HANNOVER RE (BERMUDA) LTD.

Financial Statements (With Independent Auditor's Report Thereon)

Year ended 31 December 2022

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Independent auditor's report

To the Board of Directors and Shareholder of Hannover Re (Bermuda) Ltd.

Our opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Hannover Re (Bermuda) Ltd. (the Company) as at December 31, 2022, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

What we have audited

The Company's financial statements comprise:

- the balance sheet as at December 31, 2022;
- the statement of income for the year then ended;
- the statement of comprehensive income for the year then ended;
- the statement of changes in shareholder's equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.

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

Independence

We are independent of the Company in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code) and the ethical requirements of the Chartered Professional Accountants of Bermuda Rules of Professional Conduct (CPA Bermuda Rules) that are relevant to our audit of the financial statements in Bermuda. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and the ethical requirements of the CPA Bermuda Rules.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, 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.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. 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.
- 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.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

lais Chartered Professional Accountants Ltd.

Hamilton, Bermuda

April 12, 2023

Balance Sheet as at 31 December 2022

Assets

in USD thousand	Notes	2022	2021
Fixed-income securities – available for sale	6, 8	3,425,159	3,659,719
Other financial assets – at fair value through profit and loss	7, 8	242,344	161,328
Other invested assets	6, 8	49,804	39,338
Cash and cash equivalents	5	140,069	96,481
Total investments and cash under own management		3,857,376	3,956,866
Funds withheld	9	134,937	117,688
Contract deposits	9	7,310	4,486
Reinsurance recoverables	10	841,840	908,214
Prepaid reinsurance premium	10	43,868	50,883
Deferred acquisition costs	9	463,394	539,777
Accounts receivable		533,628	452,068
Other assets	13	9,794	18,507
Intangible assets	12	31,357	41,809
Total assets		5,923,504	6,090,298
Liabilities	_		
in USD thousand	Notos	2022	2021
	Notes	2022	2021
Loss and loss adjustment expense reserve		2,557,568	2,361,051
Benefit reserve	10 10	2,557,568 30,040	2,361,051 21,140
Benefit reserve Unearned premium reserve	10 10 10	2,557,568 30,040 319,192	2,361,051 21,140 271,748
Benefit reserve Unearned premium reserve Provision for profit commission	10 10 10 10 10	2,557,568 30,040 319,192 16,717	2,361,051 21,140 271,748 7,482
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs	10 10 10 10 10 9	2,557,568 30,040 319,192 16,717 9,615	2,361,051 21,140 271,748 7,482 11,675
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld	10 10 10 10 10 9 9 9	2,557,568 30,040 319,192 16,717 9,615 1,665	2,361,051 21,140 271,748 7,482 11,675 2,020
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits	10 10 10 10 9 9 9 9 9	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits Reinsurance payable	10 10 10 10 9 9 9 9 9 11	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455 947,975	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554 919,572
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits Reinsurance payable Other financial liabilities – at fair value through profit and loss	10 10 10 10 9 9 9 9 9 11 11 7, 8	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455 947,975 23,700	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554 919,572 32,264
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits Reinsurance payable Other financial liabilities – at fair value through profit and loss Other liabilities	10 10 10 10 10 10 9 9 9 11 7, 8 14	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455 947,975 23,700 26,409	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554 919,572 32,264 15,253
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits Reinsurance payable Other financial liabilities – at fair value through profit and loss Other liabilities Dividends payable	10 10 10 10 10 9 9 9 11 7,8 14 18	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455 947,975 23,700 26,409 341,000	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554 919,572 32,264 15,253 460,000
Benefit reserve Unearned premium reserve Provision for profit commission Ceded deferred acquisition costs Ceded funds withheld Contract deposits Reinsurance payable Other financial liabilities – at fair value through profit and loss Other liabilities	10 10 10 10 10 10 9 9 9 11 7, 8 14	2,557,568 30,040 319,192 16,717 9,615 1,665 10,455 947,975 23,700 26,409	2,361,051 21,140 271,748 7,482 11,675 2,020 6,554 919,572 32,264 15,253

Total liabilities and shareholder's equity		5,923,504	6,090,298
Total shareholder's equity		1,614,168	1,956,539
Retained earnings		523,220	452,923
Accumulated other comprehensive income (loss)	19	(379,207)	33,461
Contributed surplus	17	1,365,633	1,365,633
Authorised, issued and fully paid, 104,522,359 shares of \$1 par value each	2, 16	104,522	104,522
Shareholder's equity			

The accompanying notes form an integral part of these financial statements

On behalf of the board Jungst öfel Mr. Clemen Director

Mrs. Chantal Cardinez Director

Hannover Re (Bermuda) Ltd. | Financial Statements 2022

Statement of Income for the year ended 31 December 2022

in USD thousand	Notes	2022	2021
Income			
Gross written premium		1,717,100	1,590,060
Ceded written premium		(302,202)	(418,079)
Change in gross unearned premium	10	(70,425)	(47,123)
Change in ceded unearned premium	10	(7,015)	(4,299)
Net premium earned		1,337,458	1,120,559
Other technical income		-	135
Ordinary investment income	6	81,336	68,016
Realised gains and losses on investments	6	(16,896)	(18,324)
Changes in fair value of financial instruments	6	(427)	10,633
Other investment expenses	6	(7,970)	(6,516)
Income/expense on funds withheld and contract deposits	6	1,971	848
Net investment income	6	58,014	54,657
Total revenue		1,395,472	1,175,351
Expenses			
Loss and loss adjustment expenses incurred	10	906,908	669,046
Change in benefit reserve (net)	10	10,873	4,605
Commission and brokerage (net), change in deferred acquisition costs		198,775	147,234
Other acquisition costs		9,707	8,307
Administrative expenses		28,604	26,004
Total expenses		1,154,867	855,196
Other income/expenses	20	171,330	152,228
Finance costs	15	(638)	(638)
Net income (all attributable to the shareholder)		411,297	471,745

The accompanying notes form an integral part of these financial statements

Statement of Comprehensive Income 2022

in USD thousand	2022	2021
Net Income	411,297	471,745
Other comprehensive (loss) income		
Reclassifiable to the statement of income		
Unrealised depreciation arising during the period	(426,846)	(76,409)
Reclassification adjustment for net realised gains and losses included in net income	14,017	(20,654)
Amortisation of net unrealised appreciation related to securities transferred to held to maturity	_	(8)
Foreign exchange rate differences	161	(54)
Other comprehensive loss for the year	(412,668)	(97,125)
Total comprehensive (loss) income for the year (all attributable to the shareholder)	(1,371)	374,620

The accompanying notes form an integral part of these financial statements

Statement of Changes in Shareholder's Equity 2022

in USD thousand	Share Capital	Contributed surplus	Accumulated other comprehensive income/(loss)	Retained earnings	Total shareholder's equity
At 1 January 2022	104,522	1,365,633	33,461	452,923	1,956,539
Net income	_	-	-	411,297	411,297
Other comprehensive loss	_	-	(412,668)	-	(412,668)
Dividends declared	-	-	-	(341,000)	(341,000)
At 31 December 2022	104,522	1,365,633	(379,207)	523,220	1,614,168
At 1 January 2021	104,522	1,365,633	130,586	441,278	2,042,019
Net income	_			471,745	471,745
Other comprehensive loss			(97,125)	_	(97,125)
Dividends declared				(460,100)	(460,100)
At 31 December 2021	104,522	1,365,633	33,461	452,923	1,956,539

The accompanying notes form an integral part of these financial statements

Statement of Cash Flows 2022

in USD thousand	2022	2021
I. Cash flow from operating activities		
Net income	411,297	471,745
Adjustments for non-cash items in net income:		
Amortization of intangible assets	10,452	10,452
Depreciation of other assets	1,466	1,199
Realised gains and losses on investments	16,895	18,324
Changes in fair value of financial instruments (through profit or loss)	427	(10,633)
Amortisation of investments	6,226	14,762
Impairment	7,186	193
Changes in accrued interest	(1,239)	(649)
Effect of changes in exchange rates	23,729	4,146
Net changes in non-cash balances relating to operations:		
Changes in funds withheld	(23,332)	3,060
Changes in contract deposits (net)	1,751	(8,031)
Changes in accounts receivable	(123,799)	(124,857)
Changes in reinsurance payable	28,403	55,863
Changes in ceded funds withheld	(201)	4
Changes in unearned reinsurance premium (net)	77,440	51,422
Changes in loss and loss adjustment expense reserve (net)	354,567	208,418
Changes in benefit reserve (net)	10,873	4,605
Changes in deferred acquisitions costs (net)	40,302	63,259
Changes in other assets and liabilities (net)	(69,664)	(9,630)
Cash flows provided by operating activities	772,779	753,652
II. Cash flows from investing activities		
Fixed-income securities – available for sale including short-term investments		
Maturities and sales	1,276,590	2,050,158
Purchases	(1,522,853)	(2,352,023)
Fixed-income securities – held to maturity		
Maturities	-	11,807
Other invested assets		
Redemptions	15,697	16,488
Capital calls	(30,186)	(26,329)
Cash flows from the sale/(acquisition) of tangible and intangible assets (net)	(320)	(54,251)
Cash flows used in investing activities	(261,072)	(354,150)
III. Cash flows from financing activities		
Dividends paid	(460,000)	(380,100)
Interest paid	(1,670)	(590)
Change in lease liabilities	(920)	(878)
Cash flows used in financing activities	(462,590)	(381,568)
IV. Exchange rate differences on cash and cash equivalents	(5,529)	(1,146)
Cash and cash equivalents at beginning of year	96,481	79,693
Change in cash and cash equivalents (I.+ II.+ III.+ IV.)	43,588	16,788
Cash and cash equivalents at end of year	140,069	96,481

Notes to the Financial Statements

1. Corporate information

Hannover Re (Bermuda) Ltd. ("HRBer" or the "Company") is a wholly owned subsidiary of Hannover Re Holdings (UK) Limited (the "Immediate Parent"), a company incorporated in the U.K. The Immediate Parent is wholly owned by Hannover Rück Beteiligung Verwaltungs GmbH which is wholly owned by Hannover Rückversicherung SE ("Hannover Rück SE" or "the Parent"), a company incorporated in Germany and trading internationally under the brand name Hannover Re. Hannover Rück 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 79.0%) by HDI Haftpflichtverband der Deutschen Industrie V.a.G. ("HDI"), a German mutual insurance company. The Company is a limited company incorporated and domiciled in Bermuda. The registered office is located at Victoria Place, 31 Victoria Street, Hamilton, Pembroke, HM10, Bermuda.

The Company is a Dual License holder of both a Class 4 and a Class E license issued under the Insurance Act, 1978 of Bermuda and related regulations to write all classes of property, casualty and life business.

The Company writes property catastrophe reinsurance contracts on an excess of loss basis. Property catastrophe reinsurance covers unpredictable events such as tropical cyclones, windstorms, hailstorms, earthquakes, freezes, riots and other man-made or natural disasters. Every property catastrophe excess of loss contract written by the Company provides for aggregate limits and attachment points. The Company also assumes cyber, workers' compensation, marine, aviation, credit surety, motor, casualty, personal accident and terrorism contracts primarily on an excess of loss basis.

The Company also reinsures life assurance business written by its client companies (cedants). The risks assumed generally reflect the risks inherent in the underlying life assurance policies and include mortality risk, morbidity risk, investment risk, lapse risk and surrender risk. The Company may also assume credit risk in respect of its client companies.

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 ("IFRIC").

These financial statements were examined by the Board of Directors and approved on 12 April 2023 and hence released for publication.

2.2. Basis of measurement

The financial statements have been prepared on the historical cost basis. See Note 3 for the exceptions to this.

2.3. Functional and presentation currency

The financial statements are presented in United States Dollars, 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 judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected. The area involving a higher degree of judgment and where estimates are significant to the financial statements are the reinsurance assets and liabilities. This is disclosed further in Notes 3, 9 and 10 to these financial statements.

3. Summary of significant accounting policies

In the Company's efforts to meet international disclosure standards and to meet the requirements of the local regulators, the Company has prepared financial statements in accordance with IFRS.

The financial statements reflect all IFRS in force as at 31 December 2022, as well as all interpretations issued by IFRIC, the application of which was mandatory for the 2022 financial year.

IFRS 4.38 et seq. "Insurance Contracts" requires disclosures of the nature and extent of risks stemming from reinsurance contracts, while IFRS 7.31-42 "Financial Instruments: Disclosures" requires similar information on risks from financial instruments. The disclosures resulting from these requirements are included in Note 4. With regard to the disclosures required by IFRS 4 and IFRS 7, we would refer in particular to 4.2 Technical risks and 4.3 Market risks respectively.

Since 2002, the standards adopted by the International Accounting Standards Board ("IASB") have been referred to as 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.

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.

3.1. New accounting standards or accounting standards applied for the first time

No amendments to existing standards were applied in the 2022 financial year that would have had significant implications for Hannover Re's net assets, financial position or results of operations.

3.2. 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 was deferred to financial years beginning on or after 1 January 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 reinsurance contracts, the Company will apply the general measurement model to its entire business.

The GMM measures assets and liabilities from reinsurance business by the fulfilment cash flows plus the contractual service margin. The fulfilment cash flows 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 recognised in the contractual service margin. 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 recognise the loss expected at time of acquisition directly in profit or loss in the so-called "loss component". The contractual service margin represents the unearned profit from existing contracts that is to be recognised in the statement of income as the service is performed across the period of coverage. The Company will discount all cash flows using currency-specific, risk-free yield curves that are adjusted to reflect the 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.

As a general principle, 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 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 each of the aforementioned transition arrangements, differentiated according to certain groups of contracts.

The application of IFRS 17 will have a number of implications for the structure of the 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 recognised 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 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, but is instead being replaced with insurance revenue that is defined in such a way as to facilitate comparison with the revenue disclosures of other industries. Neither savings / investment components nor certain retroceding commissions can be recognised in insurance revenue in future. Insurance revenue is instead reported when it is earned by recognising 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.

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 recognised as profit or loss in the statement of income or directly in equity. This "OCI option" can be exercised on the level of individual portfolios and will be utilised by the Company.

Changes in assumptions that do not relate to interest rates or financial risks are not recognised 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 (onerous). 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 recognised 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 onerous. At the transition date of 1 January 2022 the initial application of IFRS 17 gives rise to changes in the measurement of key items in the balance sheet:

The amount of the technical liabilities and assets changes due to the concepts 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, including for example the diverging definition of contract boundaries or the aforementioned grouping of contracts for measurement purposes.

For HRBer, in the property and casualty reinsurance segment, the expectation is that there is only a minimal change overall in the amount of the net technical liabilities and shareholder's equity. While the discounting of cash flows reduces the net liability, this effect is moderate owing to what is normally the short duration of the contracts. The effect of discounting is offset by recognition of the contractual service margin, the loss component, the risk adjustment and other measurement effects.

The technical liabilities in the life and health reinsurance segment are also not expected to change materially.

The expectation is that at the transition date of 1 January 2022, there is an immaterial loss component, in the property and casualty reinsurance segment and no loss component for the life and health reinsurance segment.

IFRS 9 "Financial Instruments" will replace IAS 39 "Financial Instruments: Recognition and Measurement", which is currently used by the Company. 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.

Initial mandatory application of the standard was envisaged for annual reporting periods beginning on or after 1 January 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 1 January 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 that the Company's predominant activity is the issuance of reinsurance contracts within the scope of IFRS 4. The Company reviewed the application requirements based on their Financial Statements as at 31 December 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.

At the transition date of 1 January 2022 we expect the changeover in the recognition of financial assets and liabilities to have an immaterial effect on the amount of shareholder's equity.

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 section 6.1 of the notes to the financial statements "Investments under own management".

In addition to the accounting principles described above, the IASB has issued the following standards, interpretations and amendments to existing standards with possible implications for the financial statements of the Company, application of which was not yet mandatory for the year under review and which are not being applied early by the Company. Initial application of these new standards is not expected to have any significant implications for the Company's net assets, financial position or results of operations:

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	1 January 2023
February 2021	Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting policies	1 January 2023
February 2021	Amendments to IAS 8 Accounting policies, Changes in accounting Estimates and Errors: Definition of Accounting Estimates	1 January 2023
May 2021	Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction	1 January 2023
September 2022	Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback	1 January 2024

3.3. Reinsurance contracts

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 recognised in accordance with the pertinent provisions of US GAAP (United States Generally Accepted Accounting Principles) as applicable on the date of initial application of IFRS 4 on 1 January 2005.

IFRS 4 "Insurance Contracts" represents the outcome of Phase I of the IASB project "Insurance Contracts" and constitutes a transitional arrangement. Refer to Note 3.2 for more information.

a) Earned premiums and unearned premium

Premiums assumed are estimated based on information received from ceding companies and reinsurance intermediaries and are included in income on a straight-line basis over the period of underlying coverage with the unearned portion deferred in the balance sheet. Reinsurance premiums ceded are similarly pro-rated over the terms of the treaties with the unearned portion being deferred in the balance sheet as prepaid reinsurance premium. Income and expenses in connection with reinsurance treaties are recognised on a basis consistent with the underlying risk of the reinsured business. Adjustments to premium estimates are recorded when updated information is reported by the ceding companies and reinsurance intermediaries. Such adjustments could result in significantly higher or lower premiums than originally estimated by the Company.

b) Reinstatement premiums and retrospectively-rated premiums

Reinstatement premiums and retrospectively-rated premiums are recognised in accordance with provisions of the reinsurance contracts. Reinstatement premiums are premiums charged for the restoration of the reinsurance limit, generally coinciding with the payment of losses by the Company. Reinstatement premiums are earned immediately whilst the original contract premium continues to be earned over the full period of the contract. Retrospectively-rated premiums triggered by losses are earned immediately.

Premium deficiencies are recognised in the statement of income in the period in which they arise.

3.4. Financial assets

As a basic principle we recognise 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.

a) Financial assets 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 measured at amortised cost. The corresponding premiums or discounts are recognised in profit or loss across the duration of the instruments using the effective interest rate method. An impairment loss is taken in the event of permanent impairment.

b) Financial assets at fair value through profit or loss

Such assets consists of securities held for trading and those classified as measured at fair value through profit or loss since acquisition. This refers principally to unsecured debt instruments issued by corporate issuers and derivative financial instruments.

Within the scope of the fair value option provided under IAS 39 "Financial Instruments: Recognition and Measurement", according to which financial assets may be carried at fair value on first-time recognition subject to certain conditions, all structured securities that would have needed to have been broken down had they been recognised as available for sale or under loans and receivables are also recognised here. The Company makes use of the fair value option solely for selected sub-portfolios of its financial assets. Securities held for trading and securities classified as measured at fair value through profit or loss since acquisition are carried at their fair value on the balance sheet date. If stock market prices are not available for use as fair values, the carrying amounts are determined using generally acknowledged measurement methods. All changes in fair values from this measurement are recognised in investment income. The classification of financial assets at fair value through profit or loss is compatible with the Company's risk management strategy and investment strategy, which are oriented extensively towards economic fair value variables.

Derivatives are financial instruments, the fair value of which is derived from an underlying instrument such as equities, bonds, indices, or currencies. Derivatives are recognised initially at fair value; attributable transaction costs are recognised in profit and loss when incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes therein are recognised immediately in income.

The fair values of the derivative financial instruments were determined on the basis of the market information available at the balance sheet date and using the effective interest rate method. If there is a lack of deep and liquid market information, a mark-to-model valuation approach is used. For insurance swap-type derivatives, a discounted cash flow approach using current best estimate assumptions is utilised.

c) Financial assets classified as available for sale

Financial assets classified as available for sale are carried at fair value; accrued interest is recognised in this context. Unrealised gains and losses arising out of changes in the fair value of securities held as available for sale are recognised in shareholder's equity after deduction of deferred taxes. All financial instruments that do not satisfy the criteria for classification as held to maturity, loans and receivables, at fair value through profit or loss, or trading are allocated to the category of available for sale.

3.5. Establishment of the fair value of financial instruments carried as assets or liabilities

The fair value of financial instruments carried as assets or liabilities is established using the methods and models described below. The fair value of a financial instrument corresponds to the amount that the Company would receive or pay if it were to sell or settle the said financial instrument on the balance sheet date. Insofar as market prices are listed on markets for financial assets, their bid price is used; financial liabilities are valued at ask price. In other cases, the fair values are established on the basis of the market conditions prevailing on the balance sheet date for financial assets with similar credit rating, duration and return characteristics or using recognised models of mathematical finance. The Company uses a number of different valuation models for this purpose. The details are set out in the table below. Financial assets for which no publicly available prices or observable market data can be used as inputs (financial instruments belonging to fair value hierarchy Level 3) are for the most part measured on the basis of proven valuations drawn up by knowledgeable, independent experts, e.g. audited net asset value, the plausibility of which has previously been subjected to systematic review. For further information, see our explanatory remarks on the fair value hierarchy in Note 8.

a) Investment income

Investment income is recognised on the accrual basis and includes the amortisation of premium or discount on debt securities purchased at amounts different from their par value.

b) Netting of financial instruments

Financial assets and liabilities are only netted and recognised in the appropriate net amount if a corresponding legal claim (reciprocity, similarity and maturity) exists or is expressly agreed by contract, in other words if the intention exists to offset such items on a net basis or to effect this offsetting simultaneously.

c) Impairment loss and reversals

Management records an impairment loss to fair value through net income for any impairment in the value of securities. Any subsequent recovery in the fair value of an impaired debt instrument classified as available for sale is reversed through net income, while a recovery in an impaired available for sale equity security is recognised in other comprehensive income.

Valuation models				
	Financial instrument	Parameter	Pricing model	
	Unlisted plain vanilla bonds, interest rate swaps	Yield curve	Present value method	
Fixed-income securities	Unlisted structured bonds	Yield curve, volatility surfaces	Hull-White, Black-Karasinski, LIBOR market model etc.	
	Unlisted ABS / MBS, CDO / CLO	Risk premiums, default rates, prepayment speed and recovery rates	Present value method	
Other invested assets	Unlisted equities, Life Settlement policies and equity investments		Capitalised earnings method, discounted cash flow method, multiple-based approaches	
	Private equity funds, private equity real estate funds	Audited net asset values (NAV)	Net asset value method	
	Unlisted bond, equity and real estate funds	Audited net asset values (NAV)	Net asset value method	
	Forward exchange transactions, foreign exchange swaps, non-deliverable forwards	Yield curves, spot and forward rates	Interest parity model	
Other financial assets – at fair value through profit or loss	OTC stock options, OTC stock index options	Listing of the underlying share, implicit volatilities, money-market interest rate, dividend yield	Black-Scholes	
	Insurance derivatives	Fair values, actuarial parameters, yield curve	Present value method	
	Cross-currency swaps	Yield curve, currency spot rates	Present value method	
	Total return swaps	Listing of underlying, yield curve	Present value method	

3.6. Other invested assets

Other invested assets includes invested funds, shares in limited partnerships, and investments in life settlement contracts. Invested funds and shares in limited partnerships are carried at fair value, life settlement contracts are valued on a policy-by-policy basis using a discounted cash flow methodology. The fair value at the point of purchase is assumed to be equal to the purchase price. The fair value at future dates is calculated as the present value of expected future cash flow discounted at the risk-free term structure of spot rates plus a policy-specific risk margin. Net changes in fair value are reflected in the statement of income in unrealised gains and losses on investments for life settlements. Invested funds and shares in limited partnerships are classified as available for sale.

3.7. Cash and cash equivalents

Cash and cash equivalents are carried at face value. For purposes of the statement 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.

3.8. Funds withheld

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

3.9. Contract deposits

Contract deposits pertain to 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 in conjunction with SFAS 113 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 "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/expenses. The payment flows resulting from these contracts are shown in the cash flow statement under operating activities.

3.10. Accounts receivable

Accounts receivable 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. Accounts receivable predominantly represent amounts due from ceding companies including amounts due from related parties. See Note 23 for details of amounts due from related parties.

3.11. Deferred acquisition costs

Deferred acquisition costs principally consist of commissions in the form of financing to cedants, brokerage, and other variable costs directly related with the acquisition or renewal of existing reinsurance contracts. These acquisition costs are capitalised and amortised 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 amortisation of deferred acquisition costs. The Company also performs recoverability testing to ensure that expenses deferred during the current year are recoverable against future profits.

3.12. Reinsurance recoverables

Shares of our retrocessionaires in the loss and loss adjustment expense reserve are calculated according to the contractual conditions on the basis of the gross loss and loss adjustment expense reserve. Appropriate allowance is made for credit risks.

3.13. Intangible assets

Intangible assets are renewal rights acquired for certain treaty and facultative portfolios. They are measured at acquisition cost and will be amortised over 5 years. The renewal rights are tested regularly for impairment based on the actual development of the business, which is subject to the renewal rights and impairment losses are taken if necessary. Refer to Note 12 for further details.

3.14. Other assets

Fixtures, fittings and equipment are recorded at cost less accumulated depreciation calculated on a straight-line basis, over the estimated useful lives of the assets, which are as follows:

Computer equipment	5 years
Fixtures and fittings	5 years
Leasehold improvements	5 years
Vehicles	7 years

The Company leases its premises and some office equipment and as such right-of-use assets, complementary right-of-use accumulated depreciation and lease liabilities have been recorded on the Company's balance sheet. Right-of-use assets are measured at amortised cost in the amount of the initial measurement of the lease liability, adjusted by probable restoration costs. These assets are amortised on a straight-line basis, over the term of the lease contract, which range from 2 to 5 years (see also Note 13).

Receivables from ISDA - financial guarantees pertains to the actual fee income outstanding from ISDA – financial guarantees. Refer to Note 7 for further details.

3.15. Loss and loss adjustment expenses

Reserves are established for payment obligations from reinsurance losses that have occurred 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 loss and loss adjustment expense reserves are 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 insured loss, notification by the insurer and pro-rata payment of the loss by the reinsurer. For this reason the realistically estimated future settlement amount based on long-standing established practice is carried out. Recognised actuarial methods are used for estimation purposes. In this regard we make allowance for past experience, currently known facts and circumstances, the expertise of the market units as well as other assumptions relating to the future development, in particular economic, social and technical influencing factors. Future payment obligations are not discounted for the time value of money. The Company involves an actuary in the annual reserving process.

Loss and loss adjustment expense reserves are shown gross in the balance sheet, i.e. before deduction of the share attributable to our reinsurers.

3.16. Benefit reserves

Benefit reserves are comprised of the underwriting reserves for claims of ceding companies in life and health reinsurance. Benefit reserves are determined using actuarial methods on the basis of the present value of future payments to cedants less the present value of premium still payable by cedants. The calculation includes assumptions relating to mortality, disability, lapse rates and the future interest rate development. The actuarial bases used in this context allow an adequate safety margin for the risks of change, error and random fluctuation. They correspond to those used in the premium calculation and are adjusted if the original safety margins no longer appear to be sufficient.

3.17. Shareholder's equity

The items "common shares" and "contributed surplus" are comprised of the amounts paid in by the Immediate Parent. In addition to the statutory reserves of the Company and the allocations from net income, the retained earnings consist of reinvested profits generated by the Company in previous periods. For retrospective change of accounting policies, the adjustment for previous periods is recognised in the opening balance sheet value of the retained earnings and comparable items of the earliest reported period.

Unrealised gains and losses from the fair value measurement of financial instruments held as available for sale are carried in accumulated other comprehensive income under unrealised gains and losses on investments.

3.18. 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 and disclosed in accordance with IAS 24 and include business both assumed and ceded under usual market conditions.

See Note 23 for further details.

3.19. Loans and borrowings

Liability loans and borrowings are from affiliated companies which are measured at amortised cost at the balance sheet dates. See Note 15 for further details.

3.20. Currency translation

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the date of the transactions. Foreign exchange gains and losses resulting from these transactions and balances are recognised in the statement of income for the year.

Foreign currency assets and liabilities are translated at exchange rates in effect at the balance sheet date. Exchange rate differences from the translation of assets and liabilities are recognised directly in the statement of income. Foreign currency gains and losses from components of equity are recognised in the statement of other comprehensive income.

3.21. Impairment of assets

As at each balance sheet date, we review our financial assets with an eye to the need to take impairments. Permanent impairments on all invested assets are recognised directly in the statement of income. In this context, we take as a basis the same indicators as mentioned below for fixed-income securities. Qualitative case-by-case analysis is also carried out. 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 and loans, 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. With the exception of value adjustments taken on accounts receivable, we recognise impairments directly on the assets side – without using an adjustment account – separately from the relevant items. If the reasons for the write down no longer apply, a write-up is made in income up to at most the original amortised cost in the case of fixed-income securities.

3.22. Employee benefits

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognised as an employee benefit expense when they are due. If the Company has prepaid contributions, they are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

3.23. Lease liabilities

Lease liabilities are initially measured at the present value of essentially all lease payments that are not variable or dependent on an index or interest rate. (See Note 14).

3.24. Consolidation of special purpose entities

IFRS 10 "Consolidated Financial Statements" introduced a single control model to be used when assessing control over another entity. Under IFRS 10, control results from an investor having: power over the investee, exposure or rights to variable returns from its investment with the investee; and the ability to use its power over the investee to affect the amounts of its returns from the investee.

Some transactions are effected with the involvement of ceding special purpose entities as contracting parties that are established by parties outside the Company and from which the Company assume certain underwriting and/or financial risks. The transactions serve the purpose, for example, of transferring extreme mortality risks above a contractually defined retention or transferring longevity risks. Since the Company does not bear the majority of the economic risks or benefits arising out of its business relations with these special purpose entities and cannot exercise a controlling influence over them, there is no consolidation requirement for the

Company.

Depending upon the classification of the contracts pursuant to IFRS 4 or IAS 39, the transactions are recognised either as insurance contracts or as derivative financial instruments or as financial guarantees. Refer to notes 6, 7, 8, 13 and 20.

4. Management of technical and financial risks

4.1. General risk management

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 risk management system has been approved by the Company's Board of Directors and forms part of the annual submissions to the local regulator the Bermuda Monetary Authority (BMA).

As part of a holistic approach to risk management, the Company takes into account numerous relevant scenarios. In addition, extreme scenarios are analysed, their effect on key balance sheet variables and performance indicators are determined, evaluated in relation to the planned figures and alternative courses of action are identified.

4.2. Technical risks

The Company's exposure to insurance risk is mitigated through the existence of Underwriting Guidelines and Exposure Management 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. Concentrations of insurance risk is monitored through regular reporting of business exposures by currency, line of business, insured event, geographical area and cedant.

Property and Casualty (P&C)

The P&C segment expects claims experience will generally be characterised by low frequency and high severity claims, which it assumes from a worldwide-diversified book of business that covers exposures across various catastrophe zones and perils, certain of which are protected by retrocession programs. This includes natural catastrophe risk and man-made catastrophe risk. The segment manages this exposure to catastrophic events with dedicated capacities, limiting the amount of its exposure in each geographic zone or for defined scenarios.

The under reserving of claims constitutes a significant technical risk. Loss reserves are determined using actuarial methods, primarily based on information provided by cedants and supplemented as necessary by additional reserves established on the basis of the Company's own loss assessments. Reserves are set aside for claims that have occurred and been reported to the insurer, but in respect of which the amount is not yet known and which therefore cannot yet be paid. There are also claims that do not manifest themselves until a later stage and which are therefore only reported by the policyholder to the insurer and by the insurer to its reinsurer sometime after their occurrence. Reserves must be established for such Incurred But Not Reported (IBNR) claims because years often elapse until the final settlement of such losses. This is especially true of liability claims. For certain catastrophic events, there is considerable uncertainty underlying the assumptions and associated estimated reserve for loss and loss adjustment expenses. These estimates are reviewed regularly and as experience develops and new information becomes known, the reserves are adjusted as necessary. Uncertainties in relation to reserving are therefore unavoidable. The IBNR reserve is calculated on a differentiated basis according to risk categories and regions.

Life and Health (L&H)

The Company's main insurance risks in its L&H segment are Mortality risk, Catastrophe risk, Longevity risk, Lapse risk, Morbidity and Disability risk. These risks are further described as follows:

Mortality risk

The Company is exposed to mortality risk through the reinsurance of life insurance business from its cedants. The reinsurance structures 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 of USD 5.0 million per life, and has retrocession arrangements in place to accept risk in excess of the retention limit.

Catastrophe risk

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

Longevity risk

The Company is exposed to longevity risk via longevity swaps and financial solutions business. Exposure via longevity swaps is mitigated considerably as the swap terms are truncated to reduce exposure to increasing mortality improvements. The financial solution treaties are structured to mitigate the extent of the Company's exposure to longevity risk.

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 rely on the persistency of the underlying business. The Company is party to a range of cash and non-cash financing structures with cedants across the globe. Treaties are structured to mitigate the extent of the Company's exposure to lapse risk.

Morbidity and Disability risk

The Company's exposure to morbidity and disability risk is primarily through a non-proportional transaction in China. The Company provides short-term cover against excess claims on a diversified book of critical illness products. In addition, the Company is moderately exposed to morbidity and disability risk through the inclusion of disability and critical illness products in the blocks underlying some of the Company's financing treaties

Sensitivity to insurance risks (L&H)

The Company assesses its exposure to insurance risk through Solvency II 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 its Solvency II numbers quarterly for Group reporting purposes. The methodology and assumptions used are in line with EIOPA Principles.

The table below shows the sensitivity of the Company's L&H segment economic capital as at 31 December 2022 under a range of insurance stresses:

in USD thousand	2022	2021
Mortality+5%	(9,660)	(8,449)
Mortality-5%	8,365	9,192
Disability/Morbidity+5%	(3,478)	(3,455)
Lapse+10%	(7,185)	(9,030)
MaintenanceExpenses+10%	(2,265)	(2,363)

Movements in sensitivities are caused by changes in projection horizons and in assumptions of the underlying L&H treaties.

4.3. Market risks

The overriding principle guiding the Company's investment strategy is capital preservation while giving adequate consideration to the security, liquidity, mix and spread of the assets. Risks in the investment sector consist primarily of market, credit, spread and liquidity risks. The most significant market price risks are interest rate and currency risks. Insurance contract liabilities are not directly sensitive to the level of market interest rates, as they are undiscounted and contractually non-interest-bearing.

Due to the Company's geographic diversification of business, the Company does have a minimal net exposure to currency risk, this is because the risk is largely mitigated by the Company's asset and liability currency matching policy and currency hedging strategy which employs the use of currency forwards and swaps to reduce the impact of currency movements on the Company's balance sheet and income statement. Exposure to market risk is also controlled through the existence of limits and thresholds in the Company's Underwriting and Investment Guidelines.

In order to monitor interest rate risks, management uses stress tests that estimate the loss potential under extreme market conditions as well as sensitivity and duration analyses that complement the Company's range of risk management tools. Interest rate risks refer to an unfavourable change in the value of financial assets held in the portfolio due to changes in the market interest rate level. One of management's central objectives of this strategy is to match cash flows on the assets and liabilities sides as closely as possible. In addition, management uses defined duration ranges within which asset managers can position themselves opportunistically according to their market expectations. The parameters for these ranges are directly linked to the Company's risk-carrying capacity. The below table shows the estimated impact a +/- 100 BPS would have on our fixed income portfolio:

in USD thousand	2022	2021
Interest Rate Risk	Equity	Equity
+100 basis point shift in yield curves	(137,093)	(183,460)
-100 basis point shift in yield curves	147,778	201,171

There is nil impact on the statement of income as our fixed income security portfolio is classified as available for sale as such unrealised gains and losses arising out of changes in the fair value of securities are recognised in shareholder's equity as opposed to the statement of income. Management spreads these risks through systematic diversification across various sectors and regions.

Further information on the risk concentrations of our investments can be obtained from the tables on the rating structure of fixedincome securities as well as on the currencies in which investments are held in Note 6.

4.4. Credit risks

Bad debt risks in reinsurance are of relevance to the Company because the business that the Company accepts is not always fully retained, but instead portions are retroceded as necessary. Retrocession partners are therefore carefully selected in light of credit considerations. This is also true of the Company's broker relationships, under which risks may occur inter alia through the loss of the premium paid by the cedant to the broker.

The Company assumes exposure to credit risk through the risk of cedant default. This risk is controlled through the Company's Underwriting Guidelines by the existence of maximum exposure limits per cedant. An internal assessment of the credit risk of non-rated entities are performed as part of the Underwriting process.

Credit risks may arise out of a failure to pay (interest and/or capital repayment) or change in the credit status (rating downgrade) of issuers of securities. The Company attaches vital importance to credit assessment conducted on the basis of the quality criteria set out in the investment guidelines. See Note 6.5 for the rating structure of fixed-income securities and Note 9.2 for additional credit risk disclosure.

4.5. Liquidity risks

The liquidity risk refers to the risk that it may not be possible to sell holdings or close open positions due to the illiquidity of the market – or to do so only with delays or price markdowns – as well as the risk that the traded volumes influence the markets in question. Regular liquidity planning and a liquid asset structure are used by the Company to make the necessary payments. The Company manages the liquidity risk inter alia by allocating a liquidity code to every security. Adherence to the limits defined in the investment guidelines for each liquidity class is subject to daily control. The spread of investments across the various liquidity classes is specified in the investment reports and controlled by limits. See Note 6.1 for the maturities of fixed-income securities and Note 10.4 for expected maturities of the technical reserves.

5. Cash and cash equivalents

in USD thousand	2022	2021
Cash at bank	66,357	96,481
Money market funds	13,385	_
Time deposits	60,327	_
Total cash and cash equivalents	140,069	96,481

The average interest rate on time deposits at 31 December 2022 was 3.92% (2021 – 0.00%) and the maturity of time deposits was 10 days (2021 - 0 days).

6. Investments including income and expenses

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

The investments also encompass investments in other invested assets, cash and cash equivalents and funds withheld/contract deposits. For further explanation, see Note 3 "Summary of significant accounting policies".

6.1. Maturities of the fixed-income securities including cash and cash equivalents

	2022		2021		
in USD thousand	Amortised cost ¹	Fair value	Amortised cost ¹	Fair value	
Available for sale, including cash and cash equivalents					
due in one year	824,748	820,958	540,828	542,873	
due after one through two years	382,399	371,707	306,877	310,977	
due after two through three years	282,763	265,280	359,397	366,726	
due after three through four years	373,000	341,468	262,690	265,770	
due after four through five years	251,664	228,542	355,259	357,246	
due after five through ten years	1,470,396	1,255,882	1,463,718	1,465,470	
due after more than ten years	360,361	281,390	436,754	447,138	
Total	3,945,331	3,565,227	3,725,523	3,756,200	

1 Including 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.

6.2. Amortised cost, unrealised gains and losses, accrued interest and fair value on the portfolio of investments

			2022		
	Cost or		Unrealised	Unrealised	
in USD thousand	Amortised cost	Accrued interest	gains	losses	Fair value
Available for Sale					
Fixed-income securities					
Government debt securities of EU member states	346,489	1,690	440	15,586	333,033
US Treasury notes	1,436,331	5,674	38	155,490	1,286,553
Debt securities issued by semi- governmental entities	135,859	545	_	11,906	124,498
Debt securities issued by other foreign governments	301,899	794	14	6,076	296,631
Corporate securities	1,403,581	11,171	229	177,753	1,237,228
Covered bonds	32,303	236	-	3,370	29,169
Asset-backed securities	126,922	1,768	-	10,643	118,047
Total fixed-income securities	3,783,384	21,878	721	380,824	3,425,159

in USD thousand			2021		
	Cost or Amortised cost	Accrued interest	Unrealised gains	Unrealised losses	Fair value
Available for Sale					
Fixed-income securities					
Government debt securities of EU member states	152,050	799	1,271	401	153,717
US Treasury notes	1,241,412	4,924	13,617	3,568	1,256,385
Debt securities issued by semi- governmental entities	176,200	590	2,139	1,358	177,573
Debt securities issued by other foreign governments	257,829	667	120	718	257,898
Corporate securities	1,611,100	12,761	38,937	18,351	1,644,447
Covered bonds	50,002	368	332	284	50,418
Asset-backed securities	119,668	671	152	1,210	119,281
Total fixed-income securities	3,608,261	20,780	56,568	25,890	3,659,719

The carrying amounts of the fixed-income securities classified as available for sale correspond to their fair values, in the case of interest–bearing assets including accrued interest.

		2022					
in USD thousand	Cost or Amortised cost Accrued interest		Unrealised gains	Unrealised losses	Fair value		
Other invested assets							
Available for Sale							
Invested funds	3,027	-	2,004	-	5,031		
Shares in limited partnerships	44,180	-	670	1,777	43,073		
At fair value through profit and loss							
Life Settlement contracts	1,700	-	-	-	1,700		
Total other invested assets	48,907	-	2,674	1,777	49,804		

in USD thousand					
	Cost or Amortised cost	Accrued interest	Unrealised gains	Unrealised losses	Fair value
Other invested assets					
Available for Sale					
Invested funds	5,000		3,275	_	8,275
Shares in limited partnerships	29,681		416	907	29,190
At fair value through profit and loss					
Life Settlement contracts	2,189		29	345	1,873
Total other invested assets	36,870	-	3,720	1,252	39,338

6.3. Investment income

in USD thousand	2022	2021
Fixed-income securities – held to maturity	_	221
Fixed-income securities – available for sale	85,691	82,460
Other invested assets	_	79
Interest on investments	85,691	82,760
Amortisation	(6,226)	(14,762)
Interest on cash and cash equivalents	1,871	18
Ordinary investment income	81,336	68,016
Realised gains on investments	4,134	19,452
Realised losses on investments	(21,030)	(37,776)
Changes in fair value of financial instruments	(427)	10,633
Impairments	(1,965)	-
Other investment expenses	(6,005)	(6,516)
Interest income on funds withheld and contract deposits (net)	1,971	848
Total investment income	58,014	54,657

6.4. Net gains and losses on investments

		2022					
in USD thousand	Ordinary investment income	Realised gains and losses	Impairments/ appreciation	Changes in fair value	Net income from assets under own management		
Available for sale							
Fixed-income securities	76,390	(15,251)	(1,965)	_	59,174		
Other invested assets	3,075	1,233	-	-	4,308		
At Fair Value through profit and loss							
Derivative financial instruments	-	(2,878)	-	(254)	(3,132)		
Other invested assets	-	-	-	(173)	(173)		
Cash and cash equivalents	1,871	-	-	-	1,871		
Total	81,336	(16,896)	(1,965)	(427)	62,048		

	2021					
in USD thousand	Ordinary investment income	Realised gains and losses	Impairments/ appreciation	Changes in fair value	Net income from assets under own management	
Held to maturity						
Fixed-income securities	199	_			199	
Available for sale						
Fixed-income securities	65,645	(17,730)			47,915	
Other invested assets	2,154	470	(193)	-	2,431	
At Fair Value through profit and loss						
Derivative financial instruments	-	(2,252)	-	10,949	8,697	
Other invested assets		1,188		(316)	872	
Cash and cash equivalents	18	-	-		18	
Total	68,016	(18,324)	(193)	10,633	60,132	

The net gains and losses on the investment portfolio of held to maturity investments, loans and receivables, available for sale investments, derivative financial instruments and other are comprised of interest income, amortisation, and realised gains and losses. In the case of derivative financial instruments recognised at fair value through profit and loss, an allowance is also made for changes in unrealised gains and losses.

6.5. Rating structure of fixed-income securities

	2022					
in USD thousand	AAA	AA	А	BBB	<bbb< th=""><th>Total</th></bbb<>	Total
Fixed-income securities – available for sale	1,636,811	405,029	701,919	595,259	86,141	3,425,159
Total	1,636,811	405,029	701,919	595,259	86,141	3,425,159

			2021			
in USD thousand	AAA	AA	А	BBB	<bbb< th=""><th>Total</th></bbb<>	Total
Fixed-income securities – available for sale	1,505,777	485,212	872,007	697,472	99,251	3,659,719
Total	1,505,777	485,212	872,007	697,472	99,251	3,659,719

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

6.6. Breakdown of investments by currency

		2022								
in USD thousand	AUD	EUR	GBP	JPY	USD	Other	Total			
Fixed-income securities – available for sale	79,849	161,153	267,026	178,701	2,678,369	60,061	3,425,159			
Other financial assets – at fair value through profit and loss	_	_	207,325	_	35,019	_	242,344			
Other invested assets	-	-	-	-	49,804	-	49,804			
Cash and cash equivalents	3,089	31,788	38,165	8,027	33,204	25,796	140,069			
Total	82,938	192,941	512,516	186,728	2,796,396	85,857	3,857,376			

				2021			
in USD thousand	AUD	EUR	GBP	JPY	USD	Other	Total
Fixed-income securities – available for sale	47,701	_	292,434	192,957	3,071,851	54,776	3,659,719
Other financial assets – at fair value through profit and loss			153,996	_	7,332		161,328
Other invested assets	_	_	-	-	39,338	_	39,338
Cash and cash equivalents	5,628	6,259	21,421	8,255	43,258	11,660	96,481
Total	53,329	6,259	467,851	201,212	3,161,780	66,436	3,956,866

7. Other financial assets and liabilities – at fair value through profit and loss

The Company's portfolio contained derivative financial instruments as at the balance sheet date in the form of forward exchange transactions taken out to hedge currency risks. These transactions gave rise to recognition of other assets at fair value through profit and loss in an amount of USD 32.7 million (2021: USD 5 million) under Level 2 and other liabilities at fair value through profit and loss of USD 2.7 million (2021: USD 2.2 million) under Level 2. The maturity of the forward exchange transactions are within 10 months. The derivative financial instruments are legally entered into by the Parent, which is rated AA- by Standard & Poor's, and passed on to the Company through a contractual intercompany arrangement.

The Company entered into a Yield-Collar Stop Loss derivative contract on 1 December 2012 with an affiliate Hannover Re (Ireland) Designated Activity Company to provide longevity risk cover for a life settlement portfolio. The derivative is recognised at fair value through profit and loss and included in other liabilities at fair value through profit and loss. At 31 December 2022, the derivative was valued at USD 5.6 million (2021: USD 4.8 million). The maturity of the Yield-Collar Stop Loss derivative transactions are within 9 years.

The Company entered into a UK financing treaty, which exposes the Company to lapse risk effective 1 January 2016, of which the Company retrocedes between 0%-50% dependent on the underlying referenced tranche which were entered into between 1 January 2016 and 31 December 2020. Based on the Company's evaluation there was insufficient insurance risk under the criteria of IFRS 4. The Company has elected to account for assets and liabilities associated with these treaties at fair value through profit and loss. The inward treaty is included in other assets at fair value through profit and loss and the outward treaty is recognised as other liabilities at fair value through profit and loss. At 31 December 2022, the derivative asset was valued at USD 132.8 million (2021: USD 154.0 million) and the liability at USD 15.4 million (2021: USD 25.2 million). Both the derivative asset and liability have maturities of between 3 months and 8 years.

The Company writes contracts where the payment obligations result from contractually defined events that relate to the development of an underlying group of primary insurance contracts with statutory reserving requirements (so–called Triple–X or AXXX reserves) of US ceding companies. The contracts are to be categorised and recognised as stand–alone credit derivatives pursuant to IAS 39. Any day one gains or losses on these derivative instruments are deferred in accordance with IAS 39. There is a zero net fair value for these instruments on the balance sheet date. As of 31 December 2022, the Company is participant to two (2021: three) of these contracts. The nominal value of these transactions at the balance sheet date is USD 1,152.5 million (2021: USD 1,402.5 million). Included under Other financial assets–at fair value through profit and loss is a related receivable balance of USD 2.3 million (2021: USD 2.3 million).

Structured transactions were entered into in order to finance statutory reserves (so–called Triple–X or AXXX reserves) for US ceding companies. In each case, such structures necessitated the involvement of a special purpose entities carry extreme mortality risks securitised by the cedants above a contractually defined retention and transfer these risks by way of a fixed / floating swap. The total amount of the contractually agreed capacities of the transactions is equivalent to USD 878.0 million (2021: USD 2,508.0 million), an amount equivalent to USD 783.5 million (2021: USD 1,958.3 million) had been taken up as at the balance sheet date. The variable payments to the special purpose entities that are guaranteed by the Company cover their payment obligations. Under some of the transactions the payments resulting from the swaps in the event of a claim are reimbursed by the parent companies of the cedants by way of compensation agreements. In this case, the reimbursement claims from the compensation agreements are to be capitalised separately from and up to the amount of the provision. Under IAS 39 these transactions are to be recognised at fair value as financial guarantees. To this end, the Company uses the net method according to which the present value of the agreed fixed swap premiums is netted with the present value of the guarantee commitment. The fair value on initial recognition therefore amounted to zero. The higher of the fair value and the amount carried as a provision on the liabilities side pursuant to IAS 37 is recognised at the point in time when utilisation is considered probable. This was not the case as at the balance sheet date. Included in Note 13 Other assets is a related receivable balance of USD 1.7 million (2021: USD 6.4 million).

The Company entered into a financing treaty, which exposes the Company to the variability on the development of biometric risk that is not specific to our contractual counterparty effective 1 July 2022. Based on the Company's evaluation there was insufficient insurance risk under the criteria of IFRS 4. The Company has elected to account for this instrument as Other financial assets – at fair value through profit and loss. At 31 December 2022, the derivative asset was valued at USD 74.5 million and has a maturity of between 1 and 2 years.

8. Fair value measurement

For the purposes of the disclosure requirements pursuant to IFRS 13 "Fair Value Measurement", it is necessary to assign to a threelevel fair value hierarchy not only the financial assets and liabilities recognised at fair value but also those assets and liabilities that are recognised at amortised cost but for which disclosure of fair value is required.

The fair value 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.

If input factors from different levels are used to measure a financial instrument, the level of the lowest input factor material to measurement is determinative.

8.1. Fair value hierarchy of financial assets and liabilities recognised at fair value

		202	22						
in USD thousand	Level 1	Level 2	Level 3	Total					
Fixed-income securities – available for sale	-	3,425,159	-	3,425,159					
Other financial assets – at fair value through profit and loss									
Derivative instruments – FX Forwards	-	32,720	-	32,720					
Derivative instruments linked to insurance risks	-	-	209,624	209,624					
Other invested assets									
Investment funds	-	5,031	-	5,031					
Shares in limited partnerships	-	-	43,073	43,073					
Life Settlement contracts	-	-	1,700	1,700					
Total financial assets	-	3,462,910	254,397	3,717,307					
Other financial liabilities – at fair value through profit or loss									
Derivative instruments – FX Forwards	-	2,738	-	2,738					
Derivative instruments linked to insurance risks	-	-	20,962	20,962					
Total financial liabilities	-	2,738	20,962	23,700					

		2021		Total 3,659,719					
in USD thousand	Level 1 Level 2		Level 3	Total					
Fixed-income securities – available for sale		3,659,719	_	3,659,719					
Other financial assets – at fair value through profit and loss									
Derivative instruments – FX Forwards	_	5,016	_	5,016					
Derivative instruments linked to insurance risks		_	156,312	156,312					
Other invested assets									
Investment funds	_	8,275		8,275					
Shares in limited partnerships			29,190	29,190					
Life Settlement contracts			1,873	1,873					
Total financial assets	-	3,673,010	187,375	3,860,385					
Other financial liabilities – at fair value through profit or loss									
Derivative instruments – FX Forwards		2,247		2,247					
Derivative instruments linked to insurance risks			30,017	30,017					
Total financial liabilities	-	2,247	30,017	32,264					

There were no transfers between levels during 2022 or 2021. At December 31, 2022 there were 20 (2021 – 20) Level 3 Investments held.

8.2. Fair value hierarchy of financial assets and liabilities measured at amortised cost

At 31 December 2022 and 31 December 2021 there were no financial assets in the portfolio of investments classified as held to maturity.

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					
in USD thousand	Other financial assets	Other invested assets	Other financial liabilities				
Net book value at 1 January 2022	156,312	31,063	30,017				
Recognised in the statement of income	4,589	(173)	492				
Recognised directly in shareholder's equity	-	(616)	-				
Additions	62,376	30,186	-				
Disposals	-	(15,687)	(6,932)				
Currency translation at 31 December	(13,653)	-	(2,615)				
Net book value at 31 December 2022	209,624	44,773	20,962				

	2021						
in USD thousand	Other financial assets	Other invested assets	Other financial liabilities				
Net book value at 1 January 2021	153,602	20,816	37,046				
Recognised in the statement of income	12,187	(509)	724				
Recognised directly in shareholder's equity	-	(273)	-				
Additions	-	26,329	-				
Disposals	(9,092)	(15,300)	(7,681)				
Currency translation at 31 December	(385)		(72)				
Net book value at 31 December 2021	156,312	31,063	30,017				

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.

9. Technical assets

The retrocessionaires' portions of the technical reserves are based on the contractual agreements of the underlying reinsurance treaties. For further details refer to the remarks on the technical reserves (see Note 10).

In P&C business, acquisition costs directly connected with the acquisition or renewal of contracts are deferred for the unearned portion of the premium.

In L&H reinsurance, the deferred acquisition costs associated with life and health 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.

9.1. Deferred acquisition costs

		2022					
in USD thousand	gross	retro	net	gross	retro	net	
Net book value at 31 December of the previous year	539,777	11,675	528,102	631,987	12,894	619,093	
Changes	(42,355)	(2,054)	(40,301)	(64,478)	(1,220)	(63,258)	
Currency translation at 31 December	(34,028)	(6)	(34,022)	(27,732)	1	(27,733)	
Net book value at 31 December for the year under review	463,394	9,615	453,779	539,777	11,675	528,102	

For further explanatory remarks, see Note 3 "Summary of significant accounting policies".

9.2. Reinsurance

In 2022 and 2021, the Company, along with the Parent and other Group Companies entered into Whole Account excess of loss and aggregate treaty reinsurance agreements with third party retrocessionaires. These agreements protect the Parent and its subsidiaries from specific named perils including earthquake, flood, storm and similar natural catastrophes, as well as aviation, marine and cyber events. The Parent pays premium on behalf of the Company to the respective retrocessionaires and collects and distributes recoveries to the Company according to its share of affected losses. Counterparty default risk from these group-wide retrocessions is borne by the Parent, which is rated AA- by Standard & Poor's and A+ by A.M. Best. (See also Note 23).

The Company also participates in the Parent's K Quota Share, which involves a quota share cession on geographically specific natural catastrophe risks as well as worldwide aviation and marine risks. The transaction can be cancelled annually by the investors. Each investor's participation is collateralised by contractually defined investments in the form of cash and equivalent liquid assets, as well as letters of credit.

Reinsurance contracts do not relieve the Company from its obligations to policyholders. Failure of reinsurers to honour their obligations could result in losses to the Company; consequently, allowances are established for any amounts deemed uncollectible.

9.3. Funds withheld

The funds withheld totalling USD 134.9 million (2021: USD 117.7 million) represent the cash and security deposits furnished by the Company to cedants that do not trigger any cash flows and cannot be realised by cedants without the Company's consent. Refer to Note 23 for related party exposures within funds withheld. Total interest earned on funds withheld reflected on the statement of income during 2022 amounted to USD 1.9 million (2021: USD 0.8 million).

9.4. Ceded funds withheld

Ceded funds withheld under reinsurance treaties totalling USD 1.7 million (2021: USD 2.0 million), represent cash deposits furnished to the Company by our retrocessionaires that do not trigger any cash flows and cannot be realised without the consent of our retrocessionaires.

9.5. Contract deposits asset and liability

Contract deposits asset totalling USD 7.3 million (2021: USD 4.5 million) and Contract deposits liabilities totalling USD 10.5 million (2021: USD 6.6 million) pertain to 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. The compensation for risk assumption booked to income under these contracts totalling USD 161.4 million in 2022 (2021: USD 155.2 million) is reported under other income / expenses.

10. Technical provisions

In order to show the net reinsurance reserves retained, the following table summarises the gross reserves together with the corresponding retrocessionaires' shares, which are shown as assets in the balance sheet.

10.1. Technical provisions

		2022		2021			
in USD thousand	gross	retro	net	gross	retro	net	
Loss and loss adjustment expense reserve	2,557,568	841,791	1,715,777	2,361,051	908,152	1,452,899	
Benefit reserve	30,040	49	29,991	21,140	62	21,078	
Unearned premium reserve	319,192	43,868	275,324	271,748	50,883	220,865	
Total	2,906,800	885,708	2,021,092	2,653,939	959,097	1,694,842	

The loss and loss adjustment expense reserve are in principle recorded on the basis of information supplied by the ceding companies. Additional IBNR reserve are established for losses that have been incurred but not as yet reported. This estimate is based on past experience and estimations of the future development.

The development of the loss and loss adjustment expense reserve is shown in the following table. Commencing with the gross reserve, the change in the reserve after deduction of the reinsurers' portions is shown in the year under review and the previous year.

10.2. Loss and loss adjustment expense reserve roll forward

		2022			2021	
in USD thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	2,361,051	908,152	1,452,899	1,968,193	662,780	1,305,413
Loss and loss adjustment expenses incurred						
Year under review	918,428	175,975	742,453	1,084,898	471,814	613,084
Previous years	84,001	(80,454)	164,455	81,193	25,231	55,962
	1,002,429	95,521	906,908	1,166,091	497,045	669,046
Less:						
Loss and loss adjustment expenses paid						
Year under review	(110,378)	(27,190)	(83,188)	(164,080)	(96,151)	(67,929)
Previous years	(581,765)	(112,612)	(469,153)	(531,308)	(138,608)	(392,700)
	(692,143)	(139,802)	(552,341)	(695,388)	(234,759)	(460,629)
Currency translation at 31 December	(113,769)	(22,080)	(91,689)	(77,845)	(16,914)	(60,931)
Net book value at 31 December for the year under review	2,557,568	841,791	1,715,777	2,361,051	908,152	1,452,899

Included within incurred and paid losses are amounts which relate to certain longevity swaps the Company is party to. Based on actuarial analysis, the Company does not hold any reserves for these longevity swap contracts.

The loss and loss adjustment expense reserve is based upon estimations that entail an element of uncertainty. Owing to the fact that the period of some reinsurance treaties is not the calendar year or because they are concluded on an underwriting-year basis, it is frequently impossible in reinsurance business to make an exact allocation of claims expenditures to the current financial year and the previous year and as such management has to make estimates as part of the allocation process.

10.3. Net loss reserve and its run-off in the property and casualty reinsurance segment

The following table shows the net loss reserve for the property and casualty reinsurance business in the years 2013 to 2022 as well as the run-off of the reserve (so-called run-off triangle). The run-off results shown reflect the changes in the ultimate loss arising in the 2022 financial year for the individual run-off years.

in USD million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Estimate of ultimate claims	:										
- at end of year	218	189	226	242	418	339	378	442	581	742	
- one year later	203	201	235	225	476	433	448	447	677	-	
- two years later	175	171	154	187	442	352	412	385	-	-	
- three years later	146	150	120	185	421	300	401	-	-	-	
- four years later	132	137	94	156	397	298	-	-	-	-	
- five years later	125	131	90	145	381	-	-	-	-	-	
- six years later	120	128	80	149	-	-	-	-	-	-	
- seven years later	119	125	83	-	-	-	-	-	-	-	
- eight years later	118	122	-	-	-	-	-	-	-	-	
- nine years later	108	-	-	-	-	-	-	-	-	-	
Current estimate of ultimates	108	122	83	149	381	298	401	385	677	742	3,346
Cumulative payments to date	(73)	(89)	(54)	(95)	(307)	(184)	(211)	(236)	(196)	(83)	(1,528)
Cumulative effects of currency rate changes	(24)	(23)	(5)	3	(8)	(11)	(23)	(11)	(35)	6	(131)
Total	11	10	24	57	66	103	167	138	446	665	1,687
Liability in respect of years prior to 2013											8
Liability recognised in the balance sheet											1,695

10.4. Maturities of reinsurance reserves

IFRS 4.38 in conjunction with 4.39(d) requires information that helps to clarify the amount and timing of cash flows expected from reinsurance contracts. In the following tables, the future maturities of the technical reserves are shown and these are broken down by the expected remaining payment profiles of the liability. The analysis below excludes funds withheld directly related to the reserves. For further explanation of the recognition and measurement of the reserves see Note 3 "Summary of significant accounting policies".

			202	2							
	Loss and loss a	idjustment expe	ense reserve	E	Benefit reserve						
in USD thousand	Gross	Retro	Net	Gross	Retro	Net					
Due in one year	736,182	208,861	527,321	5,220	7	5,213					
Due after one through five years	1,303,603	453,464	850,139	7,839	27	7,812					
Due after five through ten years	471,690	163,893	307,797	4,789	14	4,775					
Due after ten through twenty years	46,093	15,573	30,520	12,176	1	12,175					
Due after twenty years	-	-	-	16	-	16					
Total	2,557,568	841,791	1,715,777	30,040	49	29,991					

			2021			
	Loss and loss a	djustment expe	nse reserve	Ben	efit reserve	
in USD thousand	Gross	Retro	Net	Gross	Retro	Net
Due in one year	671,130	225,148	445,982	1,446	5	1,441
Due after one through five years	1,248,035	504,920	743,115	6,196	31	6,165
Due after five through ten years	402,366	162,555	239,811	4,077	23	4,054
Due after ten through twenty years	39,520	15,529	23,991	9,401	3	9,398
Due after twenty years		_		20	_	20
Total	2,361,051	908,152	1,452,899	21,140	62	21,078

The average duration of the gross loss and loss adjustment expense reserve was 3.0 years (2021 - 2.9 years) and is determined using projections of the expected future payments based on the historical payment pattern.

The payment patterns are determined with the aid of estimation methods and adjusted to reflect changes in payment behaviour and outside influences. The payment patterns used can be compared year for year by contrasting the projected payments with the actual amounts realised.

10.5. Development of benefit reserve

	2022			2021		
in USD thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	21,140	62	21,078	17,102	64	17,038
Changes	10,867	(7)	10,874	4,603	(2)	4,605
Currency translation at 31 December	(1,967)	(6)	(1,961)	(565)		(565)
Net book value at 31 December of the year under review	30,040	49	29,991	21,140	62	21,078

Benefit reserve is established to meet the expected liability to cedants arising from future claims. Deferred acquisition costs are described in Note 9. Provision for profit commission of USD 16.7 million (2021: USD 7.5 million) is established to meet the expected liability to cedants arising from future profit commission payments. Benefit reserve, profit commission reserve and deferred acquisition costs are calculated using a net premium valuation methodology, as required under provisions of US GAAP. The reserving basis is based on prospective actuarial assumptions relating to mortality, morbidity, persistency, expenses and future interest rate development. Bases are determined using current pricing bases with a provision for adverse deviation in future experience.

In accordance with US GAAP, valuation assumptions are locked in at outset and are not unlocked unless a loss recognition event occurs. Loss recognition is assessed annually at treaty level by determining the expected future profits from a treaty on the current best estimate assumption bases. In accordance with this assessment, no treaties incurred a loss recognition event during 2022 or 2021.

10.6. Development of unearned premium reserve

		2022			2021	
in USD thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	271,748	50,883	220,865	234,364	55,183	179,181
Changes	70,425	(7,015)	77,440	47,123	(4,300)	51,423
Currency translation at 31 December	(22,981)	-	(22,981)	(9,739)		(9,739)
Net book value at 31 December of the year under review	319,192	43,868	275,324	271,748	50,883	220,865

The unearned premium reserve derives from the deferral of gross written premium. The unearned portion of the premium written is determined by the period during which the risk is carried and established in accordance with the information supplied by the ceding companies. Premiums received for periods subsequent to the balance sheet date were deferred from recognition within the statement of income.

11. Reinsurance payable

Reinsurance payable of USD 948.0 million (2021: USD 919.6 million) represent balances payable to reinsurers including amounts due for retroceded premiums netted off against amounts recoverable from retrocessionaires for their share of claims recoverable, as calculated in accordance with individual retrocession arrangements. Nil (2021: USD 230.3 million) of the balance is expected to be non-current and is expected to be settled after more than 12 months but within 10 years. The non-current balance all related to one treaty between the Company and its Parent and was contra to associated related deferred acquisition costs under the same treaty. Refer to Note 22 for related party exposures within reinsurance payable.

The carrying value of these amounts approximates fair value due to the short-term nature of the payables except for the referenced non-current balance whose carrying value was carried at amortised cost.

12. Intangible assets

Intangible assets pertains to the acquisition of renewal rights for designated treaties and facultative portfolios transferred from the Parent Company with an effective date of 1 January 2021. The acquisition cost was based on the discounted expected cash flows for the designated contracts taking into account expected gross premiums, claims costs, administrative costs and other costs. After a period of two years from the effective date, a review of the valuation shall be performed based on the actual development of the business, which is subject to the Renewal Rights. If the actual development of premium deviates significantly from the data used for the valuation, an adjustment of the acquisition cost shall be calculated and paid between the Company and the Parent.

The Intangible assets were determined to have a finite life of 5 years, which the Company has chosen to amortise on a straight-line basis over the 5 years.

in USD thousand	2022	2021
Balance as at 1 January	41,809	-
Additions during the year	-	52,261
Amortisation	(10,452)	(10,452)
Total	31,357	41,809

13. Other assets

in USD thousand	2022	2021
Fixtures, fittings and equipment	1,863	2,097
Right-of-use assets from lease contracts	1,187	2,077
Other receivables/prepaid expenses	5,092	7,917
Receivables from ISDA - financial guarantees	1,652	6,416
Total	9,794	18,507

Right-of-use assets from lease contracts are measured at amortised cost in the amount of the initial measurement of the lease liability adjusted by prepaid lease payments, lease incentives received, initial direct costs incurred and probable restoration costs. Right of use assets are amortised on a straight-line basis over the term of the lease contract.

14. Other liabilities

in USD thousand	2022	2021
Sundry non-reinsurance provisions	25,429	13,353
Lease Liabilities	980	1,900
Total	26,409	15,254

All of the sundry non-reinsurance provisions are due within one year except for share-based payment of USD 0.8 million (2021: USD 0.7 million) which fall due within 5 years.

Lease liabilities are initially measured at the present value of essentially all lease payments that are not variable or dependent on an index or an (interest) rate. The discount factor used is the implicit interest rate of the lease contract or the lessee's incremental borrowing cost.

15. Loans and borrowings

On 28 December 2012, the Company obtained a loan facility from the Parent. The facility allows additional financing up to USD 80.0 million. It has a fixed interest rate of 2.55% and expires on 28 December 2027. No collateral has been pledged. As of 31 December 2022, the amount borrowed was USD 25.0 million (2021: USD 25.0 million), interest of USD 0.6 million (2021: USD 0.6 million) was included in finance costs. No capital repayments were made in 2022 (2021: 0 million).

The carrying amounts of the loans are a close approximation of their fair value.

in USD thousand	2022	2021
Balance as at 31 December	25,000	25,000

16. Shareholder's equity

Shareholder's equity is shown as a separate component of the financial statements in accordance with IAS 1 "Presentation of Financial Statements" and subject to IAS 32 "Financial Instruments: Disclosure and Presentation" in conjunction with IAS 39 "Financial Instruments: Recognition and Measurement". The change in shareholder's equity comprises of not only the net income deriving from the statement of income but also the issue of new shares and changes in the value of asset and liability items not recognised in the statement of income.

The 104,522,359 common shares (2021 – 104,522,359) of \$1 par value represent the total authorised, issued and fully paid share capital of the Company. Each share carries an equal voting right and an equal dividend settlement.

17. Contributed surplus

Contributed surplus represents cash contributed by the shareholder in excess of the issued share capital. See Note 3 for further details.

18. Dividends

The dividends declared in 2022 were USD 341 million (2021: USD 460.1 million). This represents a dividend per share in United States Dollars of \$3.26 (2021 - \$4.40).

19. Accumulated other comprehensive income/(loss)

Accumulated other comprehensive loss amounted to USD 379.2 million in 2022 (2021: Income - USD 33.5 million). This arose primarily from the recognition of unrealised gains and losses on available for sale investments at year-end.

20. Other income and expenses

in USD thousand	2022	2021
Income from contracts recognised in accordance with the deposit accounting method	161,403	155,187
Other income relating to financial guarantees (net)	53,415	13,949
Sundry income	196	224
Exchange gains/(losses)	(23,729)	(4,146)
Amortisation	(10,452)	(10,452)
Sundry expenses	(9,503)	(2,534)
Total	171,330	152,228

21. Taxes

Under current Bermuda law, the Company is not required to pay any taxes in Bermuda on profits or income or capital gains. The Company has received an undertaking from the Minister of Finance in Bermuda that in the event of any such taxes being introduced the Company will be exempted from taxation until the year 2035.

22. Staff and expenditures on personnel

Staff

The number of staff for the Company at 31 December 2022 is 51 (2021 - 48).

Defined contribution plans

The Company operates a defined contribution pension plan that is based on length of service, employees' income, and level of contributions. The expense recognised for these obligations in the year under review in accordance with IAS 19.46 amounted to USD 1.3 million (2021: USD 1.3 million).

Key management compensation

in USD thousand	2022	2021
Salaries and other short-term employee benefits	3,151	4,600
Post-employment benefits	296	375
Share-based payment	331	1,012
Total	3,778	5,987

23. Related party disclosures

Loans and Investments from related parties

All loans as disclosed in Note 15 are with related party entities. Refer to Note 7 for investments associated with related parties.

Transactions and balances with related parties arise from the normal course of business and are unsecured.

in USD thousand	2022		
Income statement	Hannover Rück SE	Companies related through common control	Total
Gross written premium	108,716	241,009	349,725
Ceded written premium	95	6,579	6,674
Commission and brokerage (net), change in deferred acquisition costs	48,440	10,151	58,591
Loss and loss adjustment expenses incurred	(11)	-	(11)
Change in benefit reserve (net)	11,597	138	11,735
Net investment income	(7,474)	(4,627)	(12,101)
Other income and (expenses)	(1,524)	110,329	108,805
Finance costs	(638)	_	(638)

in USD thousand

		Companies related through common		
Balance sheet	Hannover Rück SE	control	Total	
Other financial assets – at fair value through profit and loss	30,793	-	30,793	
Funds withheld	-	71,245	71,245	
Deferred acquisition costs	264,377	1,452	265,829	
Accounts receivable	-	150,368	150,368	
Loss and loss adjustment expense reserve	664	315,998	316,662	
Benefit reserve	24,661	149	24,810	
Unearned premium reserve	-	27,550	27,550	
Contract deposits	-	10,455	10,455	
Reinsurance payable	198,232	5,805	204,037	
Other financial liabilities – at fair value through profit and loss	811	5,551	6,362	
Other liabilities	299	213	512	
Dividends payable	-	341,000	341,000	
Loans and borrowings	25,000	-	25,000	

2021			
Hannover Rück SE	Companies related through common control	Total	
121,587	230,576	352,163	
200	6,572	6,772	
57,830	11,661	69,491	
11,536	159,535	171,071	
5,565	(19)	5,546	
(3,403)	(4,807)	(8,210)	
(12,310)	126,132	113,822	
(638)	-	(638)	
	121,587 200 57,830 11,536 5,565 (3,403) (12,310)	Companies related through common control Hannover Rück SE Componies control 121,587 230,576 200 6,572 57,830 11,661 11,536 159,535 5,565 (19) (3,403) (4,807) (12,310) 126,132	

2022

in USD thousand	2021		
Balance sheet	Hannover Rück SE	Companies related through common control	Total
Other financial assets – at fair value through profit and loss	5,016		5,016
Funds withheld		74,829	74,829
Deferred acquisition costs	352,003	1,822	353,825
Accounts receivable	68	119,390	119,458
Loss and loss adjustment expense reserve	1,388	210,143	211,531
Benefit reserve	14,362	13	14,375
Unearned premium reserve		24,592	24,592
Contract deposit liability		6,554	6,554
Reinsurance payable	263,218	5,372	268,590
Other financial liabilities – at fair value through profit and loss	2,247	4,789	7,036
Other liabilities	594	659	1,253
Dividends payable		460,000	460,000
Loans and borrowings	25,000		25,000

Whole Account transactions and balances

The Company's participation in group-wide Whole Account retrocession agreements controlled by the Parent resulted in the following amounts that are included in the financial statements (See also Note 9.2 Reinsurance):

in USD thousand	2022	2021
Statement of Income		
Ceded earned premium	51,242	121,524
Commission and brokerage	990	672
Reinsurance recoveries	9,964	279,145
Balance Sheet		
Prepaid reinsurance premium	1,463	1,461
Reinsurance recoverable on unpaid claims	323,598	357,605
Reinsurance payable	119,806	65,906

24. Statutory requirements

As a Class 4 and Class E insurer, the Company must at all times maintain a solvency margin and an enhanced capital requirement ("ECR") 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).

Under the Bermuda Insurance Act, 1978 and related regulations, the Company is subject to capital requirements calculated using the Bermuda Solvency Capital Requirement ("BSCR"), which is a standardised statutory risk–based capital model used to measure the risk associated with the Company's assets, liabilities, premiums and the risk associated with operations. The Authority requires all Class 4 and Class E insurers to maintain their capital at a target level which is 120% of the ECR calculated in accordance with the BSCR and to maintain the minimum margin of solvency. All statutory requirements were met as at 31 December 2022 and 31 December 2021.

Actual statutory capital and surplus, as determined using statutory accounting principles, is as follows:

in USD thousand	2022	2021
Total shareholder's equity	1,614,168	1,956,539
Non-admitted assets	(31,357)	(41,809)
Statutory capital and surplus	1,582,811	1,914,730

The Company is also required under its Class 4 license to maintain a minimum liquidity ratio, whereby the value of its relevant assets is not less than 75% of the amount of its relevant liabilities for general business. As of 31 December 2022 and 31 December 2021, the Company met the minimum liquidity ratio.

The Company is prohibited from declaring or paying dividends if its Class 4 or Class E statutory capital and surplus is less than its ECR, or if it is in breach of its solvency margin or minimum liquidity ratio, or if the declaration or payment of such dividends would cause such breach. Further, the Company, as a Class 4 and Class E insurer, is prohibited from paying in any year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous year's statutory balance sheet) unless it files (at least seven days before payment of such dividends) with the Authority an affidavit stating that it will continue to meet its solvency margin and minimum liquidity ratio. The Company must obtain the Authority'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.

25. Capital management

The preservation and consistent enhancement of its capital is a key strategic objective for the Company. The Company met the applicable local regulatory minimum capital requirements in the year under review.

26. Letters of credit

Ceding companies domiciled in the United States and Australia are required, pursuant to their insurance laws, to obtain letters of credit issued on the Company's behalf from approved banks in order to further secure the Company's obligations under certain reinsurance contracts. At 31 December 2022, letters of credit totalling USD 466.1 million (2021: USD 373.8 million) were in place.

27. Subsequent events

Effective 1 January 2023 the Company has discontinued writing certain speciality lines of business with external parties.