with an original maturity of ninety days or less and money market funds which can be redeemed without penalty as equivalent to cash.

4.9 Funds withheld

Funds withheld are receivables due to reinsurers from their clients in the amount of their cash deposits contractually withheld by such clients; they are recognized at acquisition cost (nominal amount). Appropriate allowance is made for credit risks.

4.10 Reinsurance recoverables

The Company uses reinsurance in the normal course of business to manage its risk exposure. Insurance ceded to a reinsurer does not relieve the Company from its obligations to policyholders. The Company remains liable to its cedants for the portion reinsured to the extent that any reinsurer does not meet its obligations for reinsurance ceded to it under the reinsurance agreements.

Reinsurance assets represent the benefit derived from reinsurance agreements in-force at the reporting date, taking into account the financial condition of the reinsurer. Amounts recoverable from reinsurers are estimated in accordance with the terms of the relevant reinsurance contract.

Reinsurance recoverables are calculated according to the contractual conditions on the basis of the gross technical reserves. Appropriate allowance is made for credit risks.

4.11 Deferred acquisition costs

Deferred acquisition costs principally consist of commissions, brokerage, ceded allowance and other variable costs directly related with the acquisition or renewal of existing reinsurance contracts. These acquisition costs are capitalized and amortized over the expected period of the underlying reinsurance contracts. The Company performs loss recognition of deferred acquisition costs, on an annual basis. Loss recognition testing applies to all in-force business. If loss recognition testing indicates that the present value of future net cash flows from the business currently on the books would be insufficient to recover the deferred acquisition costs and meet the cost of insurance liabilities, the difference, if any, is charged to income as accelerated amortization of deferred acquisition costs. The Company also performs recoverability testing to ensure that expenses deferred during the current year are recoverable against future profits.

4.12 Benefit reserves

Benefit reserves relate to assumed liabilities. Assumed liabilities are primarily comprised of coinsurance of Universal Life and Term Life business as well as reinsurance of mortality risk on a YRT basis. Reported IFRS benefit reserves for coinsured Universal Life business represent policyholder account values. Reported IFRS benefit reserves for Term Life and YRT business are determined using actuarial methods and represent the present value of future claims payments to cedants less the present value of future premium due from cedants and taking into consideration any initial consideration received. Reserves are based on the cedant reported data, which is typically reported on a 3 to 6 months' lag, projected forward to the valuation date.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Projected claims and premiums are based on best estimate assumptions with a provision for adverse deviation.

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. Premium deficiency reserves are 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 determination of premium deficiency is undertaken at a unit of account level. One unit of account spans across all traditional mortality solutions business while other businesses are tested on a more granular basis.

Because of the many assumptions and estimates used in establishing reserves and the long-term nature of the reinsurance contracts, the reserving process, while based on actuarial science, is inherently uncertain.

4.13 Claims reserves

Claims reserves expense constitutes payment obligations from life and accident and health policies, incurred in the statement period, but have not yet been settled. They are subdivided into reserves for reinsurance losses reported by the balance sheet date and reserves for reinsurance losses that have already been incurred but not yet reported (IBNR) by the balance sheet date. The claims reserves expense is based on estimates that may diverge from the actual amounts payable. In reinsurance business, a considerable period of time may elapse between the occurrence of an insurance loss, notification by the insurer and pro-rata payment of the loss by the reinsurer. For this reason, the best estimate of the future settlement amount is carried. With the aid of actuarial methods, the estimates make allowance for past experience and assumptions relating to the future development.

4.14 Related party transactions

IAS 24 defines related parties, among others, as parent companies and subsidiaries, subsidiaries of a common parent company, associated companies, legal entities under the influence of management and the management of the company itself. All related party transactions have been recorded in accordance with IAS 24 and includes business both assumed and ceded under usual market conditions.

4.15 Loans and borrowings

Loans and borrowings are from affiliated companies, which are measured at amortized costs at the balance sheet dates.

4.16 Contract deposits

Contract deposits are receivables and liabilities under insurance contracts that satisfy the test of a significant risk transfer to the reinsurer as required by IFRS 4 "Insurance Contracts" but fail to meet the risk transfer required by US GAAP. IFRS 4 requires insurance contracts that transfer a significant technical risk from the ceding company to the reinsurer to be differentiated from those under which the risk transfer is of merely subordinate importance. Since the risk transfer under the affected transactions is of subordinate importance, these contracts are recognised using the

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

“deposit accounting” method and hence eliminated from the technical account. The compensation for risk assumption booked to income under these contracts is netted under other income / expense. The payment flows resulting from these contracts are shown in the cash flow statement under operating activities.

4.17 Accounts receivable

The accounts receivable under reinsurance contracts business and other receivables are carried at nominal value; value adjustments are made where necessary on the basis of a case-by-case analysis. We use adjustment accounts for value adjustments taken on reinsurance accounts receivable, while all other write-downs are booked directly against the underlying position.

4.18 Loans receivable

Loans receivable are non-derivative financial instruments that include fixed or determinable due dates, are not listed on an active market and are not sold at short notice. They are carried at amortized cost. Premiums or discounts are deducted or added within the statement of income using the effective interest rate method until the amount repayable becomes due. An impairment loss is taken only to the extent that repayment of a loan is unlikely or no longer expected in full amount.

4.19 Disclosures about financial instruments

IFRS 7 “Financial Instruments: Disclosures” requires more extensive disclosures according to classes of financial instruments. In this context, the term “class” refers to the classification of financial instruments according to their risk characteristics. A minimum distinction is required here between measurement at amortized cost or at fair value. A more extensive or divergent distinction should, however, be geared to the purpose of the corresponding disclosures in the notes. In contrast, the term “category” is used within the meaning of the measurement categories defined in IAS 39 “Financial Instruments: Recognition and Measurement” (held to maturity, loans and receivables, available for sale and financial assets at fair value through profit or loss with the subcategories of trading and designated financial instruments). Essentially, the following classes of financial instruments are established:

- Fixed-income securities
- Equities, equity funds and other variable-yield securities
- Other financial assets – at fair value through profit or loss
- Other invested assets
- Short-term investments
- Certain financial assets in the balance sheet item “Other assets”
- Certain financial assets in the balance sheet item “Other liabilities”
- Long-term debt
- Notes payable

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

This grouping into classes is not, however, solely determinative for the type and structure of each disclosure in the notes. Rather, guided by the underlying business model of reinsurance, the disclosures are made on the basis of the facts and circumstances existing in the financial year and in light of the principle of materiality.

5. Nature and extent of risks

In the context of its business operations, the Company enters into a variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act on the associated opportunities. In this context, crucial importance is attached to risk management in order to ensure that, among other things, risks to the reinsurance portfolio remain calculable and also exceptional significant losses do not have an unduly adverse impact on the results of the Company.

5.1 Risk management system

The Company's risk management system is designed to be commensurate to the nature, scale and complexity of the risks inherent in the business. The Company's approach to risk management is summarized by the following key operations:

- Risk identification
- Risk controlling
- Risk measurement
- Risk monitoring

All stages of the risk management cycle are steered by the Company's Board of Directors and officers of the Company including the Chief Risk Officer.

5.2 Risk governance

The system of governance around the Company's risk management system is comprised of a local governance framework which sits within the broader Hannover Re Group Risk Management framework. The local governance framework is underpinned by the following committees:

- The Company Board of Directors
- Risk Committee
- Operational Council
- Audit Committee

The Hannover Re Group Risk Management function provides an additional level of governance that is independent of the local Company's operations.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

5.3 Insurance risk

5.3.1 Key risks and mitigation measures

The Company's main insurance risks are:

- Mortality risk
- Morbidity risk
- Catastrophe risk
- Lapse risk
- Interest Rate risk
- Longevity risk
- Disability risk

The Company's exposure to insurance risk is mitigated through the existence of Underwriting Guidelines which specify limits and thresholds to ensure that risk is accepted on a basis that is in line with the Company's risk appetite.

Mortality risk

Mortality risk is currently the primary insurance risk and is defined as an adverse deviation in mortality rates from expected. The Company is exposed to mortality and longevity risk through the reinsurance of life and annuity insurance business from its cedants. The reinsurance structures may include traditional structures such as risk premium reinsurance and stop loss reinsurance, alongside less traditional structures such as mortality swaps. The Company's risk management system mandates maximum retention limits and has retrocession arrangements in place to accept risk in excess of the retention limit.

Morbidity risk

Morbidity risk is the actuarial risk that the state of health of a person is adversely impacted by illness, disease, injury or frailty and that higher costs are triggered by medical treatment, long-term care or protracted periods of disability. The Company is exposed to morbidity risk through the reinsurance of health and long-term care business. The reinsurance structures may include traditional structures such as coinsurance, risk premium reinsurance and stop loss reinsurance, alongside less traditional structures such as morbidity cost swaps. The Company's risk management system mandates exposure limits and monitoring of morbidity risks.

Catastrophe risk

Due to the mortality exposure described in the previous section, the Company is also exposed to mortality catastrophe risk, namely pandemic risk.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Lapse risk

The Company's exposure to lapse risk including mass lapse risk is primarily due to its engagement in financial reinsurance and stop-loss transactions which typically relies on the persistence of the underlying business. The Company is party to a range of cash and non-cash financing structures. Treaties are structured to mitigate the extent of the Company's exposure to lapse risk.

Interest rate risk

Interest rate risk refers to an unfavorable change in the value of financial assets held in the portfolio due to changes in the general interest rate level. Interest rate risk arises primarily from the Company's investments in fixed-income securities. Declining interest rates lead to increases in the fair value of the fixed-income securities while rising interest rates lead to decreases in the fair value.

The reinsurance contracts written by the Company define future cash flow obligations that may be assessed with a reasonable degree of actuarial certainty. It is therefore possible for the investment portfolio to be closely matched to these obligations by currency, maturity and type. The Company monitors its interest rate risk by reviewing these obligations regularly. The Company matches its interest rate risk on an economic basis. A maturity analysis of the Company's financial assets and liabilities is provided under note 16.

Longevity risk

Longevity entails the risk that the mortality contained in the actuarial assumptions does not correspond to the actual mortality and that payments have to be rendered and funded for a longer duration than had been assumed.

Disability risk

Disablement entails the risk that benefit payments for disability do not correspond to the actual experience and for this reason, increased benefit obligations have to be met.

5.3.2 Sensitivity to insurance risks

The Company assesses its exposure to insurance risk through an internal economic model best estimate liability analysis, which is subsequently used as a key input for the economic balance sheet and to determine an economic capital allocation to each risk. The Company calculates the best estimate liability under a Solvency II basis quarterly for Group reporting purposes and Bermuda economic balance sheet basis at least annually. The methodology and assumptions used for Group Solvency II reporting are in line with European Insurance and Occupational Pensions Authority (EIOPA) Principles.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

The table below shows the sensitivity of the Company's best estimate liability as at December 31, 2022 under a range of insurance stresses.

USD'000s	Best Estimate (Asset)/Liability	Increase/(Decrease) in Best Estimate (Asset)/Liability	% Change
Best Estimate	\$ 572,800		
Risk-free yield-50bps	600,969	28,169	4.92%
Risk-free yield+50bps	562,767	(10,033)	-1.75%
Risk-free yield-100bps	639,081	66,281	11.57%
Risk-free yield+100bps	564,636	(8,164)	-1.43%
Mortality Business: Mortality-5%	(483,823)	(1,056,623)	-184.47%
Mortality Business: Mortality+5%	1,185,830	613,030	107.02%
Mortality Business: Mortality+10%	1,526,420	953,620	166.48%
Mortality Business: Mortality+15%	1,764,363	1,191,563	208.02%
Pandemic: Mortality +50% 1st year	1,144,204	571,404	99.76%
Pandemic: Mortality +100% 1st year	1,615,974	1,043,174	182.12%
Pandemic: Mortality +400% 1st year	7,284,468	6,711,668	1171.73%
Pandemic: Mortality+1.5‰	1,170,274	597,474	104.31%
LapseMass40%/70%	1,380,093	807,293	140.94%
Lapse-10%	457,689	(115,111)	-20.10%
Lapse+10%	662,463	89,663	15.65%
Lapse-50%	(562,633)	(1,135,433)	-198.23%
Lapse+50%	974,497	401,697	70.13%
Longevity business: Mortality +5%	533,807	(38,993)	-6.81%
Longevity business: Mortality -5%	615,642	42,842	7.48%
Longevity business: Mortality -15%	715,186	142,386	24.86%
Longevity business: Mortality -20%	746,669	173,869	30.35%
Longevity business: Mortality -25%	837,788	264,988	46.26%
Disability/Morbidity+35%/+25%	923,611	350,811	61.24%
Disability/Morbidity+5%	630,457	57,657	10.07%
Disability/Morbidity+15%	759,190	186,390	32.54%
Disability/Morbidity+25%	895,274	322,474	56.30%

5.3.3 Concentrations of insurance risk

The Company defines concentration of insurance risk as the risk of exposure to increased losses associated with an inadequately diversified insurance portfolio. Exposure to concentration risk on individual lives is not material and mitigated through the Company's retention limit set forth in the underwriting guidelines.

The process for identifying and monitoring insurance risks (including concentrations) is initiated by Group Risk Management ("GRM") and conducted annually by the Company's Risk Management function. The results are codified in a central repository for systematic identification of material risks to the risk strategy including assessment of materiality, and serves as an important tool to identify and prioritize risks for monitoring and management efforts.

5.4 Market risk

The Company's investment portfolio currently consists in large part of fixed-income securities, and hence default and spread risks account for the bulk of the market risk. The Company is also exposed to changes in interest rates due to the impact on liability valuations. Since asset and

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

liability cash flows are both impacted by changes in interest rates, an integrated approach is used to assess interest rate risk on the entity's net economic value. The Company minimizes interest rate risk through the matching of durations of fixed-income securities and the related insurance contracts' liabilities.

The table below shows the sensitivity to changes in interest rates on the Company's fixed-income and derivative securities investment portfolio:

	2022		2021	
	P&L	Equity	P&L	Equity
Fixed-income securities				
+100 basis point shift in yield curves	\$ -	\$ (765,583)	\$ -	\$ (604,714)
-100 basis point shift in yield curves		(230,788)	-	145,128
Derivative Securities				
+100 basis point shift in yield curves	\$ -	\$ 5,464	\$ -	\$ 4,172
-100 basis point shift in yield curves		(4,964)	-	(2,541)

5.5 Credit risk

In addition to credit risk within the investment portfolio, the Company is exposed to the counterparty risk of loss in value caused by the default or delay of outstanding obligations from other business partners including cedants and retrocessionaires. Counterparty exposure is assessed across the Company's asset portfolio and across reinsurance agreements and can result, for example, from a loss in future profit or recovery of initial ceding allowance on a cedant default. This risk is controlled through the Company's underwriting guidelines by the existence of maximum exposure limits per cedant.

Credit risk is minimized to retrocessionaires through the fact that assets for risk business are retained within the Company on a funds withheld basis.

Our investments entail credit risks that arise out of the risk of a failure to pay (interest and/or capital repayment) or a change in the credit status (rating downgrade) of issuers of securities. We attach equally vital importance to exceptionally broad diversification as we do credit assessment conducted on the basis of the quality criteria set out in the investment guidelines. We measure credit risks in the first place using the standard market risk components, especially the probability of default and the potential amounts of loss – making allowance for any collateral and the ranking of the individual instruments depending on their effect in each case.

We then assess the credit risk first on the level of individual securities (issues) and in subsequent steps on a combined basis on the insurer level. In order to limit the risk of counterparty default, we set various limits on the insurer and issue level as well as the form of dedicated rating quotas. A comprehensive system of risk reporting ensures timely reporting to the functions entrusted with risk management.

The following table reflects the rating structure of amounts due from ceding companies, reinsurers' share of technical contract provisions, derivative receivables and fixed-income securities using Standard & Poor's or A.M. Best Moody's ratings:

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	December 31, 2022								Total
	AAA	AA	A	BBB	BB	B	CCC	NR	
Fixed-income securities-available-for-sale	\$ 961,522	\$ 431,830	\$ 644,656	\$ 944,419	\$ 64,677	\$ 9,508	\$ 712	\$ 5,132	\$ 3,062,456
Other invested assets - available-for-sale	-	-	-	-	-	-	-	-	94,460
Loan receivable	-	-	-	-	-	-	-	-	319,916
Funds withheld	-	6,309	45,187	-	46,895	-	-	2,181,010	2,279,400
Reinsurance recoverables	-	13,351	(3,131)	152,033	-	-	-	3,893	165,946
Claim recoverables	-	34,178	3,627	12,053	-	-	-	18,760	68,618
Derivative receivable, net – at fair value through P&L	-	-	-	-	-	-	-	21,584	21,584
Accounts receivable	1,380	197,700	268,931	30,292	7,597	8,778	-	318,380	833,058
	December 31, 2021								Total
	AAA	AA	A	BBB	BB	B	CCC	NR	
Fixed-income securities-available-for-sale	\$ 1,274,390	\$ 541,593	\$ 937,905	\$ 1,373,757	\$ 98,142	\$ 17,558	\$ -	\$ 3,564	\$ 4,246,909
Other invested assets - available-for-sale	-	-	-	-	-	-	-	59,609	59,609
Loan receivable	-	-	-	-	-	-	-	336,080	336,080
Funds withheld	-	7,350	45,839	-	54,180	302	-	2,369,818	2,477,489
Reinsurance recoverables	-	17,067	(1,621)	158,045	-	-	-	4,589	178,080
Claim recoverables	-	42,767	2,244	12,549	-	-	-	9,148	66,708
Derivative receivable, net – at fair value through P&L	-	-	-	-	-	-	-	26,972	26,972
Accounts receivable	2,300	194,805	348,887	29,809	3,532	8,176	-	196,937	784,446

* Included in the Derivative receivable, net –at fair value through P&L as December 31, 2022 is USD \$1.3 million (2021 is USD \$627 thousands) of B36 – Derivative instruments (unbundled from insurance contracts).

5.6 Liquidity risk

Liquidity risk is the risk of being unable to meet financial obligations when they become due. Liquidity risk is controlled through the Company's investment guidelines which stipulates minimum liquidity requirements as a proportion of the total invested portfolio. Liquidity risk arising from insurance contracts is managed through the use of financial projections and forecasts to ensure the Company is able to meet its expected liquidity requirements.

6. Investments under own management

Investments are classified and measured in accordance with IAS 39 "Financial Instruments: Recognition and Measurement". The Company classifies investments according to the following categories: financial assets classified as available-for-sale and financial assets at fair value through profit and loss. The allocation and measurement of investments are determined by the investment intent.

Fixed Income Securities - Available for Sale	2022		2021	
	Amortised Cost	Fair Value ¹	Amortised Cost	Fair Value ¹
Due in one year	\$ 159,354	\$ 159,689	\$ 31,748	\$ 32,133
Due after one through two years	82,885	80,166	108,357	113,005
Due after two through three years	104,504	98,510	164,034	171,293
Due after three through four years	182,867	169,363	192,595	202,544
Due after four through five years	142,650	131,904	271,614	283,999
Due after five years through ten years	947,389	825,010	1,261,569	1,328,824
Due after more than ten years	1,961,982	1,597,814	1,925,866	2,115,111
Total	\$ 3,581,631	\$ 3,062,456	\$ 3,955,783	\$ 4,246,909

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Other Invested Assets - Available for Sale	2022		2021	
	Amortised Cost	Fair Value ¹	Amortised Cost	Fair Value ¹
Due in one year	\$ 31,706	\$ 31,877	\$ 763	\$ 788
Due after one through two years	964	1,000	-	-
Due after two through three years	-	-	28,368	28,887
Due after three through four years	-	-	-	-
Due after four through five years	-	-	-	-
Due after five years through ten years	-	-	-	-
Due after more than ten years	62,200	61,582	26,804	29,934
Total	\$ 94,870	\$ 94,460	\$ 55,935	\$ 59,609

¹Including accrued interest

The stated maturities may in individual cases diverge from the contractual maturities because borrowers may have the right to call or prepay obligations with or without penalty.

The Other invested assets –Available for Sale are with a non-related counterparty and provide cash financing to fund a portion of commissions relating to a block of annuity business. The fair value of these notes is calculated using an internal model based on changes in interest rates and credit spreads. The main risks associated with these instruments are counterparty, lapse and mortality risk.

Amortized cost, unrealised gains and losses, accrued interest and fair value on the portfolio of investments classified as available for sale

Available for sale	2022				
	Amortised Cost	Unrealised Gains	Unrealised Losses	Accrued Interest	Fair Value
<i>Fixed income securities</i>					
US treasury notes	\$ 1,088,624	\$ 93	\$ (183,990)	\$ 5,475	\$ 910,201
Debt securities issued by semi-governmental entities	418,432	405	(65,384)	4,906	358,359
Corporate securities	2,074,575	694	(302,743)	21,137	1,793,663
Total	\$ 3,581,631	\$ 1,192	\$ (552,118)	\$ 31,518	\$ 3,062,223
Other invested assets	\$ 94,870	\$ (2,297)	\$ (444)	\$ 2,330	\$ 94,460
Total	\$ 94,870	\$ (2,297)	\$ (444)	\$ 2,330	\$ 94,460

Available for sale	2021				
	Amortised Cost	Unrealised Gains	Unrealised Losses	Accrued Interest	Fair Value
<i>Fixed income securities</i>					
US treasury notes	\$ 1,080,106	\$ 120,644	\$ (729)	\$ 5,856	\$ 1,205,877
Debt securities issued by semi-governmental entities	423,575	28,634	(2,957)	5,132	454,384
Corporate securities	2,452,102	138,427	(26,522)	22,641	2,586,648
Total	\$ 3,955,783	\$ 287,705	\$ (30,208)	\$ 33,629	\$ 4,246,909
Other invested assets	\$ 55,935	\$ 2,950	\$ (41)	\$ 764	\$ 59,609
Total	\$ 55,935	\$ 2,950	\$ (41)	\$ 764	\$ 59,609

The carrying amounts of the fixed-income securities classified as available-for-sale as well as the short-term investments allocated to this category correspond to their fair values, in the case of interest-bearing assets including accrued interest.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Rating structure of fixed income securities

	2022							
	AAA	AA	A	BBB	BB	B	CCC	Other
Fixed-income securities-available-for-sale	\$ 961,522	\$ 431,830	\$ 644,656	\$ 944,419	\$ 64,677	\$ 9,508	\$ 712	\$ 5,132
Other invested assets - available-for-sale	-	-	-	-	-	-	-	94,460
								3,062,456

	2021							
	AAA	AA	A	BBB	BB	B	CCC	Other
Fixed-income securities-available-for-sale	\$ 1,274,390	\$ 541,593	\$ 937,905	\$ 1,373,757	\$ 98,142	\$ 17,558	\$ -	\$ 3,564
Other invested assets - available-for-sale	-	-	-	-	-	-	-	59,609
								4,246,999

The maximum credit risk of the items shown here corresponds to their carrying amounts.

7. Fair value hierarchy

For the purposes of the disclosure requirements pursuant to IFRS 7 “Financial Instruments: Disclosures”, the financial instruments recognized at fair value in the balance sheet are to be assigned to a three-level fair value hierarchy. This hierarchy, which reflects characteristics of the price data and inputs used for measurement purposes, is structured as follows:

- Level 1: Assets or liabilities measured at (unadjusted) prices quoted directly in active and liquid markets.
- Level 2: Assets or liabilities which are measured using observable market data and are not allocable to level 1. Measurement is based, in particular, on prices for comparable assets and liabilities that are traded on active markets, prices on markets that are not considered active as well as inputs derived from such prices or market data.
- Level 3: Assets or liabilities that cannot be measured or can only be partially measured using observable market inputs. The measurement of such instruments draws principally on valuation models and methods.

The following table shows the breakdown of the financial instruments recognized at fair value into the three-level fair value hierarchy.

	2022			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 46,553	\$ -	\$ -	\$ 46,553
Fixed income securities-available for sale	-	3,062,456	-	3,062,456
Other invested assets - available for sale	-	-	94,460	94,460
Equity Securities	-	-	73,549	73,549
Short-term investments	-	-	-	-
Investment in associated companies (not cons.)	-	-	8,873	8,873
Derivative asset – at fair value through profit and loss	-	1,276	20,309	21,584
Total assets carried at fair value	\$ 46,553	\$ 3,063,731	\$ 197,191	\$ 3,307,475
Derivative liabilities – no Hedge Accounting	\$ -	\$ (19,992)	\$ -	\$ (19,992)
Total liabilities carried at fair value	\$ -	\$ (19,992)	\$ -	\$ (19,992)

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	2021			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 84,629	\$ -	\$ -	\$ 84,629
Fixed income securities—available for sale	-	4,246,909	-	4,246,909
Other invested assets - available for sale	-	-	59,609	59,609
Equity Securities	-	-	57,198	57,198
Short-term investments	-	-	-	-
Investment in associated companies (not cons.)	-	-	9,113	9,113
Derivative asset – at fair value through profit and loss	-	627	26,345	26,972
Total assets carried at fair value	\$ 84,629	\$ 4,247,536	\$ 152,265	\$ 4,484,430
Derivative liabilities – no Hedge Accounting	\$ -	\$ (29,185)	\$ -	\$ (29,185)
Total liabilities carried at fair value	\$ -	\$ (29,185)	\$ -	\$ (29,185)

The following table provides a reconciliation of the fair values of financial instruments included in level 3 at the beginning of the financial year with the fair values as at the end of the financial year.

	2022			
	Other Invested Assets - Available for Sale	Equity Securities	Investment In Associated Companies (not Cons.)	Derivative Asset - at Fair Value Through Profit and Loss
Balance as at January 1	\$ 59,608	\$ 57,199	\$ 9,113	\$ 26,345
Additions	40,501	36,160	-	-
Disposals	(2,910)	(17,983)	(240)	(41,426)
Impairments	-	(1,130)	-	-
Unrealized gains with effect on profit and loss	-	-	-	35,390
Unrealized gains OCI/Realisation OCI	-	1,406	-	-
Unrealized losses OCI/Realisation OCI	(2,740)	(2,103)	-	-
Balance as at December 31	\$ 94,459	\$ 73,549	\$ 8,873	\$ 20,309

	2021			
	Other Invested Assets - Available for Sale	Equity Securities	Investment In Associated Companies (not Cons.)	Derivative Asset - at Fair Value Through Profit and Loss
Balance as at January 1	\$ 79,506	\$ 48,563	\$ 15,000	\$ 36,527
Additions	763	34,729	-	-
Disposals	(22,324)	(26,305)	(5,887)	(42,398)
Unrealized gains with effect on profit and loss	2,911	-	-	32,217
Unrealized gains OCI/Realisation OCI	-	1,312	-	-
Unrealized losses OCI/Realisation OCI	(1,247)	(1,101)	-	-
Balance as at December 31	\$ 59,609	\$ 57,198	\$ 9,113	\$ 26,346

If models are used to measure financial instruments included in level 3 under which the adoption of reasonable alternative inputs leads to a material change in fair value, IFRS 7 “Financial Instruments: Disclosures” requires disclosure of the effects of these alternative assumptions. The effects of alternative inputs and assumptions are immaterial in respect to the disclosed financial instruments included in level 3.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Application of the temporary exemption from IFRS 9

The Company met the eligibility criteria for temporary exemption under IFRS 4 from applying IFRS 9 and has accordingly deferred the adoption of IFRS 9. The tables below present an analysis of the fair value of classes of financial assets as at the end of the reporting period as well as the change in fair value during the reporting period. The classes are defined as follows:

- I. Solely payments of principal and interest ("SPPI"): assets of which cash flows represent solely payments of principal and interest on an outstanding principal amount, excluding any financial assets that meet the definition of held for trading in IFRS 9, or that are managed and whose performance is evaluated on a fair value basis; and
- II. Other at fair value: all financial assets other than those specified in SPPI. Financial assets:
 - a. with contractual terms that do not give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amounts outstanding;
 - b. that meet the definition of held for trading in IFRS 9; or
 - c. that are managed and whose performance is evaluated on a fair value basis.

	2022			
	Financial Assets That Give Rise Solely to Payments of Principal and Interest		All Other Financial Assets	
	Fair Value	Fair Value	Fair Value	Fair Value
	as of December 31st	Change in the Financial Year	as of December 31st	Change in the Financial Year
Fixed income securities -available for sale	\$ 3,050,544	\$ (714,683)	\$ 11,912	\$ -
Other invested assets -available for sale	94,460	(2,740)	-	-
Derivative linked to insurance risk	-	-	21,584	-
Equity Securities	-	-	73,549	-
Total financial assets	\$ 3,145,004	\$ (717,423)	\$ 107,045	\$ -

	2021			
	Financial Assets That Give Rise Solely to Payments of Principal and Interest		All Other Financial Assets	
	Fair Value	Fair Value	Fair Value	Fair Value
	as of December 31st	Change in the Financial Year	as of December 31st	Change in the Financial Year
Fixed income securities -available for sale	\$ 4,228,345	\$ (108,913)	\$ 18,564	\$ -
Other invested assets -available for sale	59,609	2,911	-	-
Derivative linked to insurance risk	-	-	26,972	-
Equity Securities	-	-	57,198	-
Total financial assets	\$ 4,287,954	\$ (106,002)	\$ 102,734	\$ -

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

The above table shows the financial assets that are to be recognized in the future in accordance with IFRS 9 and splits them into a group that satisfies the cash flow criterion for financial assets as well as all other financial assets. The latter encompass the financial assets currently measured at fair value through profit or loss that by their very nature cannot fulfill the cash flow criterion enshrined in IFRS 9. The cash flow criterion is met if the contractual conditions of the financial instrument give rise to cash flows at set times that are solely payments of principal and interest (SPPI).

The following table shows the rating structure of financial assets that give rise to solely payments of principal and interest.

in USD thousands	2022	2021
	Gross Value	
AAA	\$ 960,787	\$ 1,273,436
AA	431,805	541,208
A	640,622	933,103
BBB	937,446	1,363,045
BB or lower	77,352	114,486
No Rating	96,992	62,676
Total	\$ 3,145,004	\$ 4,287,954

The fair value for financial assets that meet the cash flow criterion and have more than a low credit risk corresponds to the carrying amount before impairment shown in the table.

8. Participating interest other companies

The participating interest in other companies is recognized and measured based on the respective applicable IFRS for this type of asset. The carrying amount of the participating interest in other companies is as follows for 2022 and 2021:

Investments in associated companies

	2022	2021
Net book value at 31 December of the previous year	\$ 9,113	\$ 15,000
Additions	-	-
Disposals	(240)	(5,887)
Profit or loss on investments in associated companies	-	-
Dividend payments	-	-
Net book value at 31 December of the year under review	\$ 8,873	\$ 9,113

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

9. Funds withheld

The funds withheld assets total \$2.3 billion (2021: \$2.5 billion) represent the cash and securities deposits furnished to the Company by cedants (or by the Company to affiliated cedants with respect to funds held liabilities) that do not trigger any cash flows and cannot be realized by cedants or the Company without consent of the other counter-party. Funds held liabilities totaling \$203.6 million and \$223.4 million for 2022 and 2021, respectively. In the event of default on such a deposit, the Company's reinsurance commitment is reduced to the same extent.

10. Contract deposits assets

Contract deposits assets totaling \$469.3 million (2021: \$476.2 million) include consideration paid for acquiring the reinsurance contracts. These are reinsurance contracts accounted for under the "deposit accounting" method.

11. Derivative receivable and derivative liabilities – at fair value through profit and loss

	2022		2021	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Derivative instruments	\$ 20,308	\$ (19,992)	\$ 26,345	\$ (29,185)
Embedded derivatives	1,276	-	627	-
Total derivatives	\$ 21,584	\$ (19,992)	\$ 26,972	\$ (29,185)

Derivative instruments

Transactions where the Company offers their contracting parties coverage for risks from possible future payment obligations arising out of hedging instruments are also to be classified as derivative financial instruments. The payment obligations result from contractually defined events and relate to the development of an underlying group of primary insurance contracts with statutory reserving requirements. The contracts are to be categorized and recognized as stand-alone credit derivatives pursuant to IAS 39. These derivative financial instruments are carried in Derivative asset - at fair value through profit and loss included in the consolidated balance sheet. The net fair value of these instruments as of December 31, 2022 was \$20.3 million (2021: \$26.3 million).

The Company's derivatives transfer insurance risks and consist of structured transactions that finance statutory reserves (so-called Triple-X or AXXX reserves) of U.S. ceding companies, and these transactions are accounted for as derivative financial instruments under IAS39.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Details of the structured transactions at December 31, 2022 and 2021 are the following (amounts in \$ millions):

Transaction	Effective Date	Initial Term	2022				Fair Value Net
			Notional Value	Peak Notional Value	Fair Value Asset	Fair Value Liability	
1	07/31/14	15	\$ 1,445	\$ 1,512	\$ 18	\$ 18	\$ -
2	09/30/14	25	938	1,110	51	30	20
3	12/12/14	20	75	107	2	2	-
4	02/18/15	20	25	1,000	22	22	-
5	01/15/16	18	-	-	-	-	-
6	12/31/16	15	159	159	2	2	-
7	03/29/17	20	770	1,000	12	12	-
8	06/29/17	20	-	-	-	-	-
9	07/01/17	15	804	1,020	10	10	-
10	12/31/13	20	564	900	9	9	-
11	09/30/14	15	452	411	6	6	-
Total			<u>\$ 5,232</u>	<u>\$ 7,219</u>	<u>\$ 132</u>	<u>\$ 111</u>	<u>\$ 20</u>

Transaction	Effective Date	Initial Term	2021				Fair Value Net
			Notional Value	Peak Notional Value	Fair Value Asset	Fair Value Liability	
1	07/31/14	15	\$ 1,383	\$ 1,512	\$ 23	\$ 23	\$ -
2	09/30/14	25	920	1,110	62	39	23
3	12/12/14	20	73	107	3	3	-
4	02/18/15	20	25	1,000	28	28	-
5	01/15/16	18	-	-	-	-	-
6	12/31/16	15	176	176	3	3	-
7	03/29/17	20	733	1,000	16	16	-
8	06/29/17	20	359	500	7	7	-
9	07/01/17	15	875	1,020	17	13	4
10	12/31/13	20	619	900	11	11	-
11	09/30/14	15	268	411	8	8	-
Total			<u>\$ 5,431</u>	<u>\$ 7,736</u>	<u>\$ 178</u>	<u>\$ 151</u>	<u>\$ 27</u>

The fair value of the above derivatives is calculated using a discounted cash flow method, representing the present value of expected future cash flows from fee revenue over a reasonable estimated period discounted at the risk free term structure of U.S. dollar forward rates (based on swaps) prevailing at the time of the valuation. These fair value amounts are recognized as a derivative receivable at fair value through profit and loss and derivative liabilities at fair value through profit and loss on the balance sheet. The change in value in subsequent periods is dependent upon the risk experience. Income recognized under these contracts is \$44.6 million (2021: \$32.1 million) and reflected in Ordinary investment income on the Statements of Income.

Total Return Swap

Transaction	Maturity	2022 Total Return	2021 Total Return
1	July 15, 2028	\$ -	\$ 7,740
2	February 15, 2042	19,191	21,445
3	February 15, 2045	801	-
		<u>\$ 19,992</u>	<u>\$ 29,185</u>

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Total Return Swaps with affiliate

The Company has entered into three derivative transactions with an affiliate, Hannover Ruck SE, which are total return swaps. Under the total return swap agreements, the performance of the Company's investments in U.S. Treasury Inflation Protected Securities ("TIPS") is exchanged for the performance of an equivalent notional amount of U.S. Treasury Bonds ("USTB") having similar maturity dates. Settlements between the parties are made semi-annually for differences in the investment performance of the TIPS and the USTB.

In January 2022, the Company and Hannover Ruck SE agreed to terminate the first total return swap agreement. The TIPS maturing in 2028 were sold and the Company recognized a gain on the sale of \$16.7 million. Additionally, the Company recognized a gain from the extinguishment of its derivative liability of \$7.7 million. The Company made a final settlement payment of \$4.9 million upon termination of the first total swap agreement.

At December 31, 2022, the Company held \$100M par value of TIPS having a contractual maturity date of February 15, 2042 and \$35M par value of TIPS having a contractual maturity date of February 15, 2045. During 2022, the Company received net settlement payments of \$35,045 under the total return swap agreement for the TIPS maturing in 2042 and made net settlement payments of \$537,764 under the total return swap agreement for the TIPS maturing in 2045. At December 31, 2022, the Company recognized a liability of \$19.1 million and \$801,309 from the fair values of the total return swap agreement for the TIPS maturing in 2042 and 2045, respectively.

At December 31, 2021, the Company held \$120M par value of TIPS having a contractual maturity date of July 15, 2028 and \$100M par value of TIPS having a contractual maturity date of February 15, 2042. During 2021, the Company made net settlement payments of \$14 million under the total return swap agreement for the TIPS maturing in 2028 and \$19.6 million under the total return swap agreement for the TIPS maturing in 2042. At December 31, 2021, the Company recognized a liability of \$7.7 million and \$21.4 million from the fair values of the total return swap agreement for the TIPS maturing in 2028 and 2042, respectively.

Embedded derivative

A number of treaties meet criteria which require the application of the prescriptions in IFRS 4 'Insurance Contracts' governing embedded derivatives. These accounting regulations require that certain derivatives embedded in reinsurance contracts be separated from the underlying insurance contract ("host contract"), reported separately at fair value in accordance with IAS 39 'Financial Instruments: Recognition and Measurement' and recognized under investments. Fluctuations in the fair value of the derivative components are to be recognized in income in subsequent periods.

Within the scope of the accounting of "modified coinsurance" (ModCo) and "coinsurance funds held" (CoFWH) reinsurance treaties, under which securities deposits are held by the ceding companies and payments rendered on the basis of income from certain securities of the ceding company, the interest rate risk elements are clearly and closely related to the underlying reinsurance agreements. Embedded derivatives consequently result solely from the credit risk of the underlying securities portfolio.

The Company calculates a fair value for the embedded derivative in ModCo and CoFWH treaties using market information available for the underlying securities on the valuation date on the

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

basis of a “credit spread” method. Under this method, the derivative is valued at zero on the date the contract commences, and its value then fluctuates over time according to changes in the credit spread of the underlying securities.

The cumulative value of the derivative is shown in the Balance Sheets under derivative liabilities with the movement reported in the Statement of Income as an unrealised gain/(loss) on derivatives. The unrealised gain for the year totaled \$649 thousand (2021: \$17.7 million unrealised loss).

12. Accounts receivable & accounts payable

Accounts receivable was \$833 million (2021: \$784 million) for the period ended December 31, 2022. Accounts payable was \$131 million (2021: \$119 million) for the period ended December 31, 2022. For further explanatory remarks please see section 4.1 ‘Summary of major accounting policies’. All amounts presented in the balance sheet at amortized cost approximate to fair value.

13. Deferred acquisition costs (DAC)

In life and health reinsurance, the deferred acquisition costs associated with life and annuity policies with regular premium payments are determined in light of the period of the contracts, the expected surrenders, the lapse expectancies and the anticipated interest income.

The following table shows the DAC development for 2022 and 2021:

<i>In thousands</i>	2022	2021
Net book value at January 1	\$ 439,831	\$ 440,555
Additions	37,702	65,948
Amortisations	(39,770)	(66,672)
Portfolio entries/exits	-	-
Net book value at December 31	\$ 437,763	\$ 439,831

14. Other assets and liabilities

Other assets totaling \$25.3 million (2021: \$33.7 million) and other liabilities totaling \$362.4 million (2021: \$363.6 million) consist of the following at December 31, 2022 and 2021:

	Other assets	
	2022	2021
Advances paid	\$ 295	\$ 288
Office equipment	248	307
Real estate used for own purposes	2,092	4,395
Prepaid expenses	586	571
Accrued interest and rent	2,664	818
Other receivables	19,413	27,353
Total	\$ 25,298	\$ 33,732

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

	Other Liabilities	
	2022	2021
Provision share awards	\$ 5,321	\$ 5,277
Holiday, bonuses and overtime	9,056	7,930
Accrued interest	7,880	14,358
Other accrued and deferred items	150,242	141,340
Contract liabilities - IFRS 15	7,778	8,333
Lease liabilities	2,452	4,884
Loans	178,000	180,000
Other liabilities	1,696	1,457
Total	\$ 362,425	\$ 363,579

15. Contract deposit liabilities, benefit & claims reserves

In order to show the net reinsurance provisions remaining in the retention, the following table compares the gross provisions with the corresponding retrocessionaires' shares, which are shown as assets in the balance sheet.

	2022			2021		
	Gross	Retro	Net	Gross	Retro	Net
Benefit reserves	\$ 1,598,194	\$ 165,946	\$ 1,432,248	\$ 1,785,420	\$ 178,080	\$ 1,607,340
Contract deposit liabilities	2,445,593	-	2,445,593	2,646,670	-	2,646,670
Total	\$ 4,043,787	\$ 165,946	\$ 3,877,841	\$ 4,432,090	\$ 178,080	\$ 4,254,010

Maturities of reinsurance reserves

IFRS 4 "Insurance Contracts" requires information which helps to clarify the amount and timing of cash flows expected from reinsurance contracts. In the following tables, we have shown the future maturities of the technical provisions broken down by the expected remaining times to maturity. As part of our maturity analysis, we have directly deducted the deposits put up as collateral for these reserves since the cash inflows and outflows from these deposits are to be allocated directly to the ceding companies. For further explanation of the recognition and measurement of the reserves please, see note 4 "Summary of significant accounting policies."

	2022			2021		
	Gross	Retro	Net	Gross	Retro	Net
Due in one year	\$ 129,312	\$ 162,343	\$ (33,031)	\$ 244,840	\$ 13,840	\$ 231,000
Due after one through five years	72,908	(796)	73,704	673,188	43,440	629,748
Due after five years through ten years	524,185	266	523,919	731,968	40,569	691,399
Due after ten years through twenty years	1,349,787	2,514	1,347,273	1,110,760	44,949	1,065,811
Due after twenty years	1,967,595	1,619	1,965,975	1,671,334	35,282	1,636,052
	\$ 4,043,787	\$ 165,946	\$ 3,877,841	\$ 4,432,090	\$ 178,080	\$ 4,254,010

Benefit reserves are established to meet the expected liability to cedants arising from future claims. Profit commission reserves are established to meet the expected liability to cedants arising from future profit commission payments. Deferred acquisition costs are described in note 13. Benefit reserves, profit commission reserves and DAC are calculated using a net premium valuation methodology, as required under provisions of US GAAP.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

The reserving basis is based on prospective actuarial assumptions relating to mortality, morbidity, persistency, expenses and future interest rate development. Bases are determined using the current best estimate with a provision for adverse deviation in future experience.

In accordance with US GAAP, valuation assumptions for FAS60 business are locked in at outset and are not unlocked unless a loss recognition event occurs. Loss recognition is assessed annually by determining the expected future profits on the current best estimate assumption bases. In accordance with this assessment, there is no loss recognition event during 2022.

The adequacy of the reinsurance liabilities arising out of our reinsurance treaties is reviewed as at each balance sheet date. In the context of the adequacy testing of reinsurance liabilities (liability adequacy test pursuant to IFRS 4 in conjunction with loss recognition test as per US GAAP), the anticipated future contractual payment obligations are compared with the anticipated future income. Should the result of the test indicate that the anticipated future income will not be sufficient to fund future payments, the entire shortfall is recognized in income by first writing off capitalized acquisition costs corresponding to the shortfall. Any remaining difference is constituted as an additional provision.

Development of benefit reserves

A rollforward of reinsurance reserves is as follows:

	2022			2021		
	Gross	Retro	Net	Gross	Retro	Net
Balance as at January 1	\$ 4,432,090	\$ 178,080	\$ 4,254,010	\$ 4,529,352	\$ 182,205	\$ 4,347,147
Current year development	(388,303)	(12,134)	(376,169)	(97,262)	(4,125)	(93,137)
Portfolio entries/exits	-	-	-	-	-	-
Balance as at December 31	<u>\$ 4,043,787</u>	<u>\$ 165,946</u>	<u>\$ 3,877,841</u>	<u>\$ 4,432,090</u>	<u>\$ 178,080</u>	<u>\$ 4,254,010</u>

Development of claims reserves

The claims reserves are in principle calculated on the basis of the information supplied by ceding companies. The development of the claims reserves is shown in the following table:

	2022			2021		
	Gross	Retro	Net	Gross	Retro	Net
Balance as at January 1	\$ 1,374,578	\$ 66,708	\$ 1,307,870	\$ 1,252,310	\$ 65,964	\$ 1,186,346
Current year development	(137,778)	(164,983)	27,205	122,268	744	121,524
Portfolio entries/exits	-	166,893	(166,893)	-	-	-
Balance as at December 31	<u>\$ 1,236,800</u>	<u>\$ 68,618</u>	<u>\$ 1,168,182</u>	<u>\$ 1,374,578</u>	<u>\$ 66,708</u>	<u>\$ 1,307,870</u>

Claims with a Covid-19 cause of death increased the losses on the year-end December 31, 2022 by \$117.1 million.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

16. Loans and borrowings

The following table provides a listing of the subordinated loans held by the Company as of December 31, 2022.

Lender	Principal ('000s)	Interest Rate	Inception	Maturity	Interest Accrued ('000s)	Interest Paid Current Year ('000s)
Hannover Finance, Inc	\$ -	6.67 %	March 17, 2014	March 17, 2054	\$ 70	\$ 70
Hannover Ruck	238,000	4.60 %	March 27, 2018	April 15, 2038	11,100	11,100
Hannover Finance, Inc.	-	4.20 %	September 30, 2020	September 30, 2040	1,321	2,931
Hannover Ruck	50,000	3.18 %	September 22, 2016	September 22, 2046	1,612	1,612
Hannover Ruck	75,000	3.48 %	December 23, 2016	December 23, 2046	2,646	2,646
Hannover RE (Ireland)	5,000	2.51 %	January 20, 2016	March 15, 2065	127	127
Hannover RE (Ireland)	5,000	2.86 %	July 1, 2016	March 15, 2065	145	145
	<u>\$ 373,000</u>				<u>\$ 17,021</u>	<u>\$ 18,631</u>

The carrying amounts of the loans are close approximation of their fair value, which is estimated at December 31, 2022 and 2021 to be \$373.0million and \$450.5 million, respectively. All principal payments are only due upon maturity.

17. Shareholders equity

The "common shares" of the Company amount to 2.5 million shares of \$1 par value each. Unrealised gains and losses from the fair value measurement of financial instruments held as available-for-sale are carried in accumulated other comprehensive (loss) income of \$(447.4) million (2021: \$203.8 million).

On December 31, 2022, the Company paid a dividend of \$180.0 million and simultaneously issued a short term note payable to an affiliate, Hannover Re Holdings (UK) in the amount of \$180.0 million in order to facilitate the payment of the dividend in a cashless manner. The loan is due to be repaid on May 9, 2022.

18. Gross written premium

Gross written premium was \$2.0 billion (2021: \$2.0 billion) for the period ended December 31, 2022 and originates from cedants based in the United States of America.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

19. Investment income

Net investment income was \$217.5 million (2021: \$273.3 million) for the period ended December 31, 2022 and consists of the following components:

	2022	2021
Interest Income ²	\$ 148,528	\$ 157,054
Ordinary investment income	148,528	157,054
Realised gains on investments	35,032	49,300
Realised losses on investments	(21,661)	(32,779)
Unrealised gains on derivatives	39,631	36,721
Unrealised loss on derivatives	(2,141)	(22,295)
Other investment expenses	(18,159)	(39,604)
Net income from assets under own management	181,230	148,397
Interest income on funds withheld and contract deposits	94,219	353,529
Interest expense on funds withheld and contract deposits	(57,945)	(228,621)
Net investment income	\$ 217,504	\$ 273,305

² Interest Income from Fixed - income securities available-for-sale

For the years under audit, impairment loss was recognized on fixed income securities of \$6.9 million and equity securities of \$1.1 million as of December 31, 2022.

The net gains and losses on financial assets/liabilities are shown in the following table.

	2022					
	Ordinary Investment Income	Realised Gains and Losses	Unrealised Gains and Losses	Investment Expenses	Insurance Derivative Income	Net Income From Assets Under Own Management
Available for sale - Fixed income securities	\$ 148,528	\$ 5,630	\$ -	\$ (18,159)	\$ -	\$ 135,999
At fair value through profit and loss						
Derivative assets	-	7,741	649	-	36,841	45,231
Total	\$ 148,528	\$ 13,371	\$ 649	\$ (18,159)	\$ 36,841	\$ 181,230

	2021					
	Ordinary Investment Income	Realised Gains and Losses	Unrealised Gains and Losses	Investment Expenses	Insurance Derivative Income	Net Income From Assets Under Own Management
Available for sale - Fixed income securities	\$ 157,054	\$ 16,521	\$ -	\$ (39,604)	\$ -	\$ 133,971
At fair value through profit and loss						
Derivative assets	-	-	(17,724)	-	32,150	14,426
Total	\$ 157,054	\$ 16,521	\$ (17,724)	\$ (39,604)	\$ 32,150	\$ 148,397

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

20. Other income and expenses

Other income and expenses totaled \$312 million (2021: \$365.6 million) and consist of the following:

	2022	2021
Other income		
Income from contracts recognised in accordance with the deposit accounting method	\$ 314,505	\$ 295,327
Other interest income relating to financial guarantees	797	1,052
Other income	25,191	88,498
Total other income	340,494	384,877
Other expenses		
Expenses from contracts recognised in accordance with the deposit accounting method	(16,412)	(14,352)
Sundry expenses	(12,042)	(4,898)
Total expenses	(28,454)	(19,250)
Total other income and expenses	\$ 312,040	\$ 365,627

Financial guarantees

The Company has entered into one swap agreement with an affiliate in support of secured note obligations collateralized by underlying insurance commission streams and this transaction was recaptured during 2021. This transaction is accounted for as a Financial Guarantee under IAS39. The fee income of \$0.8 million (2021: \$1.2 million) is included in Other income and expenses on the Statements of Income.

Details of structured transaction that is accounted as financial guarantees at December 31, 2022 and 2021 are as follows (amounts in \$ millions):

December 31, 2022				
Transaction No.	Effective date	Initial term (years)	Notional value at December 2022	Notional value at December 2021
1	3/14/2016	13	\$ -	\$ -
Total			\$ -	\$ -

21. Taxes

Corporation tax is provided based on the profit or loss for the year. The Company is subject to USA corporation tax on qualifying trading operations at a rate of 21%. Corporation tax is recognized in the Statements of Comprehensive Income as part of the profit or loss.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Under current Bermuda law the Company is not required to pay any taxes in Bermuda on either income or capital gains. The Company made an irrevocable election under Section 953(d) of the U.S. Internal Revenue Code of 1986, as amended, to treat the Company as a domestic insurance company for U.S. federal income tax purposes. As such, the Company will be subject to U.S. federal income tax on its income as if it is a U.S. corporation.

A deferred tax asset is recognized in respect of temporary differences between the carrying amount of assets and liabilities for condensed financial reporting purposes and the amounts used for taxation purposes. The deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted at the reporting date. Deferred tax assets are netted against deferred tax liabilities where there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

The breakdown of actual and deferred income taxes was as follows:

	2022	2021
Actual tax for the year under review	\$ 72,424	\$ 15,043
Deferred taxes due to temporary differences	(31,078)	(879)
Total	\$ 41,346	\$ 14,164

Current income taxes payable at December 31, 2022 is \$13.8 million (2021: income tax receivable \$39.6 million). The following table presents a breakdown of the deferred tax assets and liabilities into the balance sheet items from which they are derived.

	2022	2021
Deferred tax assets		
Derivative assets	\$ -	\$ 447
Net operating losses	72,102	246,350
General expenses	2,131	6,233
Compensation	2,911	2,672
Sundry items	212	260
Investments	140,471	-
Subtotal	217,827	255,962
Less: unrecognized deferred tax assets	(9,430)	-
Total deferred tax assets	208,397	255,962
Deferred tax liabilities		
Derivative assets	(67)	-
Investments	-	(51,954)
Deferred acquisition costs	(62,918)	(55,839)
Liabilities from reinsurance business	(177,371)	(374,024)
Depreciable fixed assets	(470)	(960)
Total deferred tax liabilities	(240,826)	(482,777)
Net deferred tax liability	\$ (32,429)	\$ (226,815)

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Beginning with the 2022 tax year, the Company will file a consolidated federal tax return with HLRA Ber as the parent and HLRUS, Sand Lake Re, Inc. and ARCA1 as members of the consolidated group. In 2021, HLRA Ber filed a separate federal income tax return and HLRUS filed a consolidated tax return with Sand Lake Re, Inc. The net deferred tax liability of \$32.4 million includes deferred tax assets in an amount of \$72.1 million that relates to carried forward tax losses which belong to HLRA Ber. During 2022, HLRUS and Sand Lake Re, Inc. utilized all of its remaining \$35.2 million carried forward tax losses and HLRA Ber decreased its tax loss carry forward position by \$142.6 million. During 2022, the Company did not recognize \$9.4 million of capital deferred tax assets that management concluded were not more likely than not to be fully recoverable. For ordinary deferred tax assets, management believes that sufficient taxable temporary differences and future taxable profits will continue to be available to offset the carried forward tax losses. As such, the Company concluded that it is more likely than not that the ordinary deferred tax assets will be fully recoverable in the future. Currently, there are no income tax contingency accruals established pursuant to IAS 12.

The amount of cumulative tax benefit in other comprehensive income is \$109.1 million, which is net of unrecognized deferred tax assets of \$7.7 million, for unrealised losses on available-for-sale securities. (2021: \$54.2 million charge to other comprehensive income for unrealised gains on available-for-sale securities)

The reconciliation of expected income tax expense with the actual expense is as follows:

	2022	2021
Profit before taxes on income	\$ 39,532	\$ 14,037
Nondeductible expenses	229	161
Change in unrecognized deferred tax asset	1,684	-
Other	(99)	(34)
Actual expense for income taxes	\$ 41,346	\$ 14,164

22. Related party disclosures

The Company reinsures life assurance business written by its client companies (cedants) and business assumed from affiliates. The risks assumed generally reflect the risks inherent in the underlying life assurance policies and include mortality risk, morbidity risk, investment risk and lapse and surrender risk. The Company also assumes life insurance risk in alternative forms, including capital market risks.

Income Statement	2022			2021		
	Hannover Finance, Inc. (Parent)	Companies Related Through Common Control	Total	Hannover Finance, Inc. (Parent)	Companies Related Through Common Control	Total
Net premium earned	\$ -	\$ (15,690)	\$ (15,690)	\$ -	\$ (20,962)	\$ (20,962)
Net investment income	-	(7,910)	(7,910)	-	(38,694)	(38,694)
Total revenues	-	(23,600)	(23,600)	-	(59,656)	(59,656)
Total expenses	60	4,800	4,860	265	2,943	3,208
Other income/(expenses)	-	5,309	5,309	269	6,408	6,677
Finance costs	(1,391)	(16,015)	(17,406)	(3,363)	(16,154)	(19,517)
Net income/(loss)	\$ (1,331)	\$ (29,506)	\$ (30,837)	\$ (2,829)	\$ (66,459)	\$ (69,288)

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Balance Sheet	2022			2021		
	Hannover Finance, Inc. (Parent)	Companies Related Through Common Control	Total	Hannover Finance, Inc. (Parent)	Companies Related Through Common Control	Total
Reinsurance assets	\$ -	\$ (18,360)	\$ (18,360)	\$ -	\$ (19,829)	\$ (19,829)
Reinsurance liabilities	-	(10,100)	(10,100)	-	(2,776)	(2,776)
Loans and borrowings	-	(558,880)	(558,880)	(83,978)	(560,880)	(644,858)

All transactions and balances arise from the normal course of business and are unsecured.

23. Other investment expenses

The Company has an investment management agreement in place with a related party to manage the Company's investment portfolio. Investment management fees incurred during the year amounted to \$18.2 million (2021: \$39.6 million).

24. Statutory requirements

As a Class E insurer, the Company must at all times maintain a solvency margin and an enhanced capital requirement in accordance with the provisions of the Insurance Act. Each year, the Company is required to file with the Bermuda Monetary Authority (the "Authority") a capital and solvency return within four months of its relevant financial year end (unless specifically extended).

The prescribed form of capital and solvency return, primarily comprises the Insurer's Statutory Financial Return, Bermuda Solvency Capital Requirement ("BSCR"), and associated schedules including Form 4 EBS and various other schedules as prescribed in the 1978 Act, The Insurance Accounts Rules 2016, The Insurance (Prudential Standards) (Class C, Class D and Class E Solvency Requirement) Rules 2011, Insurance (Eligible Capital) Rules 2012, and Insurance (Public Disclosure) Rules 2015. The BSCR includes a standardized model used to measure the risk associated with an insurer's assets, liabilities and premiums, and a formula to take account of insurance related risk exposure. The Minimum Margin of Solvency ("MMS") is calculated on predetermined calculations as included in The Insurance Accounts Rules 2016.

Insurer's Enhanced Capital Requirements ("ECR") is calculated as the higher of the capital requirements as measured by the BSCR and MMS. The Authority requires all Class E insurers to maintain their capital at a target level which is 120% of ECR.

As at December 31, 2022, the Company's statutory capital and reserves exceeded all calculated minimum regulatory requirements.

The Company is prohibited from declaring or paying a dividend if its Class E statutory capital and surplus is less than its ECR, or if it is in breach of its solvency margin, or if the declaration or payment of such dividend would cause such breach. Further, the Company, as a Class E insurer, is prohibited from declaring or paying any dividend of more than 25% of its total statutory capital and surplus, (as shown on its statutory balance) unless it files (at least seven days before payment of such dividends) with the BMA an affidavit stating that it will continue to meet its relevant margins. The Company must obtain the BMA's prior approval for a reduction by 15% or more of the total statutory capital as set forth in its previous year's financial statements. These restrictions on declaring or paying dividends and distributions under the Insurance Act are in addition to those under the Companies Act 1981, which apply to all Bermuda companies.

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

Actual statutory capital and surplus, as determined using statutory accounting principles, along with a reconciliation to IFRS equity is as follows:

	2022
Total statutory capital and surplus	\$ 1,727,641
Non admitted assets	-
Statutory capital and surplus	1,727,641
Surplus note	(238,000)
Total IFRS Shareholder's equity	\$ 1,489,641

25. Capital management

The Company met the applicable local minimum capital requirements in the year under review. The parent company ensures that the local minimum capital requirements applicable to subsidiaries are always satisfied in accordance with the official requirements defined by insurance regulators.

26. Other Notes

26.1 Expenditures on personnel

The expenditures on insurance business, claims expenses (claims settlement) and expenditures on the administration of investments include the following personnel expenditures:

in USD thousands	2022	2021
Wages and salaries	\$ 48,126	\$ 45,904
Social security contributions and expenditure on provision and assistance		
Social security contributions	\$ 2,913	\$ 2,884
Expenditure for pension provision	4,848	4,941
Expenditure for assistance	5,263	5,086
	61,150	58,815
Total personnel expenditures	\$ 61,150	\$ 58,815

26.2 Defined contribution plan

The Company has a defined contribution plan based on length of service and the employee's income or level of contributions. The expense recognized for these obligations in the financial year in accordance with IAS 19 "Employee Benefits" was \$5.0 million (2021: \$5.0 million).

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

26.3 Leases

The Company leases various office premises, technical facilities and office equipment. The following items were recognized in the consolidated balance sheets as of December 31, 2022 in other assets and other liabilities in connection with the leases:

Leases in the balance sheet	2022	2021
Own-use real estate	\$ 11,422	\$ 11,858
Fixtures, fitting and equipment	88	88
Lease liabilities	2,452	4,884

The following amounts were recognized in the consolidated statement of income in administrative expenses in connection with the leases:

Amortization of right-of-use assets in connection with leases	2022	2021
Own-use real estate	\$ 1,795	\$ 2,488
Fixtures, fitting and equipment	18	18
Total	\$ 1,813	\$ 2,506

The interest expenses for lease liabilities for 2022 totaled \$113 thousand and \$187 thousand for 2021. The total amounts payable for leases in 2022 came to \$2.5 million (2021: \$4.9 million).

The Company holds four leases at the end of December 31, 2022. The last one is set to expire by August 2025.

Future Minimum Lease Payments	Amounts
2023	\$ 2,250
2024	561
2025	16
Subsequent years	-
	\$ 2,827

Hannover Life Reassurance Company of America (Bermuda) Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of US Dollars, unless noted in millions)

26.4 Assets on Deposit or Pledge as Collateral

As security for technical liabilities, the Company has established trust accounts. The securities held in the trust accounts are shown as available-for-sale investments and participating interest in other companies in the balance sheet. At December 31, 2022 and 2021, the amounts were as follows:

	December 31, 2022		
	Gross Restricted		
	Total General Account Current Year	Total From Prior Year	Increase (Decrease)
Asset category			
On deposit with states	\$ 1,049	\$ 1,276	\$ (227)
FHLB Capital Stock	8,873	9,113	(240)
Pledged as reinsurance collateral - bonds	117,800	203,111	(85,311)
Total restricted assets	\$ 127,722	\$ 213,500	\$ (85,778)

	December 31, 2021		
	Gross Restricted		
	Total General Account Current Year	Total From Prior Year	Increase (Decrease)
Asset category			
On deposit with states	\$ 1,276	\$ 2,720	\$ (1,444)
FHLB Capital Stock	9,113	15,000	(5,887)
Pledged as reinsurance collateral - bonds	203,111	232,972	(29,861)
Total restricted assets	\$ 213,500	\$ 250,692	\$ (37,192)

27. Subsequent events

Management has evaluated subsequent events through the date of the issuance of these financial statements, May 12, 2023, and other than as discussed below, determined that there were no events or transactions during this period that were required to be recorded or disclosed in the financial statements.

The financial statements have been approved by the Management on May 12, 2023.