somewhat different

Annual Report 2023

hannover re®

Key figures

in EUR million	2023	+/- previous year	2022 [1]
Results			
Reinsurance revenue (gross)	24,456.5	+1.8%	24,016.7
Reinsurance service result (net)	1,658.3	+24.1%	1,336.4
Reinsurance finance result (net) [2]	-880.2	+50.9%	-583.1
Investment income	1,588.2	+64.5%	965.4
Operating profit / loss (EBIT)	1,971.2	+30.1%	1,515.7
Group net income	1,824.8	+133.7%	780.8
Balance sheet			
Policyholders' surplus	14,249.4	+4.1%	13,683.2
Equity attributable to shareholders of Hannover Rück SE	10,126.8	+11.8%	9,059.7
Non-controlling interests	892.7	-0.5%	897.2
Hybrid capital	3,229.9	-13.3%	3,726.3
Contractual service margin (net)	7,699.1	+17.4%	6,557.4
Risk adjustment for non-financial risk	3,728.6	+0.3%	3,717.1
Investments	60,128.9	+8.8%	55,285.1
Total assets	66,487.3	+5.6%	62,959.2
Share			
Earnings per share (basic and diluted) in EUR	15.13	+133.7%	6.47
Book value per share in EUR	83.97	+11.8%	75.12
Ordinary dividend per share in EUR	6,00 [3]	+20.0%	5.00
Special dividend per share in EUR	1,20 [3]	+20.0%	1.00
Total dividend per share in EUR	7,20 [3]	+20.0%	6.00
Dividend payment in EUR million	868,3 [3]	+20.0%	723.6
Share price at the end of the period in EUR	216.30	+16.6%	185.50
Market capitalisation at the end of the period	26,085.2	+16.6%	22,370.8
Ratios			
Combined ratio (property and casualty reinsurance) [4]	94.0%		94.5%
EBIT margin [5]	9.3%		7.0%
Return on investment	2.8%		1.7%
Return on equity	19.0%		8.2%

[1] Restated pursuant to IAS 8
[2] Excluding exchange rate effects
[3] Proposed dividend
[4] Reinsurance service result / reinsurance revenue (net)
[5] EBIT / reinsurance revenue (net)

Contents

About us

Hannover Re is one of the world's leading reinsurers. We transact all lines of property & casualty and life & health reinsurance and are present worldwide with more than 3,500 staff. The German business of the Hannover Re Group is written by the subsidiary E+S Rück. Established in 1966, Hannover Re is recognised as a reliable partner for innovative risk solutions, exceptional customer intimacy and financial soundness. The rating agencies most relevant to the insurance industry have awarded both Hannover Re and E+S Rück very good financial strength ratings: Standard & Poor’s AA- "Very Strong" and A.M. Best A+ "Superior".

For our investors

Jean-Jacques Henchoz
Chairman of the Executive Board

Dear Shareholders, Ladies and Gentlemen,

The 2023 financial year was a highly successful one for Hannover Re. With Group net income of EUR 1.8 billion, for example. we outperformed our target for 2023. We similarly posted very good results in our two business groups, namely Property & Casualty reinsurance and Life & Health reinsurance, as well as in our investments and we generated further profitable growth. Despite the ongoing challenging macroeconomic and geopolitical landscape, it is a source of pride for me that with our team of staff we were able to safeguard the sustained profitability of our business and thereby underscored our role as a reliable partner and robustly capitalised reinsurer.

The strong demand for our reinsurance solutions shows that we are delivering the right – and above all reliable – risk protection in times of climate change, war and inflation. Advances in technology with the associated new risks pose a further challenge. Not only that, disasters such as earthquakes, wildfires, storms and severe weather events as well as flooding caused considerable losses around the world last year. We are seeing that medium-severity natural catastrophes are continuing to increase in number and frequency. In light of climate change, extreme weather events and environmental perils are expected to remain major concerns for the reinsurance industry.

Hannover Re is optimally positioned for these challenges. Among other things, we used the financial year just ended to further bolster our financial robustness and the resilience of our balance sheet. Yet our business is not only financially sound, it is also globally diversified. With our clear focus on reinsurance, our superlative risk and capital management and our cost discipline, we are superbly equipped for the future.

Yet our risk protection can only ever be part of the measures for tackling the challenges that lie ahead. Preventive safeguards and adaptation to the effects of climate change must play an equally pivotal role in mitigating the impacts of changing climate patterns.

What inspires me with so much optimism when it comes to the value and strengths of Hannover Re? The answer lies in our team of people. With their know-how and the focus on growing with our customers and enabling their risk transfer – whether through traditional reinsurance or tailored solutions –, they play a crucial part in our company's success.

With a solvency ratio of 269 percent, a strong equity base and a return on equity of 19 percent, we are also an appealing and enduring partner for you, our shareholders. We are demonstrating this once again with a reliable and attractive dividend through which we enable you to share in the success of our company. For 2023, therefore, we are proposing an ordinary dividend of EUR 6.00 per share and a special dividend of EUR 1.20 per share to the Annual General Meeting.

I am also encouraged by the support shown to us by you, our shareholders, as well as the good and trusting collaboration with our clients and business partners. I am pleased that you have joined us on this journey. Speaking for all my colleagues on the Executive Board and the entire Hannover Re team, I thank you sincerely for your trust.

In 2023 we moved forward with Hannover Re's ongoing development as one of the world's leading reinsurers. We are very well positioned for the year ahead – resilient, financially strong, profitable – and we shall continue on our path with profitable growth over the coming year.

Yours sincerely,

Jean-Jacques Henchoz
Chairman of the Executive Board

Executive Board of Hannover Rück SE

As of 31 December 2023

Dr. Michael Pickel
Property & Casualty Reinsurance
Group Legal Services
Worldwide responsibility for Run-Off Solutions, Agricultural Risks
Regional responsibility for Germany, Austria, Switzerland, Italy, Latin America, Iberian Peninsula, Middle East

Sven Althoff
Coordination of Property & Casualty Reinsurance Business Group
Worldwide responsibility for Aviation and Marine, Credit, Surety and Political Risks, Facultative Reinsurance, Quotations
Regional responsibility for North America, United Kingdom, Ireland and London Market

Sharon Ooi
Property & Casualty Reinsurance
Regional responsibility for Asia-Pacific and Africa

Clemens Jungsthöfel
Asset Management
Reinsurance Accounting and Valuation
Group Finance
Investor and Rating Agency Relations

Jean-Jacques Henchoz
Chairman
Group Operations and Strategy
IT and Facility Management
Group Human Resources
Corporate Communications
Internal Auditing
Group Risk Management, Compliance

Silke Sehm
Property & Casualty Reinsurance
Worldwide responsibility for Catastrophe XL (Cat XL), Structured Reinsurance, Insurance-Linked Securities, Retrocessions
Regional responsibilities for Continental Europe and North Africa

Dr. Klaus Miller
Life & Health Reinsurance
Regional responsibility for North America, United Kingdom, Ireland, Northern, Eastern and Central Europe

Claude Chèvre
Life & Health Reinsurance
Worldwide responsibility for Longevity Solutions
Regional responsibility for Africa, Asia, Australia, Latin America, Middle East, Western and Southern Europe

The Hannover Re share

- Share price up by 20.3% in 2023 after substantially outperforming in 2022
- Dividend proposal: Ordinary dividend of EUR 6.00 and special dividend of EUR 1.20

Stock market influenced by interest rates and inflation

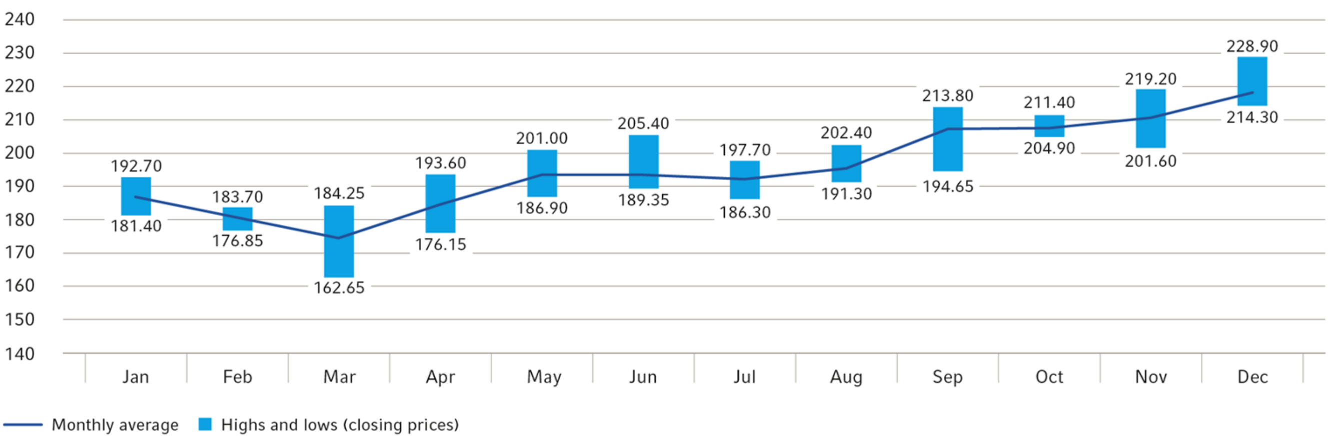
Germany's bellwether index (DAX) used the early months of 2023 to recover after a year shaped by the war in Ukraine and the turnaround in interest rate policy. Going into the new year at 13,923.59 points, it was quick to surge past the 15,000 mark on 12 January. This sharply improved market sentiment was fuelled by, among other things, the prospect of inflation easing in the United States.

The collapse of three US regional banks at the beginning of March, however, cast a new shadow over the market. Turmoil at Credit Suisse added to the volatility on the capital market. In the absence of far-reaching repercussions on the banking sector, the DAX nevertheless climbed past the 16,000 mark for the first time since January 2022.

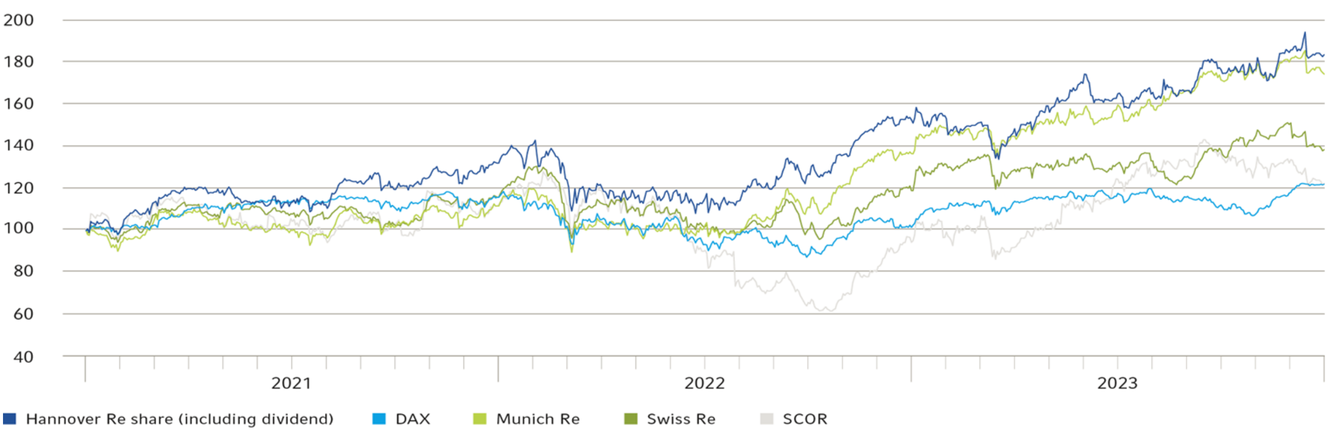
Movements on capital markets in the second and third quarters were influenced by various trends. While economic data coming out of the United States was positive, the direction in China appeared increasingly uncertain. Policy actions on interest rates taken by the Fed and ECB to fight inflation remained the centre of attention. While lower energy and oil prices were crucial in bringing inflation down in the first half of the year, they surged sharply higher again in the summer.

The war in Israel/Gaza depressed stock market sentiment in October, although it did not have a lasting influence on equity markets. From November onwards the DAX embarked on another rally, driven in part by the prospect of interest rate cuts. The German share index climbed to its highest level to date of 17,003.28 on 14 December.

Highs and lows of the Hannover Re share
in EUR



Relative performance of the Hannover Re share (including reinvested dividends)
in %



Performance of benchmark indices

in EUR	Opening price 2023	Closing price 2023	Change
DAX	13,923.59	16,751.64	20.3%
S&P 500	3,839.50	4,769.83	24.2%
Dow Jones Industrial	33,147.25	37,689.54	13.7%
MSCI World	2,602.69	3,169.18	21.8%

Hannover Re share price driven by rising profits and earnings expectations

The Hannover Re share began the new stock market year at EUR 185.50. The very favourable outcome of the year-end treaty renewals in property and casualty reinsurance had only minimal implications for the share price, which had already moved sharply higher in the second half of 2022 in expectation of significant rate adjustments in reinsurance business.

In March, the crisis affecting some US regional banks and at Credit Suisse in Switzerland led to uncertainty in the market, the effects of which were particularly evident in the share prices of financial services companies – and hence also Hannover Re.

Persistently high inflation prompted interest rate hikes both in Europe and in the United States, further fanning fears of recession. The conviction that interest rates would stay higher for longer than anticipated took hold. In this environment the Hannover Re share recovered from the price declines seen at the end of the first quarter. The price trend in the second half of the year was further buttressed by quarterly results in line with expectations and a hurricane season that passed off fairly benignly. The anticipation that the attractive market environment in property and casualty reinsurance would be sustained was another positive factor. On 13 December the share reached a new record high of EUR 228.90.

The Hannover Re share closed out the 2023 financial year with a gain of 16.6% at EUR 216.30. The share performance of our main peers Munich Re (+23.4%), Swiss Re (+9.3%) and Scor (+23.1%) was positive in 2023.

The performance including reinvested dividends amounted to +20.3% in 2023. The benchmark DAX index similarly showed a gain of 20.3%. In a three-year comparison, the Hannover Re share delivered a performance (including reinvested dividends) of 83.8%, thereby comfortably outperforming the DAX (+61.7%).

Based on the year-end closing price, Hannover Re's market capitalisation totalled EUR 26.1 billion at the end of the financial year. According to the DAX rankings drawn up by Deutsche Börse AG, the company placed twenty-third at the end of December in terms of free float market capitalisation. With a book value per share of EUR 83.97, the Hannover Re share showed a price-to-book ratio of 2.58 at the end of the year under review; it was thus above the average DAX price-to-book ratio of 1.48 at year-end. Compared to the average price-to-book ratio for its peer group, the Hannover Re share continues to be significantly better valued.

By the end of the 2023 financial year, 22 analysts had handed down opinions on our company: Eleven recommended the Hannover Re share as "buy" or "overweight". Altogether six opinions were a "hold". "Underweight" or "sell" recommendations were issued by five analysts.

Dividend proposal envisages a higher distribution

The Executive Board and the Supervisory Board intend to propose to the Annual General Meeting on 6 May 2024 that a total dividend of EUR 7.20 per share should be distributed. Against the backdrop of an improved earnings situation, it is envisaged that the ordinary dividend per share will be increased by EUR 1.00 compared to the previous year to EUR 6.00. In view of the comfortable level of capitalisation, the ordinary dividend is to be supplemented by a special dividend of EUR 1.20 per share.

Annual General Meeting adopted all proposed resolutions

The virtual Annual General Meeting of Hannover Rück SE was held on 3 May 2023.

In his address to the meeting, Chief Executive Officer Jean-Jacques Henchoz took stock of the year just ended and highlighted Hannover Re's role as a resilient, reliable and relevant partner. In a rapidly changing landscape, Hannover Re contributes significant value to society. By identifying, evaluating and protecting against new risks, the company remains true to its role as a reinsurer with its core business and expertise. This is vital, Henchoz noted, in helping to close protection gaps around the world and thereby contribute to society.

The Annual General Meeting approved the proposal made by the Executive Board and Supervisory Board to pay a total dividend of EUR 6.00 per share for the 2022 financial year. The payment was composed of an ordinary dividend of EUR 5.00 per share – an increase of EUR 0.50 compared to the previous year – and a special dividend of EUR 1.00 (previous year: EUR 1.25) per share. In total, Hannover Re distributed an amount of roughly EUR 724 million. 79.3% of the voting shares were represented this year in the voting.

The next Annual General Meeting will be held on 6 May 2024 in Hannover.

Dialogue with the capital market

The Executive Board and representatives of the Investor Relations department again kept up a continuous open dialogue with (institutional) investors in the 2023 financial year.

Activities remained focused on the financial centres of Europe and North America. Hannover Re took part in 17 capital market conferences and made additional visits to investors on twelve roadshow days. Demand among investors for face-to-face meetings as well as individually arranged teleconferences remained very high.

The discussions centred around financial reporting under the new accounting standard IFRS 17. Further topics frequently explored were the market environment in property and casualty reinsurance as well as profitability and growth opportunities.

Considerable importance was once again attached to the sustainability efforts made by Hannover Rück SE as well as to ESG (environmental, social, governance) topics in 2023.

At its 26th Investors' Day held on 12 December in Berlin, Hannover Re previewed the upcoming 2024 financial year and its financial ambitions under the new strategy for the years 2024-2026. The event was also webcast live on the company's website, although analysts continued to take the opportunity to attend in person.

Sustainability continues to take on added relevance

Along with traditional financial considerations, non-financial aspects are coming to play an increasingly important role in the evaluation of companies on the capital market. In the financial year just ended, Hannover Re again reported extensively on sustainability and ESG topics. The disclosures took the form of, among other things, a combined non-financial statement externally reviewed with limited assurance as an integral component of the Group management report. In this connection, we are reporting in full for the first time in the current year on the eligibility and alignment of our business with the requirements of the EU Taxonomy. This classification system for sustainable economic activities is intended to provide orientation for the capital market and redirect capital flows into the sustainable transformation of the European economy. In addition, we publish annual sustainability reports compiled in accordance with the internationally recognised reporting standards of the Global Reporting Initiative (GRI). In the year under review, as in prior years, we maintained a dialogue with a number of different stakeholders on sustainability issues. In addition, Hannover Re participates in the feedback processes of various ESG rating agencies. The company has ratings from, among others, CDP, ISS ESG, MSCI and Sustainalytics and is listed in the FTSE4Good, the Global Challenges Index and the sustainability index of Deutsche Börse AG (DAX 50 ESG).

Further growth in the number of shareholders

Our share register showed some 76,424 shareholders at the end of the year, another increase in the number of shareholders year-on-year (73,361). The largest shareholders at year-end were Talanx AG with 50.2% as well as Deutsche Asset Management Investment GmbH with a reported 3.0%, FMR LLC with a reported 3.0% and BlackRock, Inc. with a reported 2.9% of the voting rights. Within the free float, institutional investors accounted for 38.3% (37.8%) of the total shares outstanding, while private investors held 11.5% (12.0%).

Basic information

Securities identification number / ISIN	840221 / DE 000 840 221 5
Ticker symbols	HRN1 (Bloomberg), HRNGn (Reuters), HVRRY (ADR)
Exchange listings	
Germany	Xetra, Frankfurt, Munich, Stuttgart, Hamburg, Berlin, Düsseldorf, Hannover (official trading: Xetra, Frankfurt and Hannover)
United States	American Depositary Receipts (Level 1 ADR program; 6 ADRs = 1 share)
Market segment	Prime Standard
Index membership	DAX
First listed	30 November 1994
Number of issued shares (as at 31 December 2023)	120,597,134
Share capital	EUR 120,597,134.00
Class of shares	No-par-value registered shares

Key figures

in EUR	2023	2022 [1]	2021 [2]	2020 [2]	2019 [2]
Number of shares in million	120.6	120.6	120.6	120.6	120.6
Annual low [3]	162.65	131.35	128.00	107.50	116.40
Annual high [3]	228.90	187.60	167.95	192.40	175.20
Year-opening price [3]	185.50	167.15	130.30	172.30	117.70
Year-ending price [3]	216.30	185.50	167.15	130.30	172.30
Market capitalisation at year-end in EUR million	26,085.2	22,370.8	20,157.8	15,713.8	20,778.9
Equity attributable to shareholders of Hannover Rück SE in EUR million	10,126.8	9,059.7	11,885.0	10,995.0	10,528.0
Book value per share	83.97	75.12	98.55	91.17	87.30
Earnings per share (basic and diluted)	15.13	6.47	10.21	7.32	10.65
Base dividend per share	6,00 [4]	5.00	4.50	4.50	4.00
Special dividend per share	1,20 [4]	1.00	1.25	0.00	1.50
Total dividend per share	7,20 [4]	6,00	5,75	4,50	5,50
Cash flow per share	47.99	41.02	40.97	26.79	20.81
Return on equity (after tax) [5]	19.0%	8.2%	10.8%	8.2%	13.3%
Dividend yield [6]	3.3%	3.2%	3.1%	3.5%	3.2%
Price-to-book (P/B) ratio [7]	2.6	2.5	1.7	1.4	2.0
Price/earnings (P/E) ratio [8]	14.3	28.7	16.4	17.8	16.2
Price-to-cash flow (P/CF) ratio [9]	4.5	4.5	4.1	4.9	8.3

[1] Restated pursuant to IA 8
[2] IAS 39, IFRS 4
[3] Xetra daily closing prices from Bloomberg
[4] Proposed dividend
[5] Earnings per share / average of book value per share at start and end of year
[6] Dividend per share / year-end closing price
[7] Year-end closing price /book value per share
[8] Year-end closing price / earnings per share
[9] Year-end closing price / cash flow (from operating activities) per share

Combined management report

Foundations of the Group

Business model

- Worldwide reinsurance, transacting all lines of property & casualty and life & health reinsurance with the goal of achieving the broadest and most balanced possible diversification both regionally and in relation to the underlying risks
- Competitive advantages due to our low cost of capital and administrative expenses
- Financial strength secured through sophisticated risk management
- Commitment to responsible and transparent corporate governance geared to long-term success

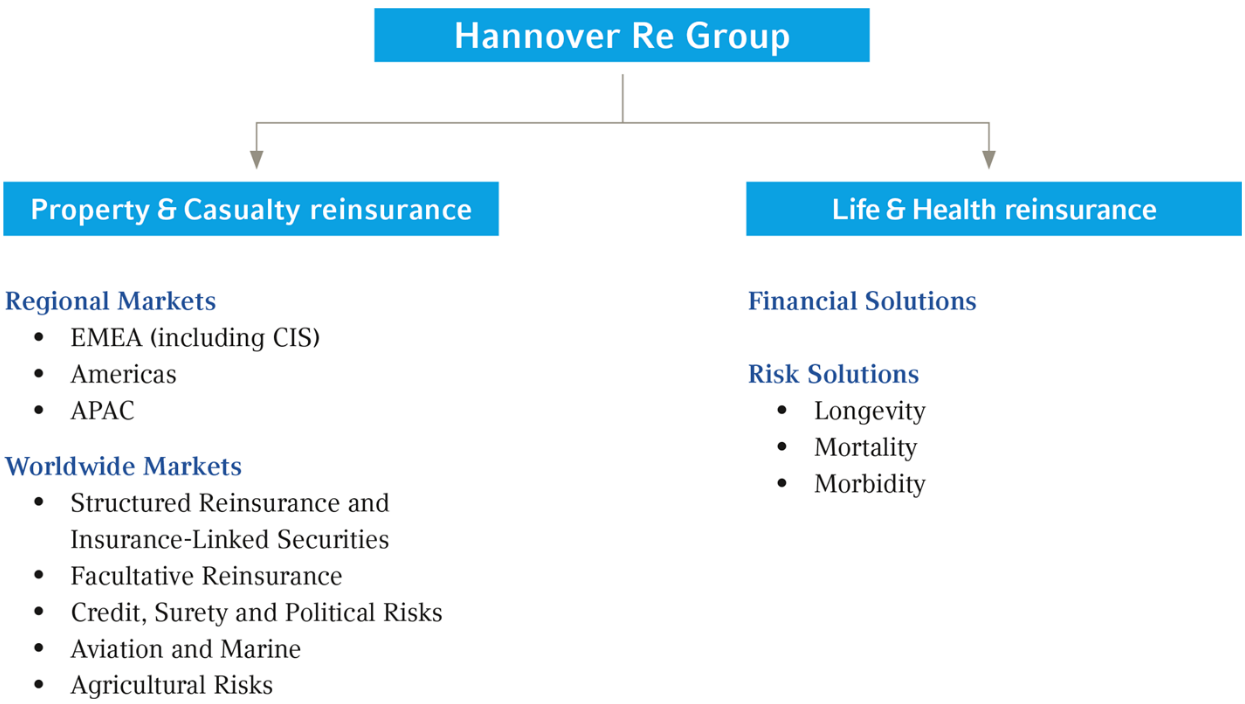
The Hannover Re Group is one of the world's leading reinsurers. Hannover Rück SE is a European Company, Societas Europaea (SE), based in Hannover, Germany.

Our business model is focused on reinsurance, which we transact worldwide in the Property & Casualty and Life & Health reinsurance business groups. In this way, we strive for the broadest possible diversification and hence an efficient risk balance. This is achieved by accepting reinsurance risks with mostly little or no correlation across all lines and regions of property & casualty and life & health reinsurance. In conjunction with efficient capital management, this is the key to our comparatively low cost of capital.

Guided by a clearly defined risk appetite, the Executive Board steers the company with the support of risk management with a view to acting on business opportunities while securing our financial strength on a lasting basis.

Our business operations are dedicated to our goal of being the preferred partner for our clients. It is for this reason that our clients and their concerns form the focus of our activities.

In addition, we generate competitive advantages to the benefit of our clients and shareholders by conducting our reinsurance business with lower administrative expenses than our peers. In this way we deliver above-average profitability while at the same time being able to offer our customers reinsurance protection on competitive terms.



Our subsidiary E+S Rückversicherung AG (E+S Rück), as the "Reinsurer for Germany", offers a range of products and services tailored to the specific features of the German market. Of special importance here are the mutual insurers with whom we maintain a strategic partnership that is underscored through their participation in E+S Rück.

In the Property & Casualty reinsurance business group we consider ourselves to be a reliable, flexible and innovative market player that ranks among the best in any given market. Cost leadership, effective cycle management and superlative risk management are the key elements of our competitive positioning. Particularly in the current market environment, we actively manage our portfolio to ensure long-term profitability on the underwriting side.

In the Life & Health reinsurance business group we are recognised – as customer surveys confirm – as one of the top players for traditional covers and a leading provider of structured solutions. We achieve this standing by, among other things, anticipating the future needs of our customers through the early identification of trends.

With a view to assuring Hannover Re's lasting stability, our strategy is grounded on a solid foundation: sustainability and integrated corporate governance. Sustainability reflects our aspiration to economic, social and environmental accountability. Through integrated corporate governance we foster the trust placed in Hannover Re, especially by regulators and investors but also by our clients and staff.

Management system

Value-based management

Our integrated system of enterprise management constitutes the basis for attainment of our strategic objectives. Located at its core are, first and foremost, our profit and growth targets. In addition to traditional key performance indicators geared to the IFRS balance sheet, our system of strategic targets also includes economic targets derived from our internal capital model approved by the regulator and from the economic equity pursuant to Solvency II reporting. The targets are regularly analysed and adjusted in the context of the strategy review conducted at periodic intervals. Given that reinsurance business is subject to cyclical fluctuations, our primary focus is on medium- and long-term attainment of the strategic targets across the cycle.

The targets set for the strategy cycle 2021-2023, which we had presented in a target matrix, were no longer entirely appropriate following the implementation of IFRS 17 in 2023. Accounting practice in the insurance industry underwent a fundamental transformation with the adoption of IFRS 17 compared to IFRS 4 and reflects economic changes much more closely. For 2023, in the last year of the strategy cycle, we did not define the usual range of long-term targets according to the previous target matrix. The strategic targets set for the Group with respect to the return on equity (1000 basis points above the risk-free rate of return) and the solvency ratio (≥ 200%) as well as the xRoCA for both business groups (≥ 2%) remained valid in the 2023 financial year and were achieved.

New financial ambitions have been defined with the adoption of the new strategy for the 2024-2026 cycle. Details are provided in the section "Outlook".

Target attainment

Business group	Key data	Targets for 2023	Target attainment 2023
Group	Return on equity [1]	1,000 bps above risk-free	19.0%
	Solvency ratio [2] [3]	≥ 200%	269.5%
Property & Casualty reinsurance	xRoCA [2] [4]	≥ 2%	13.3%
Life & Health reinsurance	xRoCA [2] [4]	≥ 2%	12.4%

[1] After tax; risk-free: five-year average return of ten-year German government bonds
[2] This information has not been audited by the independent auditor.
[3] According to our internal capital model and Solvency II requirements
[4] Excess return (one-year economic profit in excess of the cost of capital) on allocated economic capital

Capital allocation

The basis of value-based management is the risk-appropriate allocation of capital to the individual business activities. This enables us to evaluate the acceptance of underwriting risks and investment risks both in light of individual risk/return aspects and against the backdrop of our overall risk appetite. Our internal capital model supplies the key parameters for this purpose. Starting out from the Group's overall risk situation, capital is first allocated to the functional areas of underwriting and investments. We then further divide the capital within the underwriting sector, first between the business segments of property & casualty reinsurance and life & health reinsurance and then between the various reinsurance products according to risk categories / treaty types and lines. In this way, we ensure consistent adherence to our profit targets – allowing for risk, cost and return considerations – in the evaluation and pricing of our various reinsurance products.

IVC – the strategic management ratio

In order to manage the portfolios and individual treaties we apply underwriting-year-oriented measurement principles based on expected cash flows that appropriately accommodate the specific characteristics of property & casualty and life & health reinsurance. The attainment of targets in a particular financial year is also of interest – especially from the standpoint of shareholders. Based on our economic measurement and our internal capital model, the foundation of our enterprise management, we strive to generate a profit in excess of the cost of capital. This return – which is the decisive ratio for the management of our business activities – is referred to as Intrinsic Value Creation (IVC).

The IVC ratio makes it possible to compare the value contributions of the Group as a whole, its two business groups and the individual operational units. This enables us to reliably identify value creators and value destroyers.

In this way, we can

- optimise the allocation of capital and resources,
- identify opportunities and risks and
- measure strategy contributions with an eye to our demanding profit and growth targets.

The IVC (Intrinsic Value Creation) is calculated according to the following formula: adjusted economic profit – (capital allocated × weighted cost of capital) = IVC.

The adjusted economic profit is comprised of two factors: the IFRS Group net income recognised after tax and the change in the unrealised gains and losses recognised in the contractual service margin, after adjustment for reserving components. The latter makes allowance in the calculated values for economic effects not recognised in profit or loss under IFRS. In addition, interest on hybrid capital already recognised in the IFRS Group net income and the non-controlling interest in profit or loss are included back in the calculation.

The allocated capital consists of the economic equity pursuant to Solvency II including non-controlling interests and the hybrid capital. Capital is allocated to the profit centres as described above according to the risk content of the business in question. A systematic distinction is made here between the assumption of underwriting risks, on the one hand, and investment risks, on the other.

In calculating the cost of capital, our assumption – based on a Capital Asset Pricing Model (CAPM) approach – is that the investor's opportunity costs are 625 basis points above the risk-free interest rate, meaning that economic value is created above this threshold. Our strategic return on equity target of 1,000 basis points above risk-free thus already contains a substantial target value creation. We allocate equity sparingly and use equity substitutes to optimise our average cost of capital, which amounted to (unaudited by the independent auditor) 4.6% in 2023 (previous year: 4.2%).

Since comparison of absolute amounts is not always meaningful, we have introduced the xRoCA (excess return on capital allocated) in addition to the IVC. This describes the IVC in relation to the allocated capital and shows us the relative excess return generated above and beyond the weighted cost of capital.

The close interlinking of our internal capital model with the capital allocation and value-based management helps us to fulfil the requirements of the Solvency II use test.

Operational management system

A number of IFRS-based financial KPIs are also embedded in our strategic system of targets and coordinated with our metrics for value creation derived from the internal capital model. We use these KPIs for operational management within the year, in part because they are available promptly and also because they already provide initial pointers as to whether we are likely to achieve our higher-order strategic objectives. For 2023, these were the growth in reinsurance revenue and the EBIT for both business groups and the return on investment for the Group as a whole.

Management by Objectives

Key performance indicators from our management system are integrated into the individual agreements on objectives with managers. When it comes to the definition of objectives, the participants take into account not only standardised financial indicators but also non-financial variables derived from the strategic parameters. Further information on the individual objectives and associated remuneration elements of the members of the Executive Board is provided in the separately published remuneration report.

Report on economic position

Macroeconomic climate and industry-specific environment

- Global economy remains fragile, but proves surprisingly resilient in 2023
- Tight monetary policy around the world curbs inflation
- Renewals in January 2023 mark a turning point
- Continuing trend towards digitalisation

Macroeconomic climate

Against the backdrop of Russia's ongoing war against Ukraine and a significantly more restrictive monetary policy adopted by central banks in response to inflation, the global economy held up well in 2023. According to estimates by the Organisation for Economic Co-operation and Development (OECD), global gross domestic product grew by 2.9% in real terms, slightly weaker than in the previous year (3.3%). While the pace slowed in many advanced economies, the United States along with emerging market and developing countries performed better overall. Growth in China was volatile after the economy restarted following the pandemic, with the real estate sector coming under growing pressure.

The OECD sees the increase in corporate insolvencies as an indication that the less favourable financing conditions have dampened global demand. Numerous companies found themselves facing higher debt servicing, stricter credit standards and, in many cases, slower sales growth. Despite low levels of unemployment, there were increasing signs of a weakening labour market in many economies. These include slower employment growth, declining churn rates and fewer job vacancies.

On the inflation side, central banks were successful with their restrictive monetary policy. Inflation rates fell almost everywhere last year, helped by the partial reversal of the previous sharp rise in energy prices. The upward trend in prices for services remains more persistent than for goods, as wages are generally the most important production costs in the service sector.

in %	GDP 2023	GDP 2022
World	2.9	3.3
USA	2.4	1.9
Europe		
Eurozone	0.6	3.4
Germany	-0.1	1.9
France	0.9	2.5
UK	0.5	4.3
Asia		
China	5.2	3.0
Japan	1.7	0.9
Australia	1.9	3.7

Source: OECD Economic Outlook, Volume 2023, Issue 2: Preliminary Version

Capital markets

The investment environment was again very volatile in the reporting period and was influenced by numerous geopolitical and macroeconomic challenges.

On the markets for fixed-income securities, interest rates fell in our main currency areas, particularly towards the end of the reporting period in medium and longer maturities, while short-term rates continued to rise, resulting in – in some cases more pronounced – inverted yield curves. This primarily reflected central bank interest rate policy, the inflation issue and sovereign debt levels.

Uncertainties in the banking sector at the end of the first quarter led to unease on credit markets. This was reflected in some very volatile risk premiums on corporate bonds, although these had largely settled back to or even below the level at the beginning of the year by the reporting date.

Central banks once again had a significant influence on capital markets and the economy. In our main currency areas, they raised their key interest rates in multiple increments in response to the ongoing vigorous inflation trend. Overall, the policies pursued by central banks in our main currency areas consistently pulled off the difficult balancing act of keeping inflation in check while not stifling the sometimes still fragile economic momentum.

Stock markets enjoyed a strong first half of the year, primarily due to the anticipated end of interest rate hikes and buoyant price movements in the technology sector. The second half of the year got off to a much more subdued start, but recorded further significant gains in the final quarter, particularly in European and US equities.

Overall, the issue of inflation continued to dominate. Inflation rates are still above the targets set by central banks, despite retreating appreciably over the course of the year.

The euro fluctuated quite significantly against the US dollar over the course of the year before ending the year under review with slight gains. While the euro fell slightly against the British pound, it also made gains against the Australian and Canadian dollars.

Industry-specific environment

The renewals in January 2023 marked a turning point for the property and casualty reinsurance market. There was a fundamental shift in pricing and risk appetite, particularly for property catastrophe risks. This shift continued in the subsequent rounds of renewals. Market conditions nevertheless remained complex, mainly due to unpredictable inflationary trends, geopolitical risks, deglobalisation and developments in the areas of climate change and cyber risks.

In view of this risk situation and the further rise in claims costs, demand for insurance cover increased.

AM Best and Guy Carpenter estimate that reinsurance capital is likely to have risen to USD 461 billion in 2023, adjusted for equity effects from higher interest rates, compared to USD 434 billion in the previous year. Sufficient capacity was therefore available to meet demand. However, subsectors of the market were in different phases of the market cycle, resulting in capacity bottlenecks in some loss-affected segments. According to AM Best and Guy Carpenter, the market for alternative risk transfer remained largely stable with a total invested capital volume of around USD 100 billion. Within this market, there was a further shift towards catastrophe bonds.

At the same time, many risks changed. The first half of 2023 brought a high frequency of weather-related natural disasters, particularly with respect to modelled secondary risks. Severe thunderstorms with tornadoes and hail in the United States caused losses in the first half of 2023 on a scale previously only expected from a major hurricane. Other natural hazards such as wildfires and floods, which do not rank among the historical peak events, also trended higher in many regions of the world.

The most expensive insured losses in 2023 included the earthquake in Türkiye and Syria, storms in the US and Mexico and two consecutive flood events in New Zealand. Overall, the reinsurance market was in a more sustainable state in 2023, with risk-adequate prices and higher investment income boosting profitability.

The trend towards **digitalisation** in the insurance sector continued in 2023. Artificial intelligence, in particular, is a topic that has gathered significant momentum in recent months. As a result, digitalisation is playing a role in more and more areas, for example when it comes to the automation of business processes or the changing competitive landscape. At the same time, the ability to collect and analyse a wide range of additional data more precisely is opening up new opportunities. This means that risks can be better assessed and premiums calculated even more accurately. The insurance of cyber risks has also become increasingly important. Demand for insurance solutions to protect against potential losses caused by hacker attacks continued to grow.

Overall assessment of the business position

For Hannover Re, the 2023 financial year was shaped by a complex macroeconomic and geopolitical landscape as well as a high frequency of natural catastrophes. We again demonstrated our risk-bearing capacity and profitability in this challenging environment. We achieved good results in both our business groups, namely Property & Casualty reinsurance and Life & Health reinsurance, as well as in our investments.

The result in property and casualty reinsurance was particularly impacted by the considerable number of large losses. At the same time, the industry has turned the corner towards more adequate prices and conditions. These continued to improve in the 2023 treaty renewals in many lines on both the primary insurance and reinsurance side. Following the losses incurred in previous years due to death benefits in connection with the Covid-19 pandemic, life and health reinsurance delivered positive profit contributions again in the year under review. We further increased our investment income thanks in part to the higher interest rate level and positive operating cash flow. Overall, therefore, we were able to generate a Group profit slightly above our expectations.

At the time of preparing the management report, it remains the case that both the business position of the Group and its financial strength can be assessed as very good. Within the framework of our Group strategy, we determine our necessary equity resources according to the requirements of our internal capital model, solvency regulations, the expectations of rating agencies for our target rating and the expectations of our clients and shareholders.

Business development

- Reinsurance revenue (gross) up by 4.9% to EUR 24.5 billion adjusted for exchange rate effects
- Property and casualty reinsurance continues to grow on the back of improved prices and conditions; large loss expenditure in line with budgeted expectation
- Life and health reinsurance posts sharply improved profitability
- Contractual service margin (net) increases by 17.4% to EUR 7.7 billion
- Return on investment of 2.8% significantly higher than minimum 2.4% target
- Group net income beats guidance at EUR 1.8 billion
- Return on equity reaches 19.0% and comfortably surpasses minimum target

Hannover Re is reporting its business results with effect from 1 January 2023 according to the new financial reporting standards IFRS 17 and IFRS 9. In order to ensure comparability of the results, the figures for the previous year have also been calculated in accordance with the new standards.

As one of the leading reinsurers in the world, Hannover Re has a far-reaching international network and extensive underwriting expertise. On this basis, we are able to offer our customers traditional, tailor-made and innovative reinsurance solutions and we work with them to open up new business opportunities.

Global reinsurance markets have been experiencing fierce competition and losses from natural catastrophes for some years now. At the same time, climate change, Russia's war of aggression on Ukraine and global macroeconomic developments are presenting major challenges for the insurance industry.

Of the headwinds currently facing us, special mention should be made of the continued high levels of inflation. Combined with an increase in large losses, which can be attributed in part to climate change, this is leading to a sharp surge in expenditures for insurers and reinsurers alike.

Despite these challenges, Hannover Re once again demonstrated the resilience of its business model as a globally diversified and robustly capitalised reinsurer in the 2023 financial year.

The market headwinds described above are fuelling demand for high-quality reinsurance protection such as that offered by Hannover Re. Against this backdrop, our business continued to chart a profitable growth track in 2023. Not only did we achieve the guided Group net income, we also strengthened the balance sheet to a greater extent than originally planned.

Reinsurance revenue (gross) for the Group increased by 1.8% as at 31 December 2023 to EUR 24.5 billion (EUR 24.0 billion). At constant exchange rates, growth would have reached 4.9%. We thus very nearly achieved our guidance of at least 5% growth.

The reinsurance service result (net), reflecting the profitability of underwriting activity after deduction of business ceded (primarily retrocessions and insurance-linked securities), rose by a substantial 24.1% to EUR 1,658.3 million (EUR 1,336.4 million).

The reinsurance finance result (net) adjusted for exchange rate effects, which is structurally negative, decreased by 50.9% to EUR -(880.2) million (EUR -(583.1) million).

Other income and expenses decreased by 118.5% to EUR -(481.7) million (EUR -(220.5) million) due to the elimination of positive one-time effects from the previous year.

The operating profit (EBIT) grew by 30.1% to EUR 1,971.2 million (EUR 1,515.7 million). The investment income in the previous year was exceptionally low in the IFRS 9 presentation because considerable realised gains in connection with the contribution of a private equity portfolio to a joint venture were reflected not in the statement of income but rather in equity in accordance with the new accounting standards. The development of investment income in the 2023 financial year was positively affected above all by higher interest rates. In addition, the EBIT in the financial year was notable for a favourable underlying business development on the reinsurance side. Against this backdrop, the reserves in property and casualty reinsurance were further strengthened – especially in the fourth quarter –, thereby increasing the resilience of the balance sheet.

Expenditure for taxes decreased to EUR 26.3 million (EUR 525.9 million) due to different regional profit contributions and a one-time effect connected with adoption of the OECD's proposed global effective minimum tax rate. Group net income came in at EUR 1,824.8 million (EUR 780.8 million). We thus achieved our Group earnings guidance of at least EUR 1.7 billion. Earnings per share stood at EUR 15.13 (EUR 6.47).

The shareholders' equity amounted to EUR 10.1 billion (EUR 9.1 billion) as at 31 December 2023. The increase in shareholders' equity derived principally from the Group profit generated less the dividend distributed to shareholders of Hannover Re for the 2022 financial year. The return on equity stood at 19.0% (8.2%) and thus comfortably beat the minimum target of 1,000 basis points above the risk-free interest rate. The book value per share reached EUR 83.97 (EUR 75.12).

The contractual service margin (net) grew by 17.4% to EUR 7,699.1 million (31 December 2022: EUR 6,557.4 million). The increase was driven mainly by the profitable new business written. The risk adjustment for non-financial risk nudged slightly higher by 0.3% to EUR 3,728.6 million (31 December 2022: EUR 3,717.1 million).

The total policyholders' surplus, consisting of shareholders' equity, non-controlling interests and hybrid capital, amounted to EUR 14.2 billion (EUR 13.7 billion) as at 31 December 2023.

Reinsurance revenue (gross) in our **Property & Casualty reinsurance** business group rose by 6.5% adjusted for exchange rate effects. Despite a large number of medium-severity catastrophe losses, the expenditures from large losses amounting to EUR 1.621 billion remained within our budgeted expectation for the financial year of EUR 1.725 billion. The combined ratio in property and casualty reinsurance improved year-on-year to 94.0% (94.5%). In view of the challenging market environment described at the outset, prices and conditions for reinsurance protection continued to show sustained improvement. This similarly led to a further increase in the cost of retrocession covers that we take out to protect our own portfolio.

Thanks to its comparatively low administrative expenses and cost of capital as well as its above-average financial strength, Hannover Re has been and remains able to successfully assert itself in the market. Based on our positioning as one of the largest and most robustly capitalised reinsurers in the world, we enjoy sustained very good access to profitable business. The operating profit (EBIT) booked in property and casualty reinsurance improved by 26.7% to EUR 1,098.6 million (EUR 867.3 million). Due to the aforementioned higher-than-planned increase in the liabilities from reinsurance contracts issued, the EBIT was below our target EBIT of EUR 1.6 billion.

Reinsurance revenue (gross) booked in our **Life & Health** reinsurance business group grew by 1.6% adjusted for exchange-rate effects. At the same time, demand for reinsurance covers remained strong in areas such as financial solutions and protection against longevity risks. Pandemic-related losses, on the other hand, were considerably lower. The operating result (EBIT) in life and health reinsurance improved sharply to EUR 871.2 million (EUR 650.3 million) and thus played an important part overall in the total result for the year under review.

Our portfolio of **investments** amounted to EUR 60.1 billion at the end of the year (31 December 2022: EUR 55.3 billion). The investment result improved on the previous year by 64.5% to reach EUR 1,588.2 million (EUR 965.4 million). This was attributable primarily to higher interest income and fair value changes recognised in profit or loss as well as a lower charge for expected credit losses. In addition, the net realised gains recognised in the previous year in the presentation according to IFRS 9 were exceptionally low because the realisation of considerable gains from our private equity portfolio was not reflected in the statement of income under IFRS 9. The resulting return on our investments stood at 2.8% overall and thus comfortably beat our minimum full-year target of 2.4%.

We largely achieved and in some cases substantially outperformed the forecasts shown in the following table.

Business development and guidance in the year under review

	Guidance 2023	Target attainment 2023
Growth in reinsurance revenue (gross) for the Group [1]	at least 5.0%	4.9%
Return on investment	at least 2.4%	2.8%
Group net income	at least EUR 1.7 billion [2]	EUR 1.8 billion

[1] At constant exchange rates

[2] Assuming no unforeseen distortions on capital markets, large loss expenditure remaining within the expected bounds and the Covid-19 pandemic not significantly influencing the result in life and health reinsurance.

Results of operations

In the following sections we discuss the development of the financial year in our two strategic business groups, namely Property & Casualty reinsurance and Life & Health reinsurance, as well as the performance of our investments and the financial position and assets of our Group.

Property & Casualty reinsurance

- Reinsurance revenue (gross) grows by 6.5% adjusted for exchange rate effects
- New business CSM (net) amounts to EUR 2.4 billion
- Trend towards rate increases in the treaty renewals gains added momentum in 2023
- Large loss expenditure within the budgeted expectation despite high claims frequency
- Combined ratio of 94.0%
- Balance sheet resilience further strengthened
- Operating profit rises by 26.7%

Global markets for property and casualty reinsurance faced many headwinds in the financial year just ended. Numerous natural catastrophes as well as persistently high inflation resulted in strains for the entire industry.

In response, the trend towards a significant improvement in risk-adjusted prices and conditions in both primary insurance and reinsurance gained added momentum. The various rounds of renewals in 2023 marked a turning point for the industry towards more adequate prices and better conditions. At the same time, demand for high-quality reinsurance protection increased.

In sum, the renewals passed off favourably for us. We traditionally report price changes on a risk-adjusted basis. In other words, the price developments that we report already make allowance for higher inflation rates and model adjustments.

In natural catastrophe business we continued to pursue our profit-oriented underwriting policy. Our risk appetite for coverage of natural catastrophes grew at a disproportionately low rate relative to the premium growth in property and casualty reinsurance in original currency.

Treaty renewals in 2023

in %	As at 1.1.	As at 1.4.	As at 1.6./1.7.
Change in premium income	-0.7	7.1	12.6
Risk-adjusted prices	8.0	6.0	4.8

Thanks to our quality-focused underwriting approach, the new business CSM (net) was boosted by a substantial 29.7% to EUR 2,368.1 million (EUR 1,825.1 million). The new business LC (net) contracted to EUR 40.3 million (EUR 236.0 million).

Reinsurance revenue (gross) in property and casualty reinsurance grew by 3.4 % to EUR 16,823.9 million (previous year: EUR 16,264.9 million). Growth would have reached 6.5% at constant exchange rates.

The 2023 financial year was characterised by a high frequency of medium-severity catastrophe losses. The net expenditures from large losses in the financial year totalled EUR 1,620.6 million (EUR 1,705.7 million). They were thus within the budgeted expectation of EUR 1,725 million for 2023.

We classify events for which we expect gross loss payments in excess of EUR 10 million as large losses.

The largest individual losses for Hannover Re included the severe storms in Italy in July in a net amount of EUR 313.1 million. Also notable was the devastating earthquake in Türkiye and Syria at the start of the year with expenditure of EUR 270.1 million, Hurricane Otis in Mexico at a cost of EUR 142.2 million and the wildfires in Hawaii amounting to EUR 96.8 million. Further losses of EUR 73.5 million were incurred from the major earthquake in Morocco. Tropical Cyclone Gabrielle in New Zealand, the flooding in New Zealand at the start of the year and losses caused by severe storms and flooding in Australia at year-end took a toll of EUR 67.1 million, EUR 46.8 million and EUR 43.8 million respectively.

Further expenses totalling EUR 48.2 million were incurred in connection with the unrest in France. Additional pandemic-related losses – albeit in line with expectations and substantially lower than in the previous year – were recorded in accident and health insurance in the Asia-Pacific region.

The reinsurance service result (net) climbed by 5.9% to EUR 848.5 million (EUR 801.3 million). The result for the previous year had included provisions made for payments connected with the war in Ukraine. The combined ratio improved to 94.0% (94.5%) despite significant, higher-than-planned strengthening of the loss reserves in 2023. The reinsurance finance result (net) adjusted for exchange rate effects amounted to EUR -(722.0) million (EUR -(475) million).

The net investment result for property and casualty reinsurance amounted to EUR 1,170.7 million (EUR 608 million). Net realised gains had been exceptionally low in the previous year as presented in accordance with IFRS 9 because the realisation of considerable gains from our private equity portfolio was not reflected in the statement of income under IFRS 9. The operating profit (EBIT) increased by 26.7% to EUR 1,098.6 million (EUR 867.3 million) and thus fell short of our EBIT target of EUR 1.6 billion for property and casualty reinsurance. This was due to the previously mentioned higher-than-planned increase in the liabilities from reinsurance contracts issued.

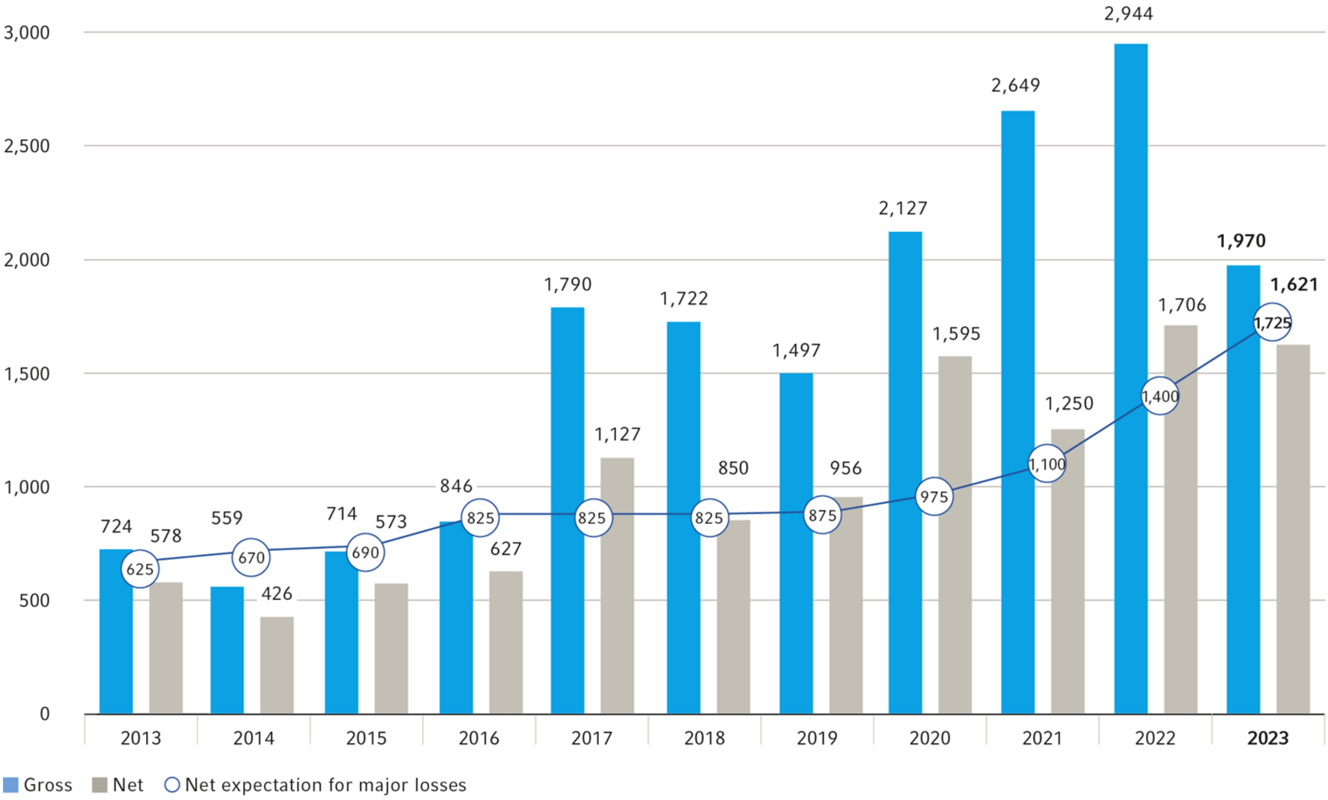
On the following pages we report in detail on developments in our Property & Casualty reinsurance business group. This is split into a number of reporting categories, sorted according to regional markets and worldwide markets.

Key figures for Property & Casualty Reinsurance

in EUR million	2023	+/- previous year	2022 [1]
Reinsurance revenue (gross)	16,823.9	+3.4%	16,264.9
Reinsurance service result (net)	848.5	+5.9%	801.3
Reinsurance finance result (net) [2]	-722.0	+51.9%	-475.2
Investment income	1,170.7	+92.6%	607.9
Operating result (EBIT)	1,098.6	+26.7%	867.3
EBIT margin [3]	7.7%		6.0%
Combined ratio [4]	94.0%		94.5%
New business CSM & LC (net)	2,327.8	+46.5%	1,589.1

[1] Restated pursuant to IAS 8
[2] Excluding exchange rate effects
[3] EBIT / reinsurance revenue (net)
[4] Reinsurance service result / reinsurance revenue (net)

Property & Casualty Reinsurance: Large loss trend[1]



[1] Natural catastrophes and other large losses in excess of EUR 10 million gross

Property & Casualty reinsurance: Key figures for individual markets and lines in 2023

	Reinsurance revenue (gross) 2023 in EUR million	Change in reinsurance revenue (gross) relative to previous year	Reinsurance revenue (gross) 2022 in EUR million
Regional markets			
Americas	4,696.5	+10.9%	4,236.0
Asia-Pacific	2,075.9	-0.1%	2,078.0
Europe, Middle East and Africa (including CIS countries)	3,947.5	+0.1%	3,944.5
Worldwide markets			
Facultative Reinsurance	1,047.5	-6.0%	1,114.3
Structured Reinsurance and Insurance-Linked Securities	3,053.9	+4.9%	2,910.2
Aviation and Marine	551.1	-10.3%	614.2
Agricultural Risks	656.5	+7.2%	612.6
Credit, Surety and Political Risks	795.0	+5.3%	755.1

Regional markets

Europe, Middle East and Africa (including CIS countries)

Continental Europe recorded an increasing frequency of natural catastrophe events in the year under review. Heatwaves, floods and storms led to high claims burdens for insurers and reinsurers in many European countries. The devastating earthquake in Türkiye and Syria at the beginning of the year and the major earthquake in Morocco were also significant events.
The growing number of large and frequency losses combined with persistent inflation have resulted in higher payments to our customers. Reinsurance prices and conditions consequently had to be appreciably increased again in the course of 2023 to take account of the higher expected claims values.

Responsibility for **Germany** within the Hannover Re Group is assigned to our subsidiary E+S Rückversicherung AG.

Insurance business in Germany was similarly characterised by an increased frequency of natural perils events in 2023. After a rather below-average first half of the year, summer storms Lambert and Kay as well as Denis and Erwin led to considerable claims burdens in the motor own damage and property insurance lines in the third quarter.

In motor insurance, average claims were once again significantly higher. At the same time, the tariff adjustments for 2023 failed to produce the desired effects. Sharp rises in the costs of spare parts and repairs as well as increased claims frequencies in combination with exceptional expenditures due to severe weather conditions led to substantial losses across the entire market for own damage insurance. In total, the German Insurance Association (GDV) puts the combined ratio for the market in 2023 at 110%, a considerable deterioration compared to the previous year.

The high-volume property lines of residential building and industrial insurance once again recorded above-average premium increases.

The price increases seen on cyber covers in previous years softened in 2023. Nevertheless, pressure for adjustments persists in connection with rising claims expenses. Controlling and limiting cyber accumulation scenarios has taken on added relevance, as is also reflected in the contractual terms and conditions.

In **France,** the market hardened further in the 2023 financial year. The insurance industry faced headwinds from Storm Ciarán in the autumn, among other things. In terms of man-made losses, the serious social unrest in the summer and resulting losses are particularly noteworthy.

Italy experienced extreme losses from natural hazards in 2023. In addition to the spring floods in the Emilia-Romagna region, it was above all the storms with hail and heavy rainfall in the third quarter that led to massive losses. Following the increased frequency of natural perils events already recorded in previous years, significant adjustments to retentions, conditions and prices were necessary and implemented on the reinsurance side in the motor own damage and property lines.

In the markets of **Central and Eastern Europe**, Russia's war of aggression against Ukraine continued to influence economic development in the region in 2023. Business here was also affected by extraordinary losses due to business interruptions caused by supply chain bottlenecks and the persistently high level of inflation. We reduced our proportional business in the year under review and at the same time expanded our non-proportional portfolio. In view of the large loss expenditures and persistently difficult macroeconomic environment, we were able to secure further price increases.

Northern Europe was similarly notable for a number of small and medium-sized frequency losses. In this region, too, we were once again able to push through price increases in the year under review and thus further improve the quality of our portfolio.

Insurers in the **UK, Ireland and the London market** obtained further rate increases in the year under review. Although these were sometimes lower than in the previous year, significant increases were also realised in some lines of business. Property covers, in particular, benefited from the market situation as a result of negative claims trends from prior years, high inflation and the resulting capacity shortages.

The wars in Ukraine and Israel prompted insurers and reinsurers to focus their attention on covers from the terrorism and political risks (political violence) segment. Clear hardening of the market was evident here, and in some cases a move away from broker facilities. In certain liability lines, such as directors' and officers' (D&O) insurance, the prices that could be obtained settled on the previous year's level. Rate reductions were also observed in the primary insurance market. As announced last year, property insurance business recorded significant rate increases.

Appreciably higher rates were seen on the reinsurance side in the motor line, in the area of terrorism and political violence and in natural catastrophe business. We were able to push through increases here in the retentions carried by primary insurers.

As a result of the rate increases in the original market, which had the effect of boosting profitability in our proportional portfolio, and price rises in the non-proportional book, our portfolio remained stable in 2023 due to targeted share reductions.

In the **Middle East** we transact both traditional reinsurance for the Middle East and North Africa region and business in accordance with Islamic law, known as retakaful. We offer retakaful capacities worldwide through our subsidiary Hannover ReTakaful. Our focus is on the Middle East, North Africa and Southeast Asia. In both business segments we observed further premium growth in the markets of the Middle East and South Asia in the financial year just ended.

In **South Africa,** the 2023 financial year was notable for a higher frequency of smaller and mid-sized losses, but no significant catastrophe losses. Risk management and firefighting in the region suffer from a lack of investment in infrastructure. The insurance industry has therefore enforced an exclusion for losses caused by a power grid failure, as this is now considered to be an uninsurable risk. Coverage for damage caused by switching the electricity on or off has also been significantly restricted.

Americas

We combine our business in North and Latin America in the **Americas** reporting category.

North America is the largest insurance market in the world. Our business here is written largely through brokers.

The economic landscape in North America was again dominated by surging inflation all around the world in 2023. In particular, the economy came under pressure in the first half of the year from increasing price rises and energy costs as well as supply chain disruptions.

The US economy proved to be relatively resilient despite this general environment. The premium volume in primary insurance consequently continued to grow. Insurers were able to push through further rate increases in light of the uncertainties in the markets. The trend towards higher prices in property and liability lines was also sustained for the fourth year in succession.

On the claims side, the financial year was not dominated by large loss events. Instead, business was shaped by a high number of severe convective storms in the first three quarters. Particularly in the Midwest, these events caused considerable losses in primary insurance and reinsurance.

Hannover Re was able to secure improvements in prices and conditions across all lines of North American business in the 2023 treaty renewals.

The pace of recovery on **Latin American** economies following the pandemic strains and natural disasters of recent years is varied. Overall, economic growth was weak. Argentina was particularly challenged by high inflation.

After a comparatively benign previous year, the region was once again hit by large losses in 2023. The most significant loss event was Hurricane Otis in October, which caused severe damage in Mexico and is considered the most expensive insured event there in the past 20 years. Against this backdrop, demand for natural catastrophe covers continued to rise, while the supply of reinsurance capacity remained stable or even tightened for some risks. This resulted in further improvements in prices and conditions for both insurers and reinsurers.

Asia-Pacific

The **Asia-Pacific** remains the region with the strongest economic growth in the world and continues to evolve into one of the largest insurance markets. We have expanded our local footprint in recent years in order to leverage the growth potential offered by the region.

The state of the economy in the "Greater China" area, which includes Mainland China as well as Taiwan, Hong Kong and Macau, was relatively stable in the year under review. Most insurers were therefore able to generate positive underwriting results. When it comes to natural catastrophe losses, a number of events occurred in 2023: Typhoon Doksuri, the historic record rainfall in Hong Kong and the earthquake in Gansu province were the most noteworthy large losses.

In the aftermath of the Covid-19 pandemic, China enjoyed vigorous economic growth in the year under review, accompanied by low inflation. This development, together with the new focus on green and sustainable economic growth (green economy), offers business opportunities for insurers and reinsurers. At the same time, however, competition is also intensifying.

We scaled back our market share in China over the course of the year due to inadequate rates. However, our customer relationships remain stable and reliable. In Taiwan, claims relating to the Covid-19 pandemic affected the result in accident and health insurance on a far smaller scale than in the previous year.

In the region of Southeast Asia – consisting of countries such as Indonesia, Malaysia, the Philippines, Singapore and Vietnam – the 2023 financial year was notable for restructuring in favour of significantly increasing the profitability of our portfolio.

Particularly in Thailand, Malaysia and South Korea, a hardening of the reinsurance market and associated appreciable improvements in conditions were noticeable. For tactical reasons, we have shifted the focus of our portfolio from proportional to more non-proportional covers.

The Indian market remains intensely competitive. We nevertheless continued to grow as planned in the property insurance lines.

In Australia and New Zealand, we further expanded our partnerships with key accounts in 2023 based on established, strong customer relationships or renewed existing large contracts over a longer period.

Following what had in some cases been devastating natural catastrophe losses in prior years, the region was again hit by such events in 2023. Cyclone Gabrielle and the floods in Auckland caused extensive destruction and corresponding large loss expenditures in the first quarter of 2023. Convective storms and hail also took a toll in the final week of the year.

The rate level increased significantly based on the claims experience of recent years and continuing inflation, both on the insurance and reinsurance side. We were also able to improve the reinsurance conditions for proportional programmes. We expect the rate level to stabilise further in the coming financial year.

Worldwide markets

Structured Reinsurance and Insurance-Linked Securities

In the **Structured Reinsurance and Insurance-Linked Securities** reporting category we combine our business involving tailor-made property and casualty reinsurance solutions and insurance-linked securities (ILS).

In **structured reinsurance** we rank as one of the largest providers of innovative and bespoke reinsurance solutions in the world. These provide solvency relief and thus have a positive effect on the client's capital and hence its rating, or they protect against the strain of frequency losses. Structured concepts also offer an alternative in cases where traditional reinsurance capacity cannot be accessed to the full extent. Along with the traditional clientele of primary insurers, structured reinsurance is increasingly in demand among large corporate groups and their in-house insurance captives.

Globally, we were again able to grow our customer base and increased the number of treaties and associated premium volume at attractive conditions. The higher retentions carried by our clients prompted stronger demand for structured, volatility-mitigating reinsurance solutions.

The market for **insurance-linked securities** reached a new record high in 2023 with a capacity of around USD 100 billion. Cash flow were channelled particularly into catastrophe bonds due to the relatively higher liquidity and comparatively better investment results in recent years. At USD 16.2 billion, the worldwide market volume of newly issued catastrophe bonds is higher than in 2022 (USD 10.3 billion) and also beats the previous record year of 2021 (around USD 14.0 billion).

According to our estimates, collateralised reinsurance still accounts for the bulk of the ILS market, even though catastrophe bonds became more attractive in the year under review. In collateralised reinsurance, insurers and investors enter into private risk transfer agreements secured by collateral held in trust accounts.

Hannover Re leverages the entire spectrum of opportunities offered by the ILS market. On the one hand, we ourselves take out reinsurance with ILS investors, while at the same time we offer to transfer our customers' risks to the capital market as a service. This is done in the form of catastrophe bonds or through collateralised reinsurance, under which our partners on the investment side are primarily specialised ILS funds. We also invest in catastrophe bonds.

In 2023, the volume of new exposures that we transferred to the capital market in the form of catastrophe bonds totalled around USD 2.8 billion, spread across ten transactions. This volume is higher than the record year of 2021 with USD 2.7 billion. Covers were placed to protect against losses from natural catastrophes such as floods, windstorm events and earthquakes. The largest transaction was a USD 500 million catastrophe bond for the Texas Windstorm Insurance Association.

Collateralised reinsurance, which remains by far our largest segment in the ILS sector, showed further pleasing growth in the year under review. Most notably, we were able to grow our business with existing clients.

The important role played by the capital market in our purchasing of retrocession protection was unchanged. For example, we have placed a protection cover for Hannover Re known as the "K quota share" – a modelled quota share cession consisting of non-proportional reinsurance treaties in the property, catastrophe, aviation and marine (including offshore) lines – inter alia on the ILS market since as long ago as 1994. In addition, we were able to transfer cyber risks to the capital market for the first time through a quota share cession, an innovation for the ILS market in view of the USD 100 million in capital support. In addition to the quota shares, we made use of the ILS market for other protection covers.

Facultative Reinsurance

In contrast to obligatory reinsurance, we write primarily individual risks in **facultative reinsurance**. The general framework conditions for both types of reinsurance in the various markets are extensively correlated.

The attractive reinsurance conditions of the previous year continued in the 2023 reporting year. Exceptions were the directors' and officers' (D&O) and financial institutions lines. Coming off a high initial level, we observed a continuation here of the rate reductions that had already begun in 2022.

The same is true of the cyber line, where we are currently seeing rate erosion following significant increases worldwide at the end of the previous year. There is a large discrepancy between US business and European placements, where pricing pressure was felt not only earlier but also more heavily.

The supply of facultative reinsurance solutions was stable on a high level in the year under review, as capacities in obligatory reinsurance continued to tighten.

The business result in facultative reinsurance was only impacted to a minimal extent by natural catastrophes. The largest losses were caused by the earthquake in Türkiye and Syria and by Hurricane Otis in Mexico. Human-caused losses, on the other hand, increased. Mention should be made here of the fire at a shopping complex in Panama, among others.

Hannover Re has enshrined sustainability goals as part of its Group strategy. In recent years, for example, we have taken a very conservative approach to the coverage of thermal coal and oilsands risks in facultative business and from 2020 onwards we have no longer written any new business in these areas. Furthermore, we exclude coverage for risks associated with the development of new oil and gas fields and respect sustainability concerns around biodiversity and human rights. If we identify violations of internationally recognised conventions, we decline the business in question. What is more, in our facultative reinsurance business we support the sustainable transformation of the economy, for example through the targeted provision of reinsurance protection for the expansion of renewables and new storage technologies.

Credit, Surety and Political Risks

Loss ratios were moderately higher in **credit and surety insurance** as well as in the **political risks** segment due to deteriorating economic conditions around the world. Higher inflation and interest rates led to a markedly gloomier general economic situation and rising insolvency numbers.

These developments spurred rising demand for insurance and reinsurance in 2023, while prices held stable or moved slightly higher. Claims activity picked up somewhat coming off a very low level, but remained below average from a multi-year perspective.

Aviation and Marine

The favourable trend for both proportional and non-proportional solutions in **aviation** reinsurance was sustained. As far as prices are concerned, the positive momentum is gradually slowing as expected, but at the same time we are still securing improvements in treaty conditions.

The primary insurance market, on the other hand, shows a more mixed picture. From a global perspective, the pricing trend in the general aviation and product liability segments ranges from slightly positive to stable. The airline segment, on the other hand, remains soft on account of persistent surplus capacities. In view of new geopolitical tensions and the continued uncertainty around pending international proceedings between leasing firms whose activities previously included Russia and their insurers, the subsegment of "war risk insurance" showed further substantial price improvements.

Turning to **marine business**, a normalisation of world trade was evident in the year under review following the impacts of the Covid-19 pandemic. Despite the ongoing war in Ukraine, maritime trade picked up in the areas of both container and bulk shipping. Inflation drove costs higher, however, including the costs of making repairs to vessels.

The marine insurance market continued the sustained upward trend already noted in previous reporting periods, albeit less vigorously, and rates in cargo and hull insurance moved slightly higher. In offshore energy business, on the other hand, prices were stable. Contrary to our expectations, the market for political risks posted only modest price increases.

On the claims side, it was pleasing to see that 2023 passed off rather benignly. Along with the impacts of various natural disasters, such as the earthquakes in Türkiye and Syria as well as Morocco, the explosion on an oil rig in the Gulf of Mexico was especially noteworthy.

In 2023 Hannover Re continued to write marine business with a sweeping exclusion for risks from the war in Ukraine. We were gratified that our existing customer relationships helped us to keep our premium largely on a stable level, albeit with structural improvements and at more attractive prices. In this context we were able to scale back our gross exposures to various sublines of marine business.

In contrast to some sublines of marine primary insurance, the marine reinsurance market continues to see rate increases. Along with the pricing arrangements, we consider a risk-adequate structure to be the second precondition for favourable evaluation of a reinsurance programme. In the treaty renewals during the 2023 reporting period, we were able to press ahead with our underwriting approach. Building especially on existing customer relationships, we generally secured more attractive pricing and structural conditions.

Agricultural risks

In the face of a growing need for commodities and foodstuffs as well as an accumulation of extreme weather events, demand for insurance and reinsurance solutions is rising in business with **agricultural risks**. We support our customers and partners here with both traditional reinsurance solutions and innovative insurance concepts such as index-based and parametric covers. In addition, the further expansion of public-private partnerships is opening up new opportunities to write profitable business in hitherto immature markets and close protection gaps.

The sustainable development of the market for agricultural risks is contingent on improved profitability for both insurers and reinsurers. The increasing exposures must therefore also be clearly reflected in the rate trend.

In terms of loss expenditures, 2023 was a quiet year. We further expanded our portfolio in Brazil in the year under review at significantly better rates and conditions. The profitability of the business written had improved considerably after the enormous drought losses of 2021. In China and India, on the other hand, we scaled back our portfolio in the year under review on account of unattractive conditions.

Life & Health reinsurance

- Reinsurance revenue (gross) up by 1.6% to EUR 7.6 billion adjusted for exchange rate effects
- New business CSM (net) amounts to EUR 359.2 million
- Contractual service margin (net) grows by 9.0% to EUR 6.0 billion
- Longevity covers and financial solutions in particularly high demand among customers
- Operating result rises by 34% to EUR 871.2 million

Life & Health reinsurance is Hannover Re's second major business group. It contributed a 31% share of our Group reinsurance revenue in the year under review.

In all segments of life and health reinsurance we enjoyed sustained strong demand from our clients in 2023. Our business in the year under review was once again shaped by the trend towards intense competition on the global life and health reinsurance markets.

In the area of financial solutions we wrote significant new business, above all in the United States and China.

Longevity covers are also still sought-after. The exacting local capital requirements for such business continue to drive demand at primary insurers and pension funds for corresponding reinsurance covers.

A positive trend in traditional reinsurance business involving mortality and morbidity risks was evident in Latin America and countries such as Italy, France and Spain, among other markets.

The Covid-19 pandemic had no further material impacts on our business in 2023. Compared to the previous year, this had particularly positive implications for the result in the mortality segment.

The new business CSM (net) decreased to EUR 359.2 million (EUR 545.3 million). The new business LC (net) amounted to EUR 14.4 million (EUR 3.9 million). In addition, contract renewals and amendments in the in-force portfolio increased the contractual service margin (net) to EUR 5,950.3 million (EUR 5,456.9 million).

Reinsurance revenue for the Life & Health reinsurance business group reached EUR 7.6 billion (EUR 7.8 billion); the increase in the reinsurance revenue would have been 1.6% at constant exchange rates.

The reinsurance service result (net) improved to EUR 809.8 million (EUR 535.1 million). The reinsurance finance result (net) before exchange rate effects, reflecting interest accretion on technical provisions discounted in prior years, fell to EUR -158.2 million (EUR –107.9 million).

Investment income generated by the Life & Health reinsurance business group increased by 16.2% to EUR 415.4 million (EUR 357.4 million). This includes income of EUR 13.5 million (EUR 87.0 million) booked from our extreme mortality cover.

The operating result (EBIT) grew by 34.0% to EUR 871.2 million (EUR 650.3 million) and thus surpassed our EBIT target for life and health reinsurance of EUR 750 million.

Key figures for Life & Health reinsurance

in EUR million	2023	+/- previous year	2022 [1]
Reinsurance revenue (gross)	7,632.5	-1.5%	7,751.9
Reinsurance service result (net)	809.8	+51.3%	535.1
Reinsurance finance result (net) [2]	-158.2	+46.6%	-107.9
Investment income	415.4	+16.2%	357.4
Operating result (EBIT)	871.2	+34.0%	650.3
EBIT margin [3]	12.6%		9.1%
New business CSM & LC (net)	344.8	-36.3%	541.4

[1] Restated pursuant to IAS 8
[2] Excluding exchange rate effects
[3] EBIT / reinsurance revenue (net)

We provide below a detailed overview of developments in the individual reporting categories – Financial Solutions, Longevity Solutions and Mortality and Morbidity Solutions.

Key figures broken down by segments

	Reinsurance revenue (gross) 2023 in EUR million	Change in reinsurance revenue (gross) relative to previous year	Reinsurance revenue (gross) 2022 in EUR million
Financial Solutions	1,119.8	+0.0%	1,119.3
Longevity Solutions	1,735.2	+3.9%	1,670.3
Mortality Solutions	3,136.5	-3.2%	3,240.1
Morbidity Solutions	1,641.0	-4.7%	1,722.1

Financial Solutions

Our core competency in the **Financial Solutions** reporting category is multifaceted reinsurance solutions individually tailored to our customers' diverse range of needs which enable them to improve their solvency, liquidity and capital position.

The United States has for years been an exceptionally important insurance market in our financial solutions business and in 2023 again played a considerable part in the total result. What is more, we further expanded our new business with structured financial solutions in China as well as in Europe. Along with China, our new business also fared well in other Asian markets. Changes in local capital requirements, which enable us to provide corresponding relief for our clients, were a factor here. The new transactions range from standardised to highly complex structured covers.

Longevity Solutions

In the **Longevity Solutions** reporting category, we group together our reinsurance business in which we cover longevity risks for our customers. We develop innovative annuity products, for example, that are tailored to the individual needs of policyholders in different life situations. They include solutions for deferred annuities, unit-linked annuities, for the reinsurance of reverse mortgages and occupied life annuities, immediate LTC annuities and enhanced annuities. The latter assure pensioners with a pre-existing condition of a higher annuity payment for their remaining shortened life expectancy. At the same time, we reinsure blocks of traditional annuity policies and pension blocks.

Overall, we recorded further growth in demand in 2023 and were able to close new transactions all around the world, including for example in Australia, Canada, Ireland and the Netherlands.

In the United Kingdom, which is still by far the largest market for coverage of longevity risks, the reinsurance volume remained high – especially in the form of smaller blocks of business and funds.

Mortality Solutions

Mortality Solutions account for the largest share overall of the premium income generated in our Life & Health reinsurance business group. We provide reinsurance protection here for our customers against the risk that their insureds do not live as long as anticipated and hence the actual mortality negatively diverges from the originally expected mortality.

Compared to the previous year, business in this segment performed better in virtually all markets worldwide. This can be attributed not least to sharply lower losses from the Covid-19 pandemic, which were a significantly heavier drag on the result in recent years.

The development of new business was generally pleasing. In Latin America, for example, we successfully renewed sizeable portfolios and were also able to acquire further new business.

Morbidity Solutions

Within the **Morbidity Solutions** reporting category, we cover business centred around the risk of a deteriorating state of health due to disease, injury or infirmity. A hallmark of this business is the wide range of possible combinations of different covered risks, including for example strict (any occupation) disability, occupational disability and long-term care insurance.

The morbidity segment similarly benefited from the decrease in Covid-19 losses in the reporting year just ended – albeit not to the same extent as the mortality segment. Business generally developed in line with expectations. As far as new business is concerned, we were successful in entering the German group life market in the second quarter.

Investments

- Return on investment beats minimum 2.4% target to reach 2.8 %
- Higher interest rate level leads to increased earnings from fixed-income securities
- Volume of investments grows to EUR 60.1 billion

Against the backdrop of continued challenging conditions on global financial markets, we are highly satisfied with the performance of our investments.

Ordinary investment income was on a par with the comparable period at EUR 1,981.5 million (EUR 1,961.1 million). This can be attributed primarily to strong earnings from our fixed-income securities. These delivered improved coupon payments that more than made up for the substantially lower amortisation amounts booked on our inflation-linked bonds, which came to EUR 180.0 million (EUR 458.5 million) in the reporting period. This reflects reduced inflation expectations compared to the previous year. Earnings booked from alternative investment funds were also down on the previous year. Income from measurement at equity increased significantly to EUR 16.3 million (EUR -63.2 million), principally against the backdrop of a negative special effect associated with the measurement of one of our participations in the previous year.

The net losses realised on disposals amounted to EUR 153.9 million (EUR 585.3 million) and were due principally to sales in the context of portfolio maintenance and the reduction of our exposure to the Chinese real estate market. The previous year's higher realised losses were notable for the sale of fixed-rate debt instruments as part of restructuring moves in our credit portfolios to strengthen our interest income and our liquidity position over the medium term. In accordance with IFRS 9, corresponding realisation gains in the previous year's period from our private equity portfolio were not presented in the statement of income, but rather recognised directly in equity.

We increased the provisions established for expected credit losses (ECL) in accordance with IFRS 9 by a net amount of EUR 22.8 million through profit or loss in the reporting period (2022: EUR 119.9 million). This was primarily in response to the default on debt instruments of an issuer from the Chinese property sector. Depreciation recognised on directly held real estate totalled EUR 56.3 million (EUR 48.5 million), reflecting our increased exposure to this sector. In addition, we recognised impairments here in an amount of EUR 79.1 million (EUR 18.2 million) because market values for commercial property – an important sector for our company – came under pressure globally in the year under review. We made allowance for this by recognising impairments in the balance sheet for a number of directly held properties. We are not affected by the turmoil surrounding the insolvency of the Signa Group, which is active primarily in German-speaking markets.

The net changes in the fair value of our assets recognised at fair value through profit or loss amounted to EUR 76.0 million (EUR -14.2 million). Particularly significant here were positive changes in the fair values of derivatives relating to the technical account and of fixed-income securities held directly and through funds. Fair value changes affecting alternative investment funds, primarily in the real estate sector, had an opposing effect.

The net investment income of EUR 1,588.2 million (EUR 965.4 million) was on a pleasing level, principally thanks to strong interest income that more than made up for the reduced return from our inflation-linked bonds. The generated average return of average return of 2.8% comfortably beat our minimum target of 2.4%. The main drivers here were the ordinary income and the net changes in the fair value of our assets recognised at fair value through profit or loss, which in each case proved to be higher than originally planned for the year under review.

Net investment income

in EUR million	2023	+/- previous year	2022 [1]
Ordinary investment income	1,981.5	+1.0%	1,961.1
Expected credit losses, impairment, depreciation and appreciation of investments	-155.8	-7.1%	-167.6
Change in fair value of financial instruments	76.0		-14.2
Profit / loss from investments in associated companies and joint ventures	16.3	-125.9%	-63.2
Realised gains and losses on investments	-153.9	-73.7%	-585.3
Other investment expenses	-175.9	+6.3%	-165.5
Investment income	1,588.2	+64.5%	965.4

[1] Restated pursuant to IAS 8

Financial position and net assets

- Risk-commensurate investment policy
- Highly diversified investment portfolio
- Equity base remains robust

Investment policy

Hannover Re's investment policy continues to be guided by the following core principles:

- generation of stable and risk-commensurate returns while at the same time maintaining the high quality standard of the portfolio
- ensuring liquidity and solvency at all times
- high diversification of risks
- limitation of currency exposure and maturity risks through matching currencies and maturities

With these goals in mind, we engage in active risk management based on balanced risk/return analyses. To this end we adhere to centrally implemented investment guidelines and incorporate insights gained from dynamic financial analysis. They form the basis for investment ranges which are specified in light of the prevailing state of the market and the requirements on the liabilities side and within which operational management of the portfolio takes place. These measures are intended to safeguard the generation of an appropriate level of return. In so doing, we pay strict attention to compliance with our clearly defined risk appetite, which is reflected in the risk capital allocated to the investments and constitutes the foundation for the asset allocation of the entire Group and the individual portfolios. Our ability to meet our payment obligations at all times is also ensured in this way. Within the scope of our asset/liability management (ALM) the allocation of investments by currencies and maturities is determined by the technical liabilities. The modified duration of our bond portfolio is geared largely to the technical liabilities.

By adjusting the maturity pattern of our fixed-income securities to the expected payment patterns of our liabilities we reduce the economic exposure to the interest rate risk. Through active and regular management of the currency spread in our fixed-income portfolio we also aim for extensive matching of currencies on the assets and liabilities sides of the balance sheet, as a consequence of which fluctuations in exchange rates have only a limited effect on our result. As at year-end 2023 we held 30.6% (30.2%) of our investments in euros, 41.1% (42.2%) in US dollars, 5.3% (6.0%) in pound sterling and 6.5% (6.5%) in Australian dollars.

Breakdown of investments

in %	2023	2022	2021	2020	2019
Government bonds	35.2	36.6	34.0	34.4	35.0
Semi-government bonds	14.7	13.0	13.8	15.2	15.0
Corporate bonds	28.7	27.2	29.6	29.6	31.0
Covered bonds	6.5	6.2	6.1	6.1	7.0
Equity (listed, private)	3.3	3.5	3.6	3.4	3.0
Real assets	6.7	6.6	5.5	5.1	5.0
Other	2.7	3.6	2.0	2.9	2.0
Short-term investments and cash [1]	2.0	3.2	3.2	3.2	3.0
in EUR million					
Investments	60,128.9	56,939.5	56,213.2	49,001.6	47,629.4

[1] Item "Short-term investments and cash" excluding cash from 2023 onwards

Investment portfolio

At EUR 60.1 billion, our portfolio of assets under own management was significantly higher than the comparable level of the previous year (31 December 2022: EUR 55.3 billion). The main positive factors here were inflows from operational business, interest rate declines in medium and longer maturities in the euro segment and lower risk premiums on corporate bonds. Repayment of a bond, currency effects and higher interest rates in short maturities were the primary opposing factors.

Our investments benefited from the fact that we had already tended to adopt a more defensive posture from the beginning of the previous year onwards with an eye to anticipated central bank moves and inflation developments. In addition, we had no defaults in our bank exposure and did not hold any positions in stressed US banks. We were able to counter the turmoil in the Chinese real estate sector in part with sales, but also recognised impairments in profit or loss. Furthermore, the balanced interest rate positioning of our investments in relation to the technical provisions was reflected in the balance sheet in greater resilience to market volatility following initial application of the IFRS 17 and IFRS 9 accounting standards in the period under review. This is because it is now also recognised in the balance sheet that the fair values of interest rate-sensitive assets and liabilities react in the opposite direction to changes in market rates. High interest rate volatility therefore has only a limited impact on our shareholders' equity and solvency.

Overall, we kept our asset allocation largely stable in the year under review. Only in emerging markets did we slightly expand our portfolio, whereas in China we reduced it. In view of current market signals, we shall maintain this rather cautious posture for the time being. In Latin America and the APAC region, we were able to act on market opportunities to further strengthen our real estate portfolio. At 4.7 (4.8), the modified duration of our fixed-income portfolio was scarcely changed compared to the end of the previous year.
In all other asset classes we made only minimal changes in the context of regular portfolio maintenance.

The net charges on debt instruments recognised at fair value through OCI in other income and expenses amounted to EUR 3.2 billion (EUR 4.9 billion). As to the quality of the bonds measured in terms of rating categories, the proportion of securities rated "A" or better remained on a consistently high level of 75.8 % (76.6%) at year-end.

Rating of fixed-income securities

in %	2023
AAA	23.4
AA	33.8
A	18.6
BBB	17.7
<BBB	6.5

Holdings of alternative investment funds increased overall in the year under review. As at 31 December 2023 an amount of EUR 2,018.9 million (EUR 1,981.1 million) was invested in private equity funds, with a further EUR 665.2 million (EUR 579.9 million) attributable predominantly to fund investments in high-yield bonds and loans. In addition, altogether EUR 1,043.8 million (EUR 945.5 million) was invested in structured real estate and infrastructure investments. The uncalled capital with respect to the aforementioned alternative investments totalled EUR 1,161.6 million (EUR 2,061.7 million).

At the end of the year under review, we held a total amount of EUR 1,224.8 million (EUR 554.3 million) in short-term investments.

Analysis of the capital structure

The technical provisions and liabilities are of course by far the most significant item in our balance sheet. Further elements are equity and equity substitutes, which help to substantially strengthen our financial base and optimise our cost of capital. The following table shows our capital structure as at 31 December 2023, broken down into percentages of the balance sheet total.

Capital structure as at 31 December 2023

in %	2023
Equity	16.6
Contractual service margin (net)	11.6
Risk adjustment for non-financial risk	5.6
Other technical provisions and liabilities [1]	50.4
Long-term debt and notes payable	7.3
Other liabilities	8.5

[1] plus asset items included in the CSM and in the risk adjustment

The technical provisions and liabilities shown above, including the contractual service margin and the risk adjustment for non-financial risk, make up 67.6% (67.2%) of the balance sheet total and are more than covered by our investments and reinsurance recoverables.

The equity including non-controlling interests at 16.6% (15.8%) of the balance sheet total as well as the long-term debt and – especially – notes payable at altogether 7.3% (8.8%) of the balance sheet total represent our most important sources of funds.

We ensure that our business is sufficiently capitalised at all times through continuous monitoring and by taking appropriate steering actions as necessary.

Group shareholders' equity

Compared to the position as at 31 December 2022, Group shareholders' equity increased in the year under review by EUR 1,062.6 million, or 10.7%, to EUR 11,019.5 million. After adjustment for non-controlling interests, it grew by EUR 1,067.1 million to EUR 10,126.8 million. The book value per share increased accordingly by 11.8% to EUR 83.97. The changes in the shareholders' equity were shaped chiefly by the following developments:

Cumulative foreign currency gains amounting to EUR 160.5 million were recorded as at the balance sheet date due to exchange rate movements of foreign currencies against the euro. Compared to the cumulative foreign currency gains of EUR 509.0 million in the previous year, this constitutes an decrease of EUR 348.5 million in the foreign currency gains and losses recognised in OCI. This decrease in the currency translation reserve from the translation of the shareholders' equity of foreign subsidiaries resulted principally from the appreciation of the euro against almost all relevant currencies, especially the US dollar.

The balance of unrealised gains and losses on investments stood at EUR -1,985.1 million, an increase of EUR 1,168.9 million compared to the beginning of the year under review. This reflects the declines in interest rates in medium and longer maturities as well as reduced risk premiums observed in our main currency areas in the course of the reporting period and the associated rise in the fair values of investments sensitive to interest rate movements. This is opposed by a corresponding interest rate-driven decrease of EUR 844.9 million in the fair value of our technical provisions and liabilities to EUR 2,026.3 million.

Non-controlling interests in shareholders' equity contracted by EUR 4.5 million to EUR 892.7 million as at 31 December 2023. The bulk of this – in an amount of EUR 813.3 million (EUR 841.8 million) – is attributable to the non-controlling interests in E+S Rückversicherung AG.

The Group net income for 2023 attributable to the shareholders of Hannover Rück SE amounted to EUR 1,842.8 million (EUR 780.8 million). The non-controlling interest in the profit generated in the year under review totalled EUR 2.8 million (EUR 117.5 million).

In its capital management Hannover Re is guided by the requirements and expectations of the rating agencies with an eye to its targeted rating. Furthermore, while making appropriate allowance for business policy considerations and factors that influence market presence, the allocation of capital to the Group's operational companies is based upon the economic risk content of the business group in question. The Group companies are also subject to national capital and solvency requirements. All Group companies met the applicable local minimum capital requirements in the year under review. Adherence to these capital requirements is continuously monitored by the responsible organisational units on the basis of the latest actual figures as well as the corresponding planned and forecast figures. From the Group perspective we manage Hannover Re's solvency largely through the use of our internal capital model (cf. opportunity and risk report).

Financing and Group debt

In addition to the financing effect of the changes in shareholders' equity described above, debt financing on the capital market is a significant component of Hannover Re's financing. It is essentially composed of bonds issued to ensure lasting protection of our capital base – in part also in observance of rating requirements. The total volume of long-term debt and notes payable stood at EUR 3,977.0 million (EUR 4,472.0 million) as at the balance sheet date.

Our bonds supplement our equity resources with the aim of reducing the cost of capital and also help to ensure liquidity at all times. As at the balance sheet date altogether six (seven) bonds had been placed on the European capital market through Hannover Rück SE and Hannover Finance (Luxembourg) S. A.

The following table presents an overview of the amortised cost of the issued bonds.

Amortised cost of our bonds

in EUR million	Issue date	Coupon	2023	2022
Hannover Finance (Luxembourg) S.A., subordinated debt, EUR 500 million; 2012/2043	20/11/2012	5.00%	-	499.6
Hannover Rück SE, subordinated debt, EUR 500 million; 2014/undated	15/9/2014	3.375%	499.0	498.2
Hannover Rück SE, senior bond, EUR 750 million; 2018/2028	18/4/2018	1.125%	747.0	745.7
Hannover Rück SE, subordinated bond, EUR 750 million; 2019/2039	9/10/2019	1.125%	744.0	743.0
Hannover Rück SE, subordinated bond, EUR 500 million; 2020/2040	8/7/2020	1.75%	496.0	495.9
Hannover Rück SE, subordinated bond, EUR 750 million; 2021/2042	22/3/2021	1.375%	745.0	743.9
Hannover Rück SE, subordinated bond, EUR 750 million; 2022/2043	14/11/2022	5.875%	746.0	745.7
Total			**3,977.0**	**4,472.0**

Several Group companies have also taken up long-term debt – principally in the form of mortgage loans and loans from joint ventures – amounting to EUR 798.0 million (EUR 926.6 million).

For further explanatory information please see our remarks in the notes to this report, section 6.7 "Financing liabilities" and section 6.8 "Shareholders' equity and treasury shares".

Various financial institutions have provided us with letters of credit for the collateralisation of technical liabilities. We report in detail on existing contingent liabilities in the notes, section 9.7 "Contingent liabilities and commitments".

Analysis of the consolidated cash flow statement

Liquidity

We generate liquidity from our operational reinsurance business, investing activities and financing measures. Through regular liquidity planning and by managing the fungibility of our investments, we ensure that Hannover Re is able to make the necessary payments at all times. Hannover Re's cash flow is shown in the consolidated cash flow statement.

Hannover Re does not conduct any automated internal cash pooling within the Group. Liquidity surpluses are managed and created by the Group companies. Various loan relationships exist within the Hannover Re Group for the optimal structuring and flexible management of the short- or long-term allocation of liquidity and capital.

Consolidated cash flow statement

in EUR million	2023	2022
Cash and cash equivalents at the beginning of the period	1,323.2	1,355.1
Cash flow from operating activities	5,788.8	4,947.1
Cash flow from investing activities	-4,509.8	-5,076.5
Cash flow from financing activities	-1,504.8	44.2
Exchange rate differences on cash	-42.7	53.2
Change in cash and cash equivalents	-268.4	-31.9
Change in cash and cash equivalents according to cash flow statement	-268.4	-31.9
Cash and cash equivalents at the end of the period	**1,054.8**	**1,323.2**

Cash flow from operating activities

The cash flow from operating activities, which also includes inflows from interest received and dividend receipts, amounted to EUR 5,788.8 million in the year under review as opposed to EUR 4,947.1 million in the previous year. The increase of altogether EUR 841.7 million was due to the positive development of operational business.

Cash flow from investing activities

The balance of cash inflows and outflows from operating activities and financing activities in an amount of EUR -4,509.8 million (EUR -5,076.5 million) was invested in accordance with the company's investment policy, giving particular consideration to the matching of currencies and maturities on the liabilities side of the technical account. Regarding the development of the investment portfolio, please see also our remarks at the beginning of this subsection.

Cash flow from financing activities

The cash inflow from financing activities amounted on balance to EUR -1,504.8 million (EUR 44.2 million) in the year under review. This item includes the dividends paid out in the financial year by Hannover Rück SE, E+S Rückversicherung AG and other Group companies to parties outside the Group totalling EUR 768.6 million (EUR 723.5 million). The balance from the issuance and repayment of long-term debt, especially bonds, which is also included in the cash flow from financing activities, amounted to EUR -760.6 million (EUR 767.5 million).

Overall, the cash and cash equivalents therefore decreased year-on-year by EUR 268.4 million to EUR 1,054.8 million.

For further information on our liquidity management please see the opportunity and risk report.

Information pursuant to § 315 and § 315a Paragraph 1 German Commercial Code (HGB)

The common shares (share capital) of Hannover Rück SE amount to EUR 120,597,134.00. They are divided into 120,597,134 registered no-par shares. In this connection reference is made to the required disclosures pursuant to § 160 Para. 1 No. 2 Stock Corporation Act (AktG) in the notes to the consolidated financial statement.

The Executive Board of the company is not aware of any restrictions relating to voting rights or the transfer of shares, including cases where these may arise out of agreements between shareholders.

The following companies hold direct or indirect capital participations that exceed 10% of the voting rights: Talanx AG, Hannover, directly holds 50.2% (rounded) of the company's voting rights. This participation is indirectly allocable to HDI Haftpflichtverband der Deutschen Industrie Versicherungsverein auf Gegenseitigkeit, Hannover, which holds the majority stake in Talanx AG.

There are no shares with special rights granting their holders powers of control, nor is there any specially structured voting rights control for employees who have capital participations and do not directly exercise their rights of control.

The appointment and recall of members of the Executive Board are determined by §§ 84 et seq. Stock Corporation Act (AktG). Amendment of the Articles of Association is governed by §§ 179 et seq. Stock Corporation Act (AktG) in conjunction with § 18 (2) of the Articles of Association of Hannover Rück SE.

The powers of the Executive Board with respect to the issue and repurchase of shares are defined in the Articles of Association of Hannover Rück SE (§ 6 "Contingent capital" and § 7 "Authorised capital") as well as in §§ 71 et seq. Stock Corporation Act (AktG). In this connection the Annual General Meeting authorised the Executive Board on 6 May 2020 pursuant to § 71 Para. 1 Number 8 Stock Corporation Act (AktG) to acquire treasury shares on certain conditions for a period of five years, ending on 5 May 2025.

We describe below major agreements concluded by the company that are subject to reservation in the event of a change of control, inter alia following a takeover bid, as well as the resulting effects. Some letter of credit lines extended to Hannover Rück SE contain standard market change-of-control clauses that entitle the banks to early termination of a credit facility if Talanx AG loses its majority interest or drops below the threshold of a 25% participation or if a third party acquires the majority interest in Hannover Rück SE.

In addition, retrocession covers in property & casualty and life & health business contain standard market change-of-control clauses which in each case grant the other contracting party a right of termination if a significant change occurs in the ownership structure and participation ratios of the affected contracting party.

The company has not concluded any compensation agreements with the members of the Executive Board or with employees in the event of a takeover bid being made.

Information on Hannover Rück SE

(Condensed version in accordance with the German Commercial Code (HGB))

Hannover Re exercises the option to present a combined management report pursuant to § 315 Para. 5 of the German Commercial Code (HGB) in conjunction with § 298 Para. 2 of the German Commercial Code (HGB). Supplementary to the reporting on the Hannover Re Group, we discuss below the development of Hannover Rück SE.

The annual financial statement of Hannover Rück SE is drawn up in accordance with German accounting principles (HGB). The balance sheet and profit and loss account in particular are reproduced here in condensed form.

Hannover Rück SE transacts reinsurance business in the business groups of Property & Casualty and Life & Health reinsurance. Through its global presence and activities in all lines of reinsurance, the company achieves extensive risk diversification.

Since 1 January 1997 Hannover Rück SE has written active reinsurance for the Group – with few exceptions – solely in foreign markets. Responsibility within the Hannover Re Group for German business rests with the subsidiary E+S Rückversicherung AG.

Results of operations

Hannover Rück SE recorded a pleasing business development in the 2023 financial year. The gross premium in total business fell by 1% to EUR 27.3 billion (previous year: EUR 27.6 billion). The level of retained premium decreased to 64.3% (65.4%). Net premium earned retreated by 3% to EUR 17.4 billion (EUR 17.9 billion).

The underwriting result (before changes in the equalisation reserve) came in at EUR -336.9 million (EUR 31.8 million), reflecting increased retrocession costs and commissions as well as the strengthening of the resilience of our loss reserves. This is also evident in the combined ratio, which stood at 102.0% (101.6%). An amount of EUR 594.8 million was withdrawn from the equalisation reserve and similar provisions in the year under review (previous year: allocation of EUR 548.3 million).

A considerable number of large losses were again recorded in the 2023 financial year. The total net expenditure on large losses for Hannover Rück SE amounted to EUR 936.5 million (EUR 938.8 million).

Ordinary investment income including deposit interest came to EUR 1,581.3 million (EUR 1,525.5 million). Ordinary income from fixed-income securities totalled EUR 825.5 million (EUR 626.1 million).

Net gains of EUR 8.4 million (EUR 745.1 million) were realised on disposals, principally due to sales of fixed-income securities as part of portfolio maintenance. The previous year's exceptionally high figure derived from the contribution of private equity participations to a joint venture.

Write-downs of EUR 41.7 million (EUR 157.0 million) were taken on investments, for the most part on bearer debt securities held as fixed assets. In the reporting period we wrote down a small part of our fixed-income securities held as fixed assets to the lower fair value even if impairment is not expected to be permanent. This similarly applies to future reporting periods. In the period under review this accounts for EUR 17.9 million (EUR 0.0 million) of the aforementioned write-downs.

The write-downs contrasted with write-ups of EUR 3.1 million (EUR 3.4 million) that were made on assets written down in previous periods to reflect increased fair values. All in all, the net investment result decreased to EUR 1,453.1 million (EUR 1,941.0 million).

The profit on ordinary activities improved by 31.8% to EUR 1,082.2 million (EUR 820.9 million). The year under review closed as forecast with a profit for the year that amounted to EUR 892.2 million (EUR 753.0 million).

Condensed profit and loss account of Hannover Rück SE

in EUR thousand	2023	2022
Earned premiums, net of retrocession	17,406,565	17,923,625
Allocated investment return transferred from the non-technical account, net of retrocession	159,777	204,342
Other technical income, net of retrocession	1	0
Claims incurred, net of retrocession	13,328,288	14,022,509
Changes in other technical provisions, net of retrocession	-149,188	120,838
Bonuses and rebates, net of retrocession	-131	-95
Operating expenses, net of retrocession	4,424,998	4,193,490
Other technical charges, net of retrocession	869	1,080
Subtotal	**-336,869**	**31,821**
Change in the equalisation reserve and similar provisions	594,854	-548,303
Net technical result	**257,985**	**-516,482**
Investment income	1,723,904	2,779,172
Investment charges	270,825	838,403
Allocated investment return transferred to the technical account	-161,418	-205,849
Other income	192,556	167,263
Other charges	659,955	564,803
Profit or loss on ordinary activities before tax	**1,082,247**	**820,898**
Taxes on profit and income and other taxes	189,986	67,947
Profit for the financial year	**892,261**	**752,951**
Profit brought forward from previous year	592,417	564,567
Allocations to other retained earnings	678	1,518
Disposable profit	**1,484,000**	**1,316,000**

Development of the individual lines of business

The following section describes the development of the various lines of business. The cooperation and exchange of business between Hannover Rück SE and E+S Rückversicherung AG has been regulated since the 2014 financial year through a quota share retrocession from Hannover Rück SE to E+S Rückversicherung AG in property and casualty reinsurance.

Hannover Rück SE: Breakdown of gross premium by individual lines of business

in EUR million	2023	2022	2021	2020	2019
Fire	5,788	5,602	4,015	3,313	2,937
Casualty	3,417	3,669	2,992	2,410	2,317
Accident	696	861	379	510	442
Motor	3,839	3,989	3,197	2,735	2,945
Aviation	303	280	315	322	258
Marine	702	645	544	460	454
Life	5,764	6,042	5,679	5,026	4,758
Other lines	6,812	6,533	4,820	4,441	3,962
Total	**27,321**	**27,621**	**21,941**	**19,217**	**18,073**

Fire

Gross premium income for the fire line climbed by 3.3% to EUR 5,787.8 million (EUR 5,602.0 million). The net loss ratio increased to 72.2% (65.4%). The underwriting result closed at EUR -65.5 million (EUR 171.8 million). An amount of EUR 1.2 million (allocation of EUR 85.8 million) was withdrawn from the equalisation reserve and similar provisions.

Liability

Gross premium in liability business fell by 6.9% to EUR 3,416.8 million (EUR 3,668.7 million). The net loss ratio increased to 82.3% (70.4%). The underwriting result decreased to EUR -299.1 million (EUR 103.8 million). An amount of EUR 391.2 million (allocation of EUR 534.4 million) was withdrawn from the equalisation reserve and similar provisions.

Accident

Gross premium income for the accident line contracted to EUR 695.6 million (EUR 860.8 million). The net loss ratio stood at 66.6% (116.3%). The underwriting result came in at EUR -42.9 million (EUR -233.1 million). No withdrawal (EUR 25.8 million) was made from the equalisation reserve and similar provisions.

Motor

Gross premium for the motor line decreased by 3.8% to EUR 3,839.6 million (EUR 3,989.4 million). The loss ratio increased slightly to 78.7% (75.0%). The underwriting result came in at EUR -206.1 million (EUR -55.6 million). An amount of EUR 46.7 million (allocation of EUR 64.1 million) was withdrawn from the equalisation reserve and similar provisions.

Aviation

Gross premium income rose by 8.3% to EUR 303.1 million (EUR 279.8 million). The loss ratio climbed to 75.3% (43.2%). The underwriting result amounted to EUR -2.3 million (EUR 84.7 million). A withdrawal of EUR 81.8 million (allocation of EUR 42.6 million) was made from the equalisation reserve and similar provisions.

Marine

The gross premium volume for the marine line grew by 8.8% to EUR 702.3 million (EUR 645.4 million). The net loss ratio increased to 54.2% (41.9%). The underwriting result stood at EUR 57.3 million (EUR 143.0 million). An amount of EUR 65.8 million (allocation of EUR 34.8 million) was withdrawn from the equalisation reserve and similar provisions.

Life

The gross premium in the life line fell by 4.6% to EUR 5,764.0 million (EUR 6,041.9 million). Life and health reinsurance business has a clear international focus. We write our business on all continents, thereby achieving a good diversification of risks. In many instances we are directly available as a local point of contact thanks to our extensive network. In addition to traditional mortality business, we write financial solutions business as well as health and longevity risks on a worldwide basis in life and health reinsurance. The underwriting result in the life line amounted to altogether EUR 36.2 million (EUR 162.9 million).

Other lines

The lines of health insurance, credit and surety, other indemnity insurance and other property insurance are reported together under other lines. Other property insurance consists of the extended coverage, comprehensive householder’s (contents), comprehensive homeowner’s (buildings), burglary and robbery, water damage, plate glass, engineering, loss of profits, hail, livestock and windstorm lines. Other indemnity insurance encompasses legal protection, fidelity as well as other pure financial losses and property damage.

Gross premium income in the other lines grew by 4.3% to EUR 6,812.0 million (EUR 6,533.1 million). The net loss ratio improved to 70.5% (85.9%). The underwriting result closed at EUR 185.5 million (EUR -345.6 million), A withdrawal of EUR 8.0 million (EUR 187.5 million) was made from the equalisation reserve and similar provisions.

Assets and financial position

Balance sheet structure of Hannover Rück SE

in EUR thousand	2023	2022
Assets		
Intangible assets	70,702	60,263
Investments	53,918,846	52,053,530
Receivables	5,928,666	6,488,265
Other assets	483,799	717,789
Prepayments and accrued income	332,679	291,589
Total assets	**60,734,692**	**59,611,436**
Liabilities		
Subscribed capital	120,597	120,597
Capital reserve	880,608	880,608
Retained earnings	630,511	630,511
Disposable profit	1,484,000	1,316,000
Capital and reserves	**3,115,716**	**2,947,716**
Subordinated liabilities	3,250,000	3,750,000
Technical provisions	44,954,982	43,601,651
Provisions for other risks and charges	548,424	493,531
Deposits received from retrocessionaires	4,998,161	5,111,583
Other liabilities	3,867,409	3,706,955
Total liabilities	**60,734,692**	**59,611,436**

Our portfolio of assets under own management increased to EUR 44.1 billion (EUR 42.4 billion). The hidden losses on fixed-income securities and bond funds amounted to EUR 1,105.8 million (EUR 2,207.2 million). This was primarily a reflection of valuation gains due to reduced risk premiums and lower interest rates in medium- and long-term maturities.

Deposits with ceding companies, which are shown under the investments, remained virtually unchanged at EUR 9.8 billion (EUR 9.6 billion).

Our capital and reserves – excluding the disposable profit – were unchanged at EUR 1,631.7 million (EUR 1,631.7 million). The total capital, reserves and technical provisions – comprised of the capital and reserves excluding disposable profit, the subordinated liabilities as well as the net technical provisions, including the equalisation reserve and similar provisions – amounted to EUR 49.8 billion (EUR 49.0 billion). The balance sheet total of Hannover Rück SE grew to EUR 60.7 billion (EUR 59.6 billion).

An ordinary dividend of EUR 5.00 per share plus a special dividend of EUR 1.00 per share was paid out in the year under review for the 2022 financial year. This was equivalent to EUR 723.6 million (EUR 693.4 million).

It will be proposed to the Annual General Meeting on 6 May 2024 that an ordinary dividend of EUR 6.00 per share plus a special dividend of EUR 1.20 per share should be paid for the 2023 financial year. This corresponds to a total dividend of EUR 7.20 per share and altogether EUR 868.3 million. The dividend proposal does not form part of this consolidated financial statement.

Risks and opportunities

The business development of Hannover Rück SE is essentially subject to the same risks and opportunities as that of the Hannover Re Group. As a general principle, Hannover Rück SE shares in the risks of participating interests and subsidiaries according to the amount of its respective holding; these risks are described in the risk report. The relations with participating interests of Hannover Rück SE may give rise to losses from legal or contractual contingent liabilities (particularly novation clauses and guarantees). Please see our explanatory remarks in the notes to this report.

Other information

We received an adequate consideration for all transactions with affiliated companies according to the circumstances of which we were aware at the time when the transactions were effected. We incurred no disadvantages as defined by § 311 Stock Corporation Act (AktG).

Hannover Rück SE maintains branches in Australia, Bahrain, Canada, China, France, Hong Kong, India, Ireland, South Korea, Malaysia, Sweden and the United Kingdom.

Outlook

In view of the interrelations between Hannover Rück SE and the Group companies and the former's large share of business within the Group, we would refer to the subsection "Forecast" with respect to expectations for developments affecting the macroeconomic environment, capital markets and the insurance industry as well as developments on reinsurance markets. We thus anticipate net premium earned on the level of the previous year for Hannover Rück SE, a significantly improved net underwriting result and a somewhat higher profit contribution from the investments. To this extent, the profit reported for the 2024 financial year under the German Commercial Code (HGB) is expected to improve substantially again on the previous year.

Combined non-financial statement

The combined non-financial statement is a section of the report that the legislator has expressly exempted from the audit of the financial statements (§ 317 Para. 2 Sentence 6 and Sentence 4 German Commercial Code (HGB)). The combined non-financial statement presented here has, however, been reviewed with limited assurance by the auditing firm of PricewaterhouseCoopers in accordance with the audit standard ISAE 3000 (Revised) (see the section entitled "Audit opinion on non-financial reporting").

Introduction

The present combined non-financial statement was drawn up in accordance with §§ 315c in conjunction with 289c to 289e German Commercial Code (HGB) as well as Article 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereinafter EU Taxonomy Regulation). The identification of material contents reflected the materiality definitions of the Global Reporting Initiative (GRI) and the German Commercial Code (HGB).

The combined non-financial statement encompasses – unless presented separately – the disclosures for both the Group and the parent company Hannover Rück SE. It contains the legally required information relating to material environmental concerns, employee concerns, social issues, respect for human rights and combating corruption and bribery. Within the individual aspects, the underlying concepts and internal due diligence processes are discussed and available findings are reported. The identified material topics were allocated to the aspects (see section “Materiality analysis”). In addition, the combined non-financial statement is to be used to report on material risks pursuant to § 289c Para. 3 No. 3 and 4 German Commercial Code (HGB) to the extent necessary for an understanding of the business development, business result, position of Hannover Rück SE and the Group as well as of the implications for non-financial matters.

Information is also included pursuant to the requirements of Article 8 of the EU Taxonomy Regulation.

Pursuant to § 315b Para. 1 Sentence 3 German Commercial Code (HGB), reference is also made to non-financial disclosures provided elsewhere in the combined management report with respect to certain aspects. References to information outside the combined management report and the consolidated and annual financial statement do not form part of the combined non-financial statement.

For a description of the business model, the reader is referred to the subsection “Business model” under “Foundations of the Group”.

Strategic orientation

Hannover Re's Group strategy is revised every three years. The current strategy cycle 2021 – 2023 concluded at the end of 2023.

In the Group strategy 2021 – 2023, strong governance, risk management, integrated compliance and corporate social responsibility form the foundations for our growth as a reliable global reinsurance partner. Three performance drivers – preferred business partner, innovation catalyst, earnings growth – address the global trends affecting the insurance and reinsurance industry. Three performance enablers – empowered employees, a lean operating model, effective capital management – help us to outperform the industry average in terms of return on equity. Four strategic initiatives – client excellence, innovation and digitalisation, growth in the Asia-Pacific region, talent management – are at the heart of the strategic programme for the cycle. This programme is complemented by major Group projects (known as value streams) and joint strategy contributions spanning multiple departments, which also include goals of a non-financial nature.

"Corporate Social Responsibility" is one of these joint strategy contributions. Associated topics are specified more closely in our Sustainability Strategy 2021 – 2023. This is comprised of the four action fields Transparency, Employees, Core Business and Commitment as well as underlying measures and goals.

The strategic programme is supported and monitored by the Group Strategy & Sustainability department and progress reports are provided to the Executive Board on a quarterly basis.

Materiality analysis and material topics

Hannover Re regularly conducts materiality analyses to identify material ESG (environmental, social and governance) issues, most recently in the 2023 reporting year. The materiality analysis was conducted based on the publication of the Global Reporting Initiative (GRI Standards 2021; GRI 3) and § 289c of the German Commercial Code (HGB). Preparations for extended reporting requirements under the Corporate Sustainability Reporting Directive (CSRD) also commenced in the year under review and the list of topics covered by the future European Sustainability Reporting Standards (in accordance with ESRS 1) was taken into account in the materiality analysis.

When conducting a materiality analysis, the "materiality of impacts" and "financial materiality" must be considered for identified ESG topics. The ESG topics identified were initially taken from the sector-agnostic European Sustainability Reporting Standards and then supplemented by insurance-specific topics. In the subsequent assessment, a distinction was made between three areas of Hannover Re's business: own operations, reinsurance and investments.

The survey was conducted in the form of interviews and workshops using a standardised questionnaire. The respective topics were scored by the stakeholders surveyed on a scale from zero (unimportant) to ten (important).

Altogether 16 interviews were conducted with 19 stakeholders (seven interviews with internal stakeholders; nine interviews with external stakeholders) for the purpose of identifying the positive and negative impacts of Hannover Re's business model (inside-out). The internal stakeholders reflected the perspectives of the various market and service departments. The external stakeholders covered the perspectives of market participants, non-governmental organisations and the scientific community. Workshops were held with Group Risk Management to determine the financial materiality and impacts of the defined topics on Hannover Re's business model (outside-in).

The average of all the scores for each topic was transferred to a materiality matrix. A topic was defined as material as soon as the threshold value of 6.5 for the inside-out analysis or 5.5 for the outside-in analysis was exceeded.

The materiality analysis was approved by the Executive Board at its meeting on 10 July 2023.

Allocation of non-financial aspects to the material topics

Non-financial aspect	Material topic	
Environmental concerns	Adaptation to climate change Climate protection Transition of the energy supply	Corporate culture Risk management system Information security and data protection Compliance management system Relationships with stakeholders
Employee concerns	Working conditions of the workforce Equal treatment and equal opportunities	
Social issues	Adaptation to climate change Transition of the energy supply	
Respect for human rights	Equal treatment and equal opportunities Information security and data protection	
Combating corruption and bribery	Corruption and bribery	

Corporate culture and stakeholders

Hannover Re has a Code of Conduct that applies throughout the company and is published on its website in various languages. The Code of Conduct, which was completely revised in 2022, was adopted by the Executive Board and duly noted by the Supervisory Board. Hannover Re employees were informed of the changes through various channels. All new employees receive the Code of Conduct as an annex to their employment contract.

The Code of Conduct is guided by the motto "Connected – outside, inside, and all-around". It clarifies Hannover Re's corporate self-image both outside the company in our dealings with business partners and clients ("Outside – we care for our partners") and in-house in our interactions with one another ("Inside – we care for one another") as well as in relation to our role in society and the environment ("all-around – we care for our environment").

The Code of Conduct makes it clear that active or passive bribery will not be tolerated. Additionally, it explicitly references the prohibition of money laundering and other criminal offences and contains specific instructions on appropriate behaviour for the avoidance and disclosure of conflicts of interest, for the granting and acceptance of benefits, gifts and invitations, for the arrangement of donations and sponsorships as well as with respect to sideline activities and involvement in other companies and business transactions.

Hannover Re expressly emphasises in its Code of Conduct that it does not tolerate any form of discrimination, but rather it cultivates respectful and fair treatment of one another, which forms the basis of our mutual relationships. This also includes the respectful treatment of clients and business partners as well as the transparent provision of pre-contractual information.

Hannover Re considers the assessment of internal and external stakeholders when determining the material topics. Regular discussions with investors and (ESG) analysts, participation in the feedback process for ESG ratings and scorings as well as this annual reporting similarly form part of the dialogue with stakeholder groups.

Risk management system

As part of its business activity as a reinsurance company, Hannover Re knowingly enters into many different risks. It is equipped with an adequate and effective risk management system for ongoing monitoring of these and other risks.

Within the scope of its risk management system Hannover Re considers, among other things, sustainability risks, i.e. those risks that arise in connection with environmental issues, social issues or in connection with corporate governance. Such risks can adversely impact the company's assets and earnings. They include, for example, the risk of more frequent natural disasters caused by climate change. However, there is also the risk that Hannover Re's business activity may have – real or perceived – negative implications for social sustainability goals. This latter aspect, in particular, can affect Hannover Re's reputation. Hannover Re has a framework applicable Group-wide for the management of sustainability and reputational risks, which was reviewed and approved by the Executive Board in the year under review.

For further information, we refer to the opportunity and risk report in the combined Group management report.

Information security and data protection

For details regarding information security and data protection, we refer to the opportunity and risk report in the combined Group management report.

Compliance management system

Compliance encompasses not only compliance with statutory and regulatory requirements (legal compliance) but also fulfilment of external standards, such as those from the German Corporate Governance Code, as well as internal guidelines. At Hannover Re, compliance topics are addressed in a compliance management system. This is geared to international standards and ensures that the core tasks of a compliance function are performed:

- Examining and evaluating changes in the legal/regulatory environment and determining measures (monitoring function)
- Advising the Executive Board and the employees on compliance with laws (advisory function)
- Identifying and evaluating specific current and emerging compliance risks (identification function)
- Identifying and assessing material compliance risks (risk function)

The Executive Board is responsible for ensuring adequate and effective compliance structures. Execution falls to the Chief Compliance Officer (CCO), who reports in a direct line to the Executive Board on material compliance issues and developments. The annual compliance report is also submitted to the Supervisory Board and its Finance and Audit Committee. The CCO is supported in his work by the Compliance department, specially designated officers and a worldwide network of local compliance officers. Monitoring procedures are conducted for the management of compliance risks. Checks can also take place on an ad hoc basis where there are grounds for suspicion. The underlying compliance risk analysis is updated annually.The CCO works closely with Risk Management to ensure a consistent approach to operational risks, which include compliance risks. Several compliance committees also exist in various compositions, comprised of members from the operational business groups as well as from the areas of Group Legal, Finance, Accounting and Investments. Among other things, the compliance committees examine reinsurance treaties with a special eye to compliance with supervisory requirements and accounting standards and they take fundamental decisions on dealing with sanctions.

Attentive and trained employees constitute a crucial component of a functioning compliance management system – both to avoid unconscious violations and to recognise and prevent deliberate violations and associated risks. Hannover Re uses various training activities to raise employee awareness of compliance-related issues. On joining the Group and throughout the entire duration of their employment, all members of staff receive compliance training. These training activities cover, among other things, topics such as combating money laundering and terrorist financing as well as compliance with international sanctions. Our staff are also provided with information about the internal, online speak-up system. In addition, focused training activities are held on various compliance topics throughout the year for specific target groups. This is supplemented by dedicated compliance pages in the intranet containing more extensive information.

Should members of staff or indeed persons outside the company become aware of compliance violations, harmful behaviour or risks, such suspicions can be reported to the CCO or the Compliance department or, if so desired, anonymously through an online speak-up system (whistleblower system). The speak-up system is available in four languages. In addition, violations can be reported in any language by e-mail.

For further information, we refer to the opportunity and risk report in the combined Group management report.

Environmental concerns

In connection with environmental matters, special importance attaches to the active exploration of the causes and consequences of progressive climate change. Extreme weather events and natural disasters such as heatwaves and droughts, severe precipitation events and storms, as well as continuous processes such as global warming, glacier melting and rising sea levels, have far-reaching implications for society and the economy and lead to considerable economic and insured losses. What is more, further environmental concerns, such as the proper functioning of ecosystems or the water resources of ground and surface waters, are directly affected by climate change. If the earth's temperature were to continue rising unchecked, this would increase the scale of such phenomena and risks. Yet the sought-after transition to a climate-friendly, resource-saving economy is also associated with a number of social and economic impacts.

In view of these extensive environmental, economic and social impacts, climate change is at the heart of numerous national and international regulatory initiatives and measures. The goals of the Paris Climate Agreement, under which the international community committed in 2015 to limit the rise in the global average temperature to well below 2 °C, preferably to 1.5 °C, compared to pre-industrial levels, are considered a key driving force here. Overall, far-reaching implications are to be anticipated in this connection not only for the real economy but also for the financial sector, which has an important role to play both in climate change adaptation and when it comes to climate protection.

Impacts on operations

Climate change goes hand-in-hand with a range of impacts on Hannover Re's operations, e.g. due to an increase in the frequency and/or severity of losses (physical risks) or changing framework conditions with implications for reinsurance business and investments (transition risks). Furthermore, on the societal level an increase in environment-related lawsuits against businesses and public institutions can be observed (litigation risks) that may adversely affect the insurance industry.

The risks posed by climate change can affect numerous risk categories of the risk register and are extensively monitored through the risk management system. ESG topics are also addressed as part of the management of sustainability and reputational risks. For information on the corresponding concepts and implemented stress test mechanisms, we refer to the opportunity and risk report in the combined Group management report.

Impacts of our operations

Insurance business

Fossil fuels are considered one of the main drivers of climate change. With a view to countering this and facilitating the transformation to a lower-emissions economy, we support among other steps the expansion of renewable energy sources. These range from wind energy (both onshore and offshore) to photovoltaic and geothermal energy. Insurance protection begins with installation of the equipment and accompanies customers through many years of operation. In addition, we support special coverages for the roll-out of new technologies, such as performance guarantees for fuel cells (conversion of hydrogen or natural gas into electricity). Furthermore, our products support the development of hydrogen infrastructure worldwide and we are participating in initial large-scale projects to advance the energy transition.

At the same time, Hannover Re is consistently seeking to reduce its exposure to fossil fuels. The goal is to no longer cover any risks connected with the mining of and energy generation from power plant and thermal coal by the year 2038 in the entire portfolio of property and casualty reinsurance business. An internal position paper has been adopted for the property and casualty reinsurance sector, fleshing out this approach in greater detail and addressing further issues (such as oil and gas). The position paper is applicable to both facultative and obligatory reinsurance business.

In addition, the facultative division is guided by an ESG manual that deals with environmental issues, among other things, and regulates specific exclusions.

In facultative reinsurance business, reinsurance contracts are written for individual risks, i.e. the treaties can be allocated to specific projects or policyholders. Since as long ago as April 2019 the facultative division has no longer provided reinsurance for planned new coal-fired plants or thermal coal mines. Moreover, from February 2020 onwards all new facultative business connected with thermal coal or the associated infrastructure has been excluded. Thermal coal infrastructure encompasses mines, coal-fired power plants and facilities as well as port and rail operations allocable exclusively to the thermal coal industry. Reinsurance covers for individual risks that generate more than 30% of their revenues from activities in thermal coal are similarly excluded in the facultative division. As an additional step, an exit plan for existing facultative business in thermal coal was adopted in 2021. The phased plan provides for exclusions based on thresholds. In a first step to be completed by 31 December 2025, the facultative division will scale back business with thermal coal producers whose annual production volume from all mines amounts to 100 million tonnes or more as well as business with the operators of coal-fired power plants whose installed total capacity from coal power stations amounts to 25 gigawatts or more. It is envisaged that these thresholds will be progressively reduced in the following years until complete exclusion of all thermal coal risks. Any expansion of existing capacities in the context of contract renewals is already ruled out.

The facultative division also does not reinsure any new standalone oil-fired power plants that were not in operation or under construction by 1 July 2023. Furthermore, since mid-2022 the facultative division is no longer taking on any new covers for project policies for the exploration and/or development of new (greenfield) oil and gas reserves (upstream) or for project policies that exclusively support transportation and storage (midstream) of such (greenfield) oil and gas reserves.

Since as long ago as 2020, the facultative division has no longer accepted any new individual risks for companies that hold 20% or more of their oil reserves in oil sands and it excludes oil sands extraction and processing operations. The reinsurance treaties in the currently existing portfolio will not be renewed from 2025 onwards. Oil sands extraction and processing encompass the extraction of bitumen from bituminous sand, refinement into synthetic crude oil, further processing of this synthetic crude into petroleum products and the associated transportation by pipeline or rail.

Since 2021 the facultative division has no longer accepted any new risks connected with projects for the extraction of oil and gas in Arctic regions – this policy applies to both greenfield and brownfield projects. We define "Arctic regions" as the zone around the Arctic Circle which runs in a circle of latitude 66.34° north of the Equator. This includes the Arctic National Wildlife Refuge (ANWR) in the United States. In addition, no risks are written that are connected with the development of new oil and gas deposits in deep waters below 5,000 feet. In addition, the facultative division has not underwritten any projects connected with deep sea mining since 2023.

The facultative division similarly declines transactions if they may entail damage to protected wetlands (Ramsar Convention) or damage to UNESCO world cultural heritage sites.

In obligatory reinsurance, large-volume portfolios with sometimes heterogenous contents are accepted. We are engaged in talks with our customers to obtain an overview of the carbon intensity of the business ceded to us. We also began a dialogue with our clients in the year under review to gain a better understanding of their environmental strategies and goals, as well as their plans to reduce their portfolio's exposure to fossil fuels. We are already refraining from writing new treaties in obligatory reinsurance that are to be used exclusively for coverage of thermal coal risks. The same is true of new treaties geared exclusively to the exploration and/or development of new (greenfield) oil and gas reserves (upstream) or exclusively to transportation and storage (midstream) of such (greenfield) oil and gas reserves.

We offer Web-based training courses on ESG for underwriters in property and casualty reinsurance and in life and health reinsurance as well as for other interested employees.

Investments

ESG criteria are similarly applied to the assets under our own management. These are defined in writing in an internal Responsible Investment Policy, application of which is ensured by an ESG officer on the investment team.

In its investing activities Hannover Re similarly works to consistently reduce its carbon footprint. The focus here is on progressive decarbonisation of the asset portfolio. We are doing this, in the first place, by reducing the carbon footprint (Scope 1 and 2) of the investments under own management from the areas of corporate bonds, covered bonds and equities by 30% by the year 2025 compared to the base year of 2019. Our decarbonisation efforts are guided by various external analyses and ratings that give us an extensive overview of our investment portfolio's carbon footprint as well as qualitative information about the carbon risks associated with individual issuers.

As a further step, since as far back as 2012 fixed-income securities (government and semi-government bonds, corporate bonds and covered bonds [with the exception of collateralised debt obligations (CDO)]) and listed equities within the portfolio of assets under own management have been subject to negative screening, which now takes place on an ongoing and even ad hoc basis. Only a few niche funds or asset classes, such as real estate, private equity or structured investments, cannot be analysed using this system. Similarly, corresponding screening is carried out with an eye to existing ESG criteria before any new investments are made. Issuers who do not satisfy these criteria are actively scaled back.

When it comes to environmental concerns, Hannover Re applies specific exclusion criteria to issuers that generate 25% or more of their revenues from the mining of or power generation from thermal coal or from oil sands extraction. We similarly exclude companies that generate 10% or more of their revenues from offshore extraction of oil and gas in the region within the Arctic Circle (66° 34' N).

In addition to application of the aforementioned exclusion criteria, best-in-class analyses have also increasingly complemented our ESG management since 2019. They facilitate ongoing monitoring of the existing portfolio's sustainability quality and are used in the implementation of specific ESG portfolio measures.

Furthermore, Hannover Re is increasingly adding to its asset portfolio sustainable investments that support the transformation towards a resource-efficient economy. These include infrastructure assets in areas such as renewable energies or clean transportation as well as investments in dedicated impact funds and sustainable technologies. We comfortably surpassed our goal of increasing the volume by at least 10% by the end of 2023 compared to the end of 2020.

Opportunities

New framework conditions, changing values and hence a greater need for protection, combined with the transition to a net zero greenhouse gas economy – inter alia in connection with the EU Action Plan for Financing Sustainable Growth and the European Green Deal –, are bringing new business opportunities. Such opportunities are opening up, for example, through wider use of parametric covers on the underwriting side, growth in natural catastrophe business and expanded solutions for mitigation of / adaptation to climate-related risks. The same is true of investment opportunities in sustainable innovative technologies and economic sectors.

Environmental concerns: selected goals

Goal	Target indicator by 2023	Status 31.12.2023
Supporting the goals of the Paris Agreement on climate change	Definition of measures to reduce emissions, enhance transparency, increase adaptability and mitigate the impacts of climate change in the action fields	Achieved, will be continued
Promoting the development of actuarial methods for the assessment of risks from natural perils and climate change	Active involvement in and financial sponsorship of various market initiatives and events	Achieved
Advancing a global energy transition through the reinsurance of renewable energy sources	Increase of 60% in the facultative premium volume for renewable energies	Increase on the planned scale not achieved.
No new business in the insurance of individual risks in coal-fired power plants or mines for thermal coal	No underwriting of facultative new business in coal-fired power plants or mines for thermal coal	Achieved
Asset management: reducing the CO_2 load in the asset portfolio	Goal tightened: reduction of the carbon footprint (corporate bonds, covered bonds, equities) by 30% by 2025 (base year 2019)	Ongoing, on target
Reducing greenhouse gas emissions at the Hannover location	Reduction of greenhouse gas emissions at the Hannover location by 25% per employee (base year 2019)	Achieved
Increasing transparency around greenhouse gas emissions at the worldwide locations	Expansion of data recording for relevant environmental aspects to at least 75% of the global workforce; the assessed locations are to become 100% climate-neutral through the purchase of certificates	Achieved

Employee concerns

Qualified and motivated people are at the heart of a company's business activities. Growing importance is attached to sustainability-related aspects in all phases of their employment. Most notably, the demographic shift in industrial countries is leading to intensified competition for well-qualified junior staff. It is evident that members of Generations X, Y and Z are especially likely to consider not only monetary aspects when it comes to choosing their employer. Other aspects move front and centre, such as adherence to principles of responsible corporate governance, measures to realise sustainable development in the core business, a company's reputation, culture and work atmosphere, compatibility of work and family life, the availability of development and career opportunities and other fringe benefits – summed up as the "total rewards". At the same time, existing trends such as mobile working and virtual/hybrid meetings have gained added impetus.

Employees are part of a company and part of social structures outside that company. All measures taken strengthen Hannover Re's position on the labour market while at the same time having external implications. For this reason, we have chosen not to consider the impacts separately below.

Impacts on our operations and impacts of our operations

As a service provider in the insurance industry, Hannover Re operates in a highly specialised environment and at the same time finds itself faced with the framework conditions described above. A risk exists, for example, if vacancies cannot be filled quickly enough or candidates of the necessary quality cannot be appointed. At the same time, companies benefit directly from motivated, dedicated and high-performing employees.

A Talent Management initiative sponsored by the Chief Executive Officer was launched in 2020. The goal is to attract talented new people to the company and retain them along with talent already existing in our ranks, to optimally deploy, foster and develop them at all locations and to create a work environment that makes Hannover Re the employer of choice. In addition, the initiative envisages measures to promote global mobility, the optimisation of relevant processes and systems as well as a greater interlinking of worldwide human resources activities. The initiative covers the following aspects:

- building a Group-wide, supportive human resources IT system,
- promoting a global network within the human resources community,
- improved succession planning,
- expanding measures relating to "Learning & Development", especially leadership development, and
- realising a Diversity, Equity & Inclusion (DE&I) strategy and implementing a roadmap with corresponding measures.

For information on operational risks that can arise in connection with or independently of the activities of the workforce, the reader is referred to the opportunity and risk report.

For information about the requirements placed on the specialist qualifications and personal reliability (fit & proper criteria) of persons in key positions, we refer to the opportunity and risk report.

Hannover Re employed 3,756 members of staff (previous year: 3,519) Group-wide at the reference date of 31 December 2023.

Development opportunities

Hannover Re operates in a knowledge-intensive industry with a high level of specialisation. Continuous and appropriate (further) training of employees serves to assure the high quality standard of services and a positive perception of the company. At the same time, the programme of further training enables employees to continue their personal growth and it promotes life-long learning. In support of our approach to talent management, our goal is to align ongoing training activities more closely with the values, competencies and leadership fundamentals and to extend reporting to additional locations. The global leadership development programme "LEAD" launched back in 2021 was conducted multiple times in the year under review on both the Group management and team manager level. Additional modules for a comprehensive Leadership Development Journey as well as a mentoring programme have been added. A global assignment policy was also approved in 2021 and the internal job market was expanded to all locations around the world. Both of these measures made themselves felt again in the year under review and created added transparency around the internal filling of positions on the global level.

Health and wellness

The performance capability and health of our employees are essential prerequisites for sustainable development of our business. Given that they work for a service provider, our staff members do not engage in activities that expose them to particular risk. Nevertheless, the transformation in the world of work, the need for efficiently structured work processes and a constant pressure for change can lead to reduced productivity and physical and/or psychological disorders – and hence to direct economic impacts on the company as well as social implications for the employees concerned, their private sphere, their colleagues and the social welfare systems.

With a view to protecting the health of the workforce, the applicable employment protection legislation as well as requirements relating to ergonomic workplace design are systematically observed and reviewed worldwide. Particularly close attention was paid to this issue in connection with the redesign of workplaces as part of "New Ways of Working". Instruction in health and safety at the workplace is provided regularly. In addition, wellness among staff is actively encouraged through health promotion measures; these are in place worldwide, but are tailored to local needs in each case.

Diversity and equal opportunities

Supporting fair working conditions as well as a healthy and non-discriminatory working environment is part of Hannover Re’s corporate culture. The Executive Board has recognised the Core Labour Standards of the Initial Labour Organization (ILO) for 100% of the workforce. Hannover Re does not tolerate discrimination or bullying in any form whatsoever and has enshrined this in a company-wide Code of Conduct. Furthermore, the right to form employee representative bodies and engage in collective bargaining negotiations over working conditions is recognised; employees are neither advantaged not disadvantaged on account of their membership of a trade union or employee representative body.

Hannover Re and its Executive Board are committed to equal opportunities in relation to diversity criteria and on all hierarchical levels. A current focus of the measures is on supporting women in leadership positions. Of the 174 senior executives around the world, 44 are women; this is equivalent to a proportion of 25.3%. Our goal is to increase diversity on all levels of management worldwide. Explicit targets have also been set for the two management levels below the Executive Board, which can be found in the Declaration on Corporate Governance.

As part of the Talent Management initiative, a DE&I strategy was developed in 2021 that builds on our purpose and values. We aim to "create opportunities together" while also being "somewhat different". Based on the DE&I strategy, we pressed ahead with implementation of the action plan with nine focus areas from 2022. In this context, for example, the women's network "Women@Hannover Re" continued to expand in the year under review, further progress was evident in closing the gender pay gap and recruitment processes around the world were implemented systematically with a focus on diversity. With a view to counteracting issues of "unconscious bias", in other words unconscious prejudices or thought patterns that influence everyday behaviour and can have potentially negative effects in daily working life, awareness-raising workshops were again conducted in the year under review, especially in the context of the LEAD leadership programme. Techniques for more objective decision-making are also being integrated.

Compatibility of the professional and private sphere is closely correlated with issues of diversity and equal opportunities. The Covid-19 pandemic has accelerated certain developments in the world of work that had already begun in prior years. These include, for example, greater combination of an office workspace with remote working as well as flexible working time models tailored to the employee's situation. These changes are increasingly becoming an integral component of a state-of-the-art, agile working environment and enhance the company's attractiveness on the labour market as well as the satisfaction, loyalty and performance readiness of the workforce.

Opportunities

We link all measures to the possibility of recruiting, retaining and optimally fostering the best employees on the market.

Employee concerns: selected goals

Goal	Target indicator by 2023	Status 31.12.2023
Identifying, recruiting, developing and retaining performance-driven employees according to requirements	Conceptual design and further refinement of powerful branding and recruitment systems	Achieved
Cultivating and developing global mobility	Adoption of a Global Assignment Policy	Achieved
Supporting the lifelong learning of employees around the world	Alignment of training activities with the values and core competencies of Hannover Re and expanded reporting on the worldwide programme of continuing training	Achieved
Identifying and fostering high-potentials and assuring successors for key positions	Optimisation of Group-wide talent reviews with a focus on development planning	Achieved
Promoting the health and performance of employees around the world	Expansion of programmes to promote health and wellness by at least 10%	Achieved
Increasing diversity on all managerial levels, especially in relation to women	Gender-neutral new appointments/replacements for all vacant leadership positions on all managerial levels worldwide	Achieved
Enhancing equal opportunities through measures to support the compatibility of career and family	Worldwide programme of mobile working	Achieved

Social issues

Access to insurance enables people to protect themselves against fundamental personal risks and against adverse changes in their environment. Such protection against threats to their livelihood is especially important in countries where social security systems are weak or not present at all. Yet it is here, in particular, that the comparatively high vulnerability of the population contrasts with what is still overall a minimal supply of insurance solutions tailored to the relevant financial, social and cultural requirements.

In addition to protecting against personal life risks, insurance solutions also offer protection for economic activities. Consequently, they form a vital basis not only for the economic development of national economies but also for a transition from an informal economy – in which the vast majority of employees and their families enjoy scarcely any social protection – to a formal economy.

Impacts on our operations

Social issues can affect our operations in many ways. For example, Hannover Re covers property damage resulting from social unrest under its reinsurance business. Growing social disparities can be associated with more frequent and severe social unrest. As part of the risk management of its reinsurance activities, Hannover Re also considers trends relating to current or future developments in social issues.

Insurance business

In our insurance business, we encourage the expansion of products that offer financial protection against extreme weather events. By covering insurance solutions such as micro- and agricultural insurance products, we also contribute to economic development in structurally deprived regions. This enables people with limited financial resources, particularly in regions that are severely affected by climate change, to protect themselves against basic risks such as the consequences of natural disasters or crop failures.

To simplify access to insurance, we are also actively involved worldwide in the development of parametric insurance solutions and index-based covers. These products insure and settle claims on the basis of defined and clearly determinable parameters such as the amount of precipitation or wind speeds. In this case, the sum paid out is defined in advance and depends on the occurrence of a trigger event and not on the actual loss. Where risks are insurable, parametric insurance products can help to make coverage more accessible, settle claims more quickly and thus close the protection gap in many areas.

In life and health reinsurance, too, we offer our worldwide customers – primary insurers – reinsurance solutions tailored to their individual needs and support them around the world with our expertise and power of innovation in the development and launch of new insurance products. Our offerings span life and annuity insurance products, solutions for critical illness, incapacity for work and long-term care as well as insurance products containing wellness and/or lifestyle components. Many of these solutions address special needs of end consumers or target groups that have hitherto not been adequately met by existing standardised products on account of specific requirements or challenges.

Investments

A budget for investments in dedicated impact funds was set up back in 2019. The primary objective here is to achieve appreciable improvements in the fields of food security and nutrition, education, health and well-being, ending poverty and climate action, among others, through the broadest possible coverage of the United Nations Social Development Goals (SDGs). We were invested in 29 of these funds with a special impact focus as at 31 December 2023, with capital commitments entered into totalling around USD 150 million. In addition, we invest through funds and directly in the infrastructure sector in renewables and clean transportation concepts as well as in sustainable forest and agriculture funds.

Opportunities

We see particular opportunities in the context of the continued protection gap existing between economic and insured values and on the basis of changing requirements in the life sector. Examples in property and casualty reinsurance include greater penetration of emerging markets, new/additional solutions to protect against or mitigate the impacts of natural disasters or extreme weather events, crop insurance products, parametric covers or protecting the transportation of medicines/vaccines. In life and health reinsurance, examples similarly include the cultivation of new markets through innovative insurance solutions connected with changing demographics, special insurance solutions for new forms of community, service offerings for seniors and digitalisation.

Social issues: selected goals

Goal	Target indicator by 2023	Status 31.12.2023
Further expanding insurance protection for emerging and developing countries in relation to extreme weather events and natural disasters in property and casualty reinsurance	Expansion of NatCat aggregates in emerging and developing countries to close the protection gap	Achieved
Expanding sustainable insurance solutions to mitigate the impacts of climate disasters and natural catastrophes	Discussion and review of at least five programmes and initiatives	Achieved
Expanding insurance protection for previously inadequately insured population groups in life and health reinsurance	Premium growth in developing and emerging countries	Not measurable due to transition from IFRS 4 to IFRS 17
Supporting our primary insurance partners with the (further) development of sustainable insurance solutions in life and health reinsurance	Expanded reinsurance of longevity risks, especially outside the United Kingdom	Achieved
Integrating ESG criteria into the underwriting policy for the facultative reinsurance department	Approval and adoption of an internal framework	Achieved
Asset management: expanding investments that support the sustainable transformation	Measurable expansion by 2023	Achieved
Signing the Principles for Responsible Investment	Signing	Achieved
Expanding corporate citizenship	Increase of 20% in the existing budget by 2023	Achieved

Respect for human rights

As long as 20 years ago, human rights were one of the four subject areas defined in the United Nations Global Compact in which companies commit to behave in a responsible manner. The requirements placed on companies in relation to human rights were fleshed out in greater detail in 2011 through the endorsement of the UN Guiding Principles on Business and Human Rights by the UN Human Rights Council. Companies are urged to implement adequate safeguards in order to avoid human rights risks within their entrepreneurial scope of influence. Hannover Re has issued a corresponding policy statement which can be viewed on its website. Statements on the Modern Slavery Act 2015 (United Kingdom) and the Modern Slavery Act 2018 (Australia) are also published there. As a signatory to the United Nations Global Compact, Hannover Re also releases an annual progress report on the Ten Principles.

Impacts on our operations

Reputational and compliance risks could materialise in connection with the non-financial aspect. In view of our business operations, no direct and/or severe risks were identified. Please see the opportunity and risk report in the combined Group management report for further information.

Impacts of our operations

As an internationally operating reinsurer, we consider impacts in relation to potential human rights violations from the perspective of the rightsholders.

Employees

In view of the fact that our employees are highly qualified specialists and we attach the utmost priority to compliance with applicable national regulations, collective bargaining provisions and company rules, we do not see any risk of serious violations of human rights. That said, issues such as discrimination, equal opportunities and oppression require constant attention and monitoring. We manage these issues in the context of our human resources management structure. For further information we refer to the remarks in connection with the aspect “Employee concerns”. We protect employee data through rigorous compliance with statutory data protection requirements.

Suppliers

Hannover Re does not have a traditional upstream or downstream supply chain of raw and auxiliary materials or produced goods as is the case with, for example, manufacturing companies. Nevertheless, we too source a broad range of goods and services. Hannover Re has a Third Party Code of Conduct for suppliers, the currently valid version of which was adopted by the Executive Board in the year under review and replaced the existing version upon entry into force. The Third Party Code of Conduct contains requirements covering compliance with legal provisions, respect for human rights including observance of the core labour standards of the International Labour Organization (ILO) and adherence to all applicable regulations and further rules in the areas of health, safety and environmental protection as well as data protection, information security and confidentiality. It additionally includes an explicit reference to the whistleblower system and various access channels.

As far as human rights due diligence is concerned, we see the greatest risk in connection with the procurement of IT hardware. For this reason, we have adopted an IT Procurement Guideline that is valid Group-wide and contains consistent rules governing the purchasing of IT products throughout the organisation. All bottleneck, leverage and strategic suppliers are subject to monitoring. Recognition of the Third Party Code of Conduct or submission of the supplier's own more extensive code of conduct is mandatory. As of 31 December 2023 100% of core IT suppliers have committed to compliance with the Third Party Code of Conduct or equivalent rules.

Insurance business

With regard to our activities in insurance business, we refer to the remarks made in connection with the aspect “Environmental concerns”. Based on our risk analysis, we identified the greatest risk of potentially detrimental impacts on human rights in the following, particularly exposed areas: large construction projects (incl. dams, oil and gas projects, mines and pipelines), mining operations as well as companies connected with internationally banned weapons. The facultative division's ESG manual provides for a screening process to identify and decline transactions that entail an inherent risk of severe breaches of fundamental human rights.

Underwriters on both the property and casualty and the life and health reinsurance side are offered instruction in ESG issues in the form of a Web-based training programme.

Investments

As far as our activities relating to assets under own management are concerned, we refer to the remarks made in connection with the aspect “Environmental concerns” and the negative screening process described there. This is based inter alia on the Ten Principles of the United Nations Global Compact (UNGC); six of these Principles explicitly address the issues of human rights and labour standards. Our investment guidelines also exclude issuers involved in the development and proliferation of internationally banned weapons.

Opportunities

No particular opportunities are identified in connection with this non-financial aspect.

Respect for human rights: selected goals

Goal	Target indicator by 2023	Status 31.12.2023
Living up to duties of care in matters of human rights	Definition of measures in conformity with the United Nations Guiding Principles on Business and Human Rights	Achieved, will be continued

Combating corruption and bribery

Corruption, as the abuse of entrusted power for personal gain, has numerous negative repercussions. On the political and administrative level, corruption influences decision-making and the execution of approved measures in favour of individuals or parts of the population. This erodes trust in the state and can become a threat to state legitimacy as well as to democratic institutions. On the economic level, corruption distorts competition and causes business transactions to become more expensive while obstructing the efficient use of resources. Combating corruption and bribery forms part of our compliance management system.

Impacts on our operations

Compliance risks may become relevant in connection with the non-financial aspect "Combating corruption and bribery". At the same time, integrity and lawful conduct are directly correlated with a company's reputation and establish the basis for the trust placed in such company by business partners, investors, shareholders and the broader public and hence also the foundation for its success and competitiveness over the long term. In view of the business operations and implemented structures, no direct and/or severe risks were identified. For further information the reader is referred to the opportunity and risk report in the combined Group management report.

Impacts of our operations

Any form of unlawful or corrupt behaviour inflicts considerable harm on society and impedes free and fair competition. Companies in the financial sector have an important role to play when it comes to prevention and execution. Hannover Re has a sophisticated governance and compliance management system and adopts the "three lines of defence" approach. For details of the implemented structures please see the opportunity and risk report in the combined Group management report.

Opportunities

No particular opportunities are identified in connection with this non-financial aspect.

Combating corruption and bribery: selected goals

Goal	Target indicator by 2023	Status 31.12.2023
Ensuring that the organisation is compliant	Average compliance score corresponding at a minimum to the targeted maturity level	Achieved

Disclosures in accordance with Article 8 of the EU Taxonomy Regulation

Article 8 of the EU Taxonomy Regulation ([EU] 2020/852) requires reporting entities pursuant to § 289 of the German Commercial Code (HGB) to publish information on how and to what extent their activities are consistent with economic activities that qualify as environmentally sustainable under the EU Taxonomy. The Taxonomy is a central element of the EU Action Plan for Financing Sustainable Growth and is intended – as a unified classification system – to foster transparency on sustainability in the financial market.

The Commission Delegated Regulation (EU) 2021/2139 supplementing Article 8 of the EU Taxonomy Regulation currently focuses exclusively on activities that contribute to mitigating or adapting to climate change. In this context, both the investments of the Hannover Re Group and our reinsurance solutions in property and casualty business fall within the scope of consideration.

Reinsurance business

Reinsurance solutions that protect against climate-related natural perils such as flood or storm damage can contribute to climate change adaptation. The provision of corresponding reinsurance capacities increases resilience in the face of natural catastrophes by protecting those impacted and compensating them in case of loss. Furthermore, reinsurance solutions ensure the continuation of major projects and the development of new technologies, thereby sustainably fostering economic growth. Long-standing experience in risk assessment and risk management facilitates the early detection of new and emerging risks and the development of appropriate risk transfer solutions.

The Taxonomy eligibility of our reinsurance activity specifies what proportion of our economic activities is described in the Taxonomy and for which economic activities technical screening criteria have been developed. These criteria determine the substantial contribution to the set environmental objectives, prevent harm to other environmental objectives and are intended to ensure adherence to social minimum standards. The proportions of the economic activities established using the screening criteria are Taxonomy-aligned and must be reported for the first time for the 2023 financial year. In view of the fact that comprehensive reporting is provided for the first time in the year under review, the informative value of the KPIs is considered to be still too slight to be able to incorporate them for effective steering purposes into our business decisions and product development processes.

Note:

The EU Taxonomy Regulation and the underlying delegated acts contain requirements and passages that make unambiguous and consistent interpretation and implementation difficult. In applying for the first time the full criteria developed for reinsurance undertakings, we have taken into account all official documents, FAQs and statements of the European Commission released until preparation of the reporting, subject to the draft FAQs published at the end of 2023, the contents of which could not be fully implemented. The new requirements will be explored in depth over the coming reporting year. In view of this and the interpretation uncertainties that still remain, it can be assumed that the evaluation of the disclosures in accordance with Article 8 of the EU Taxonomy Regulation – in particular the assessment of eligibility and alignment – will undergo gradual adjustments over time and that comparability within sectors can only emerge progressively. As a reinsurer, we are also dependent on extensive external data supplied by our clients and business partners in order to adequately analyse our Taxonomy alignment, many of whom are not subject to any European reporting obligation. Data gaps – which in some cases will be considerable – must be expected in the early reporting years in connection with information on the avoidance of significant harm. Further information on the conservative handling of such data gaps is provided in the corresponding description.

Taxonomy eligibility

In reinsurance business, we consider all revenues of one of the lines of business described in the Commission Delegated Regulation (EU) 2021/2139 under Solvency II to be Taxonomy-eligible if direct covers of climate-related natural hazards can be established. Evidence is provided, on the one hand, by our internal risk control and additionally by specific evidence of a corresponding contract from each identified line of business. Subject to further specifications by the legislator, all other lines of business that do not include direct climate-relevant covers or are not described in the Commission Delegated Regulation (EU) 2021/2139 are classified as Taxonomy-non-eligible.

Taxonomy alignment

Establishment of Taxonomy alignment requires proof of fulfilment of the technical screening criteria, which are intended to ensure the substantial contribution made by our reinsurance activities to the environmental objective of "adaptation to climate change" (economic activity 10.2; NACE Code K65.2.0). It must then be demonstrated that these activities do not have a negative impact on the environmental objective of "climate protection" and that the minimum safeguards are met.

Substantial contribution

For reinsurance companies, the Commission Delegated Regulation (EU) 2021/2039 includes five dedicated technical screening criteria. These reflect business practices and processes that the legislator considers to be essential prerequisites for being able to declare sustainable revenues within the meaning of the EU Taxonomy:

Leadership in modelling and pricing of climate risks

In its economic activities Hannover Re considers state-of-the-art modelling techniques with regard to climate-related natural perils. For further information on our approach to dealing with these risks we refer to our "Opportunity and risk report".

Supporting development and supply of enabling non-life reinsurance products

Hannover Re has implemented processes to ensure that the major needs of its clients regarding climate-related natural hazards are considered in reinsurance products. The pricing of such products is risk-based, meaning that preventive measures to minimise these risks (e.g. adherence to certain building standards) can be factored into the pricing. In the case of obligatory business, only the share of a portfolio's premiums that meet the technical screening criteria is reported as aligned.

Innovative reinsurance coverage solutions

Hannover Re supports the development of innovative reinsurance solutions with regard to climate-related natural hazards in order to satisfy the growing needs of its clients and society.

Data sharing

Hannover Re engages in a regular exchange with local authorities and shares data on request for analytical purposes to advance knowledge about changes caused by climate change. The requirements of technical screening criterion 4.1 are thus fully met.

High level of service in post-disaster situation

If large loss events connected with climate-related natural hazards occur, Hannover Re has implemented high standards of claims management and takes fair and prompt action with respect to its clients.

Compliance with the technical screening criteria can be ensured through standardised processes, work instructions and guidelines. These apply to all reinsurance products (in both obligatory and facultative business) that are in principle considered to be Taxonomy-eligible and where we serve as risk carrier. In order to identify premiums connected with aligned products, we refer to our internal risk and classification processes in underwriting and consider only explicit shares of reinsurance products that relate to coverage of climate change-related hazards specified in Annex A of the Commission Delegated Regulation (EU) 2021/2039. This includes, among other things, wind-related natural hazards such as storms, water-related natural hazards such as floods and heavy rain, and temperature-related natural hazards such as heatwaves and wildfires. The revenues that we recognise as Taxonomy-aligned on this basis thus make a substantial contribution to social adaptation to perils associated with climate change.

Avoidance of significant harm

In order to be able to recognise economic activities as sustainable within the meaning of the EU Taxonomy, it must be ensured that they do not significantly harm other environmental objectives ("Do No Significant Harm", DNSH). For reinsurance activities, this must be established for environmental objective 1 "Climate change mitigation". This means that the activities recognised as sustainable do not include the transfer of insurance for the extraction, storage, transport or production of fossil fuels or the transfer of insurance for vehicles, property, plant and equipment or other facilities used for these purposes.

Hannover Re has implemented processes to ensure that the revenues reported as Taxonomy-aligned do not include any covers related to fossil fuels as described above. In order to identify these covers in our obligatory reinsurance activities (the coverage of large portfolios), we are dependent on data supplied by our clients and brokers, which we actively request. In this respect, sometimes sizeable data gaps are evident in the year under review. Portfolios for which no information whatsoever is available are conservatively considered to be Taxonomy-non-aligned. It can be assumed that increasing data coverage over the coming years will affect the ratio of Taxonomy-aligned revenues.

Compliance with minimum safeguards

Economic activities must be carried out in accordance with the minimum safeguards criteria if they are to be reported as Taxonomy-aligned. In the absence of further clarification from the European Commission on this topic, we base our assessment on the requirements of the "Final Report on Minimum Safeguards" published by the Platform on Sustainable Finance (PSF) in October 2022. Four core topics that companies should consider are specified here:

- Respect for human rights
- Prevention of corruption and bribery
- Fair taxation
- Fair competition

Hannover Re has implemented processes for all four core topics to ensure compliance in its business activities. There are no known incidents or pending proceedings for the reporting year that would indicate a breach of the minimum safeguards requirements.

Further information on reported key performance indicators:

The Taxonomy KPIs for the 2023 financial year include disclosures on our eligible and aligned revenues from economic activity 10.2 Reinsurance (NACE Code K65.2.0). The mandatory template for (re)insurance undertakings contained in Annex X to the Commission Delegated Regulation (EU) 2021/2178 was used for the presentation. In this context, the stated KPIs refer to the Group revenues of Hannover Re recognised and consolidated in accordance with IFRS 17. Since disclosures on Taxonomy alignment were determined for the first time, we do not report any prior-year figures. Nor do we report any prior-year figures for Taxonomy eligibility, as our revenues had to be recognised in accordance with the requirements of IFRS 17 for the first time in the year under review. Pursuant to the draft FAQs of the European Commission released on 21 December 2023, we only report the premiums that demonstrably serve to provide concrete coverage for climate-related natural hazards as Taxonomy-aligned (premium split). Premiums identified as connected with fossil fuels are deducted from these premiums. The Taxonomy ratio is derived from the Taxonomy-aligned revenues (numerator) over the total revenues in non-life insurance business (denominator). The share of the aligned revenues from our retrocession activities is determined from internal retrocession ratios of our lines of business relevant to natural hazards.

Our KPIs can be found in the table contained in the annex to this subsection.

Investments

The key performance indicators (KPIs) relating to the EU Taxonomy are determined in accordance with the requirements of the Commission Delegated Regulation (EU) 2021/2178. At the present time, these are not incorporated into strategic business decisions because there is still considerable uncertainty around how they are to be understood as well as room for interpretation. The environmental sustainability of investing activities is managed using other approaches. The regulatory requirements are intended to capture the proportions of environmentally sustainable (Taxonomy-aligned) as well as potentially environmentally sustainable (Taxonomy-eligible) investments in the numerator relative to the total investments considered of Hannover Re in the denominator.

The denominator is derived from the investments of Hannover Re shown in the balance sheet excluding funds withheld. The Commission Delegated Regulation (EU) 2021/2178 further specifies under Article 7 (1) the exclusion of all exposures to central governments, central banks and supranational issuers from the calculation of the denominator.

The observation horizon of the numerator includes, in particular, securities exposures to issuers covered by the European reporting obligation pursuant to the "Non-Financial Reporting Directive" (NFRD) as well as tangible assets and loans where the specific purpose of the lending is known. With regard to exposures to undertakings that are excluded from the numerator pursuant to Article 7 (3) of the Commission Delegated Regulation (EU) 2021/2178, we include here investment funds, investments in equity participations and special purpose vehicles (SPVs) as well as liquid assets, the issuers of which have their registered office outside the EU (out of scope). In the case of issuers whose registered office is within the EU, a check is made to verify the obligation to publish non-financial information. As far as investment funds are concerned, the methodology has been changed in comparison with the previous year, with the result that this year around EUR 650 million in real estate funds are no longer reported in the numerator as Taxonomy-eligible.

In order to verify the Taxonomy eligibility and alignment of liquid securities of issuers whose registered office is within the EU, in other words which are potentially subject to the NFRD, we draw on data from an external service provider as well as the results of internal screening for a significant portion of the liquid assets for further allocation purposes. In the case of issuers subject to a reporting obligation, the Taxonomy ratios published in the context of non-financial reporting are applied to the investments of Hannover Re. The reported ratios are similarly either obtained from an external service provider or subsequently acquired manually, where such ratios are not available.

All investments in tangible assets connected with the purchase and ownership of real estate are generally considered to be Taxonomy-eligible. This includes investment property. One investment property is also considered to be Taxonomy-aligned because the technical screening criteria, the "Do no significant harm" criteria and compliance with minimum safeguards could be established. It has not so far been possible to establish Taxonomy alignment for 94% of the real estate assets. We were able to obtain information regarding the correct classification of around 96% of the total investments considered for the numerator without undue effort. The missing roughly 4% will initially be conservatively reported as Taxonomy-non-eligible this year. We are making every effort to gradually enhance the data quality and coverage and it is our expectation that the information base will continue to improve, in part through progressive standardisation of the reporting and the expansion of regulatory reporting requirements.

The key performance indicators for our Taxonomy-eligible and Taxonomy-aligned investments as well as the other required disclosures can be found in the reporting template in the annex to this subsection. There are currently no tangible assets or loans where the concrete lending purpose is known that are connected with the generation of energy from nuclear power or gas within the meaning of the Commission Delegated Regulation (EU) 2022/1214. A minimal indirect exposure exists to issuers from the utilities industry. We do not report this separately in the annex because it is too low to be material. It was not possible to take full account of the draft FAQs released at the end of December 2023 due to the short time available and the remaining regulatory uncertainties. Requirements that have still to be fulfilled will be elaborated over the current year.

Further information on reported key performance indicators

The Taxonomy-aligned investments of Hannover Re derive primarily from liquid investments in undertakings that are subject to the obligation to report under the NFRD and that publish Taxonomy-aligned revenues and capital expenditures (CapEx). In addition, one investment property is included in our Taxonomy-aligned investments. Given that the obligation to report on Taxonomy alignment is first appliable to financial undertakings for the 2023 financial year, information is so far only available on Taxonomy eligibility for exposures to such issuers. The alignment of these issuers will be considered in the calculation of the numerator for the KPIs from next year onwards. The internationally oriented investment horizon of Hannover Re naturally results in a large proportion of issuers not subject to mandatory reporting. At the same time, this gives rise to a small proportion of Taxonomy-eligible and Taxonomy-aligned investments. For the breakdown of the numerator by environmental objective, the value of the Taxonomy-aligned investments is used as the denominator in the absence of a consistent interpretation. A complete split of the Taxonomy-aligned investments into environmental objectives 1-2 is not possible due to the inconsistent Taxonomy ratios published to date by counterparties. With regard to environmental objectives 3-6, the counterparties are reporting quotas for the first time this year, which means that liquid investments can only be considered with effect from the coming reporting period. The activity "Acquisition and ownership of buildings" has similarly only been released for environmental objectives 1-2, and we are therefore unable to provide a disclosure for environmental objectives 3-6 for aligned tangible assets.

Template: The underwriting KPI for non-life insurance and reinsurance undertakings

	Substantial contribution to climate change adaptation			DNSH (Do No Significant Harm)					
Economic activities	**Absolute premiums, year 2023**	**Proportion of premiums, year 2023**	**Proportions of premiums, year 2022**	**Climate change mitigation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Biodiversity**	**Minimum safeguards**
in mio. EUR	Currency	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
A.1 Non-life insurance and reinsurance underwriting taxonomy-aligned activities	1,028.4	6.1	–	Y	Y	Y	Y	Y	Y
A.1.1 Of which reinsured	440.8	2.6	–	Y	Y	Y	Y	Y	Y
A.1.2 Of which stemming from reinsurance activity	1,028.4	6.1	–	Y	Y	Y	Y	Y	Y
A.1.2.1 Of which reinsured (retrocession)	440.8	2.6	–	Y	Y	Y	Y	Y	Y
A.2 Non-life insurance and reinsurance underwriting taxonomy-eligible but not environmental sustainable activities (not Taxonomy-aligned)	10,078.8	59.9	–	–	–	–	–	–	–
B. Non-life insurance and reinsurance underwriting Taxonomy-non-eligible activities	5,716.7	34.0	–	–	–	–	–	–	–
Total (A.1+A.2+B)	**16,823.9**	**100%**	–	–	–	–	–	–	–

Template: The proportion of the insurance or reinsurance undertaking's investments that are directed at funding, or are associated with, Taxonomy-aligned in relation to total investments

The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with Taxonomy-aligned economic **activities relative to the value of total assets covered by the KPI**, with following weights for investments in undertakings per below: Turnover-based: 1.1% Capital expenditures-based: 1.8%	The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with Taxonomy-aligned economic activities, with following weights for investments in undertakings per below: Turnover-based: 360.4 Mio EUR Capital expenditures-based: 591.6 Mio EUR
The percentage of assets covered by the KPI relative to total investments of insurance or reinsurance undertakings (total AuM). Excluding investments in sovereign entities. Coverage ratio: 100.0%	The monetary value of assets covered by the KPI. Excluding investments in sovereign entities. Coverage: 33,241.4 Mio EUR

Additional, complementary disclosures: breakdown of **denominator** of the KPI

The percentage of derivatives relative to total assets covered by the KPI: 0.8%	The value in monetary amounts of derivatives: 262.5 Mio EUR
The proportion of **exposures to financial and nonfinancial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 33.4% For financial undertakings: 42.7%	Value of **exposures to financial and nonfinancial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 11,109.5 Mio EUR For financial undertakings: 14,208.1 Mio EUR

Additional, complementary disclosures: breakdown of **denominator** of the KPI

The proportion of **exposures to financial and nonfinancial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 29.5% For financial undertakings: 28.4%	Value of **exposures to financial and nonfinancial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 9,793.0 Mio EUR For financial undertakings: 9,450.1 Mio EUR
The proportion of **exposures to financial and nonfinancial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: 6.1% For financial undertakings: 7.8%	Value of **exposures to financial and nonfinancial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: 2,013.8 Mio EUR For financial undertakings: 2,583.6 Mio EUR
The proportion of **exposures to other counterparties and assets over total assets** covered by the KPI: 9.2%	Value of **exposures to other counterparties and assets**: 3,064.0 Miio EUR
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy**: 100.0%	Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**. 33,241.4 EUR
The value of all the investments that are funding **economic activities that are not Taxonomy eligible** relative to the value of total assets covered by the KPI: Turnover-based: 12.6% Capital expenditures-based: 13.5%	Value of all the investments that are funding **economic activities that are not Taxonomy eligible**: Turnover-based: 4,175.7 EUR Capital expenditures-based: 4,486.5 Mio EUR
The value of all the investments that are funding Taxonomy-eligible economic activities, **but not Taxonomy-aligned relative to the value of total assets** covered by the KPI: Turnover-based: 9.4% Capital expenditures-based: 7.8%	Value of all the investments that are funding Taxonomy-eligible economic activities, **but not Taxonomy-aligned**: Turnover-based: 3,125.4 Mio EUR Capital expenditures-based: 2,583.3 EUR

Additional, complementary disclosures: breakdown of **numerator** of the KPI

The proportion of **Taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU** over total assets covered by the KPI: For non-financial undertakings: Turnover-based: 0.6% Capital expenditures-based: 1.3% For financial undertakings: Turnover-based: 0.0% Capital expenditures-based: 0.0%	Value of **Taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU**: For non-financial undertakings: Turnover-based: 208.3 Mio EUR Capital expenditures-based: 439.6 Mio EUR For financial undertakings: Turnover-based: 0.0 Mio EUR Capital expenditures-based: 0.0 Mio EUR
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, Taxonomy-aligned: Turnover-based: 1.1% Capital expenditures-based: 1.8%	Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts **where the investment risk is borne by the policy holders**, that are directed at funding, or are associated with, Taxonomy-aligned: Turnover-based: 360.4 Mio EUR Capital expenditures-based: 591.6 Mio EUR
The proportion of **Taxonomy-aligned exposures to other counterparties and assets** over total assets covered by the KPI: Turnover-based: 0.5% Capital expenditures-based: 0.5%	Value of **Taxonomy-aligned exposures to other counterparties and assets over total assets** covered by the KPI: Turnover-based: 152.0 Mio EUR Capital expenditures-based: 152.0 Mio EUR

Breakdown of the numerator of the KPI per environmental objective
Taxonomy-aligned activities – provided 'do-not-significant-harm'(DNSH) and social safeguards positive assessment:

	Turnover	CapEx		Turnover	CapEx
(1) Climate change mitigation	95.5%	70.8%	Transitional activities Enabling acitivities	4.4% 20.9%	0.9% 15.6%
(2) Climate change adaptation	0.1%	22.9%	Enabling acitivities	0.0%	4.0%
(3) The sustainable use and protection of water and marine resources	–	–	Enabling acitivities	–	–
(4) The transition to a circular economy	–	–	Enabling acitivities	–	–
(5) Pollution prevention and control	-	–	Enabling acitivities	–	–
(6) The protection and restoration of biodiversity and ecosystems	–	–	Enabling acitivities	–	–

Template 1 Nuclear and fossil gas related activities Row Nuclear energy related activities

Row	Nuclear energy related activities	YES/NO
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	NO
	Fossil gas related activities	
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	NO
5	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels	NO
6	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

Opportunity and risk report

Risk report

- Hannover Re's capital resources over the course of the year are in excess of the defined threshold. The capital position is reviewed on an ongoing basis.
- Our risk management system constantly monitors newly added and changing risks and is able to respond flexibly to changes in internal and external factors.

Strategy implementation

Robust governance and strong risk management are important parts of the foundation for our business operations. This is anchored in our corporate strategy.

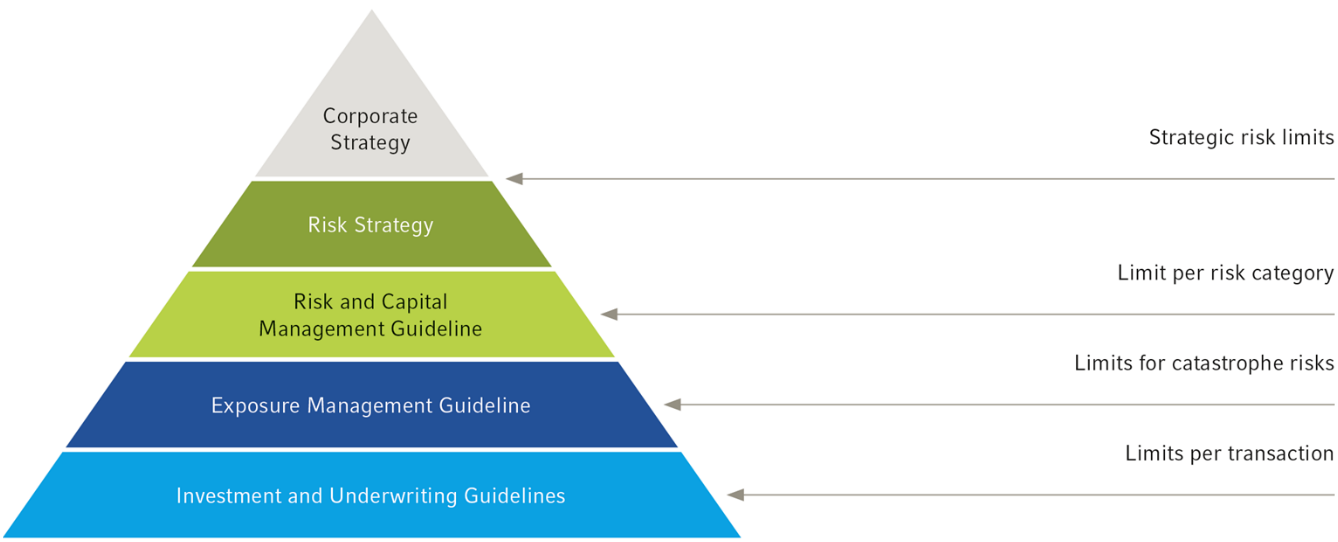
Derived from the corporate strategy, the risk strategy is the core element for our handling of risks. It specifies more closely the goals of risk management and documents our understanding of risk. We have defined the following overriding principles within the risk strategy:

1. We monitor adherence to the risk appetite set by the Executive Board.
2. We integrate risk management into value-based management.
3. We promote an open risk culture and the transparency of our risk management system.
4. We fulfil the requirements of rating agencies.
5. We fulfil the regulatory requirements.
6. We act in light of materiality and proportionality considerations.
7. We make balanced use of both quantitative and qualitative methods.
8. We ensure the independence of the risk management function

In addition to the risk strategy, the risk register and the central system of limits and thresholds are components of our Risk and Capital Management Guideline which is reviewed at least once a year. In this way we ensure that our risk management system is kept up-to-date.

Our solvency ratio should be at least 180%; 200% is already considered to be a threshold, and countermeasures would be triggered if the solvency ratio were to fall below this level. Adherence to the regulatory requirement of a solvency ratio of at least 100% is therefore also ensured.

Risk management through multiple levels of limits



Solvency capital requirements are monitored using our internal capital model and the Executive Board is informed quarterly about adherence to the key thresholds as part of regular risk reporting as well as on an additional basis in the case of major events or changes. In addition to the above mentioned threshold of 200%, the necessary equity resources are also influenced by the expectations of rating agencies and customers for our target rating.

Major external factors influencing risk management

This subsection describes geopolitical, regulatory and the capital market-related external factors that were particularly relevant to risk management in 2023. Further current developments are discussed in the following sections.

Geopolitical risks

In 2023, the global tensions increased over the course of the year. The war between Israel and Hamas has added another military conflict with far-reaching consequences.

Russia's war against Ukraine continued. The far-reaching consequences and ramifications for Europe and the world have been mitigated to some extend but are still felt. While the frontline has remained largely unchained over the year, the risk of the conflict escalating beyond the territory of Ukraine remains. This could have potentially extensive consequences for the geopolitical order on a global scale. As reactions on the Russian invasion, Western countries have enacted numerous sanctions against Russia. Hannover Re ensures that sanctions are not violated. The business relationship with Russian cedants therefore remains suspended. The high level of inflation in Europe, which is partly attributable to the conflict, has eased over the course of 2023 but remains well above the long-term targets set by European Central Bank.

The war between Israel and Hamas in the Gaza Strip is ongoing and a solution is currently not in sight. The risk of an escalation or a spreading of the war to neighbouring countries persists. The global terror risk is considered to be increased. Hannover Re is examining its covers for terrorism risks and unrest in this context during the treaty renewals.

Generally spoken, risks from armed conflicts are excluded in reinsurance treaties but may be covered under special arrangements such as for marine risks. Political risk and political violence covers, among others, are available for other risks from violent conflicts and their consequences. The risk situation for these policies is therefore elevated. Risks stemming from economic tensions can have disruptive effects on supply chains.

The relations between China and Taiwan continues to be tense. In recent years, the Chinese government is emphasising its territorial claims to the island and threatened a military solution to the situation. A violent escalation of the conflict harbours numerous significant risks for the global economy. The Taiwanese high-tech industry plays a major role in global supply chains, particularly in the production of semiconductors.

The upcoming US presidential elections in November 2024 could – depending on the outcome – lead to a comprehensive reorientation of foreign policy with significant consequences for the conflicts mentioned above.

Capital market environment

In the reporting period, our investments continued to perform satisfactorily and in line with our expectations, although numerous geopolitical and economic challenges continued to cause uncertainty. This was reflected in particular in exceptionally volatile interest rate markets. There was a lack of clear macroeconomic signals to counteract the volatility. With regard to the associated valuation swings, our investments benefited from the fact that we had positioned ourselves more defensively with regard to credit risks since the beginning of the previous year in anticipation of the effects of central bank activities.

An important external factor influencing the return achievable on our investments is the general interest rate level. In the reporting period, this reflected the interest rate dynamics of the central banks in our main currency areas, which raised their key interest rates in several steps, in some cases significantly, while constantly balancing the need to combat inflation with fluctuating recession expectations. The high level of liquidity in the markets was only reduced rather hesitantly. Following the very sharp rise in interest rates in the previous year, slight falls in interest rates were recorded at the end of the reporting period in our main currency areas, particularly in medium and long maturities, while short-term interest rates continued to rise, resulting in more pronounced inverse yield curves. Even if the continued high interest rates compared to the past initially reduced the market value of our fixed-interest securities, we benefited from the overall increase in the level of new investments and reinvestments. In addition, the balanced interest rate positions of our investments in relation to the technical provisions as a result of the IFRS 17 and IFRS 9 accounting standards to be applied for the first time in the reporting period resulted in good balance sheet resilience to market fluctuations, as it is now also recognized in the balance sheet that the market values of interest-sensitive assets and liabilities react in the opposite direction to changes in market interest rates.

At the end of the first quarter, uncertainties in the banking sector led to turmoils on the credit markets. This was reflected in some very volatile risk premiums on corporate bonds, which however at the time of reporting had largely even settled below the level at the end of the previous year.

Overall, the market value of our fixed-interest securities increased, although this was partially offset by our high proportion of our US Dollar exposure and its slight loss in value against the Euro.

In contrast to the interest rate markets, the equity markets were characterized by rather stable valuation levels and lower volatilities. Due to the liquidation of our positions in the previous year, the equity markets currently have no significant impact on our investments.

Inflation remains a key issue, with the measured inflation indices in both the Euro and US Dollar areas noticeably losing momentum. This is reflected in lower income from realized inflation amortization in our ordinary investment result compared to the exceptionally high rates of change in the previous year.

We continue to be exposed to the market for private equity. Here, changes in market value are based less on general market conditions and more on company-specific assessments. The risks are primarily in the business model and profitability and less in the interest component as part of the cash flow forecasts. We therefore also see the declines in market value observed in some cases during the reporting period as part of the risk profile specific to this asset class and company characteristics.

The importance of real estate risks remains unchanged significant for us due to our ongoing commitment in this area. We spread these risks through broadly diversified investments in high-quality markets worldwide, each of which is preceded by detailed property, manager and market analyses. During the reporting period, there was global pressure on market values in the commercial real estate sector, which is important to us. We are not affected by the disposals in the wake of the insolvency of the Signa Group, which is primarily active in the German-speaking region. We do not currently consider any other notable parts of our exposure to be critical.

For the near future, we continue to expect increased volatility on the global capital markets for investments, but we also see this as an opportunity and believe that we are adequately prepared with our current investment strategy. For more information, please refer to the section "Investments" in the economic report of the combined management report.

Regulatory developments

In the year 2023, there were numerous regulatory developments at the international, European, and national levels.

In the legislative process for the Solvency-II-Reform and the Directive on Recovery and Resolution in (re)insurance (IRRD), an agreement was reached in December 2023 during the final interinstitutional negotiations between the European Parliament, Council, and Commission. The negotiations included crucial elements of the directives, such as the definition of significant cross-border business, new macroprudential supervisory powers, as well as changes to yield curves and adjustments in the calculation of the risk margin.

On a global scale, the International Association of Insurance Supervisors (IAIS) introduced the latest iteration of the Insurance Capital Standards (ICS) and began assessing the comparability between the American Aggregation Method and the ICS. Implementation of the ICS is set to commence in 2025, with Solvency-II expected to serve as a direct implementation of the standard for European companies.

Within the EU, the Corporate Sustainability Due Diligence Directive (CSDDD) has also entered interinstitutional negotiations. In December 2023, discussions continued regarding the potential inclusion of financial service providers, leading to a preliminary agreement. It is anticipated that financial service companies will fall within the scope concerning their own business activities and supply chains, but not regarding the financial services they offer to customers. However, this is subject to a review clause, allowing a decision to extend coverage to financial institutions and products based on a comprehensive impact analysis at a later date.

During 2023, EIOPA conducted a consultation on reinsurance from third countries aimed at national supervisory authorities (NSAs). The consultation included a draft regulatory statement from EIOPA with recommendations on how reinsurance with third countries could be regulated in the future.
Concerning the EU/US Covered Agreement, both sides issued a joint statement reaffirming the agreement's significance and recognizing its effective functioning. The EU and the USA also committed to continuously reviewing the progress of the agreement and close coordination. They called on relevant authorities to refrain from actions contradicting the agreement.

Digital technologies play a crucial role in the processes of the financial services industry overall, including (re)insurance. The EU has developed a new framework, the Digital Operational Resilience Act (DORA), to ensure the performance of digital services in critical scenarios. Hannover Re must adjust numerous internal processes related to the review of external IT service providers for compliance with DORA, which becomes effective in 2025.

The European approach to Artificial Intelligence (AI), the EU AI Act, establishes guidelines for the use of AI systems, including automated decision-making. A preliminary agreement was recently reached in the trilogue. Extensive obligations apply to AI systems classified as high-risk, including a mandatory fundamental rights impact assessment, which also applies to the insurance sector. The EU AI Act is expected to be applicable two years after its enactment, with some exceptions for specific provisions. Hannover Re is preparing for potential requirements regarding AI governance and AI risk management, planning to adapt existing practices for AI use considering legal requirements.

Growing regulatory protectionism in many parts of the world in 2023 led to additional market access restrictions.

Risk capital

In the interests of our shareholders and clients, we strive to ensure that our risks remain commensurate with our capital resources.

Our quantitative risk management provides a uniform framework for the evaluation and steering of the risks affecting the company as well as of our capital position. The internal capital model – a stochastic enterprise model – is a central tool in this context. It covers all subsidiaries and business groups of the Hannover Re Group. The core variable in risk and enterprise management is the economic equity, which is calculated according to market-consistent valuation principles and also constitutes the basis for calculating the own funds under Solvency II. Hannover Re's internal capital model reflects the risks that influence the development of the economic equity. These are split into underwriting risks, market risks, counterparty default risks and operational risks. For each of these risk categories we have identified a number of risk factors for which we define probability distributions. Risk factors include, for example, economic indicators such as interest rates, exchange rates and inflation indices, but also insurance-specific indicators such as the mortality of a particular age group within our portfolio of insureds in a particular country or the number of natural catastrophes in a certain region and the insured loss amount per catastrophe. The specification of the probability distributions for the risk factors draws upon historical and publicly available data, exclusive industry data and the internal data resources of the Hannover Re Group. This process is further supplemented by the know-how of internal and external experts. The fit of the probability distributions is regularly checked by our specialist departments, although more importantly it is also verified in the context of the regular, company-wide use of the capital model when assessing risks and allocating the cost of capital. The Hannover Re Group calculates the required risk capital as the Value at Risk (VaR) of the economic change in value over a period of one year with a confidence level of 99.5%. This corresponds to the requirements of Solvency II. For its capitalisation under Solvency II Hannover Re has set a limit of 180% and a threshold of 200% for the capital adequacy ratio (Solvency ratio). Both, limit and threshold are exceeded.

Own funds and required risk capital

in EUR million	31.12.2023[1]	31.12.2022
Available economic capital	19,587.0	18,164.0
Eligible own funds (Solvency II)	18,951.9	17,514.0
Solvency capital requirement/required risk capital at the confidence level 99.5%	7,032.5	6,952.3
Excess capital (Solvency II)	11,919.4	10,561.7
Solvency ratio (Solvency II)	269.5%	251.9%

[1] The figures are based on the Solvency II reporting as at 31 December 2023. The Solvency II balance sheet related audit procedures have still to be completed by independent auditor. The remaining figures have not been audited. The solvency capital requirements take the major model change for the tax module in the internal model into account, the approval process with BaFin is still pending.

The eligible own funds of the Hannover Re Group for regulatory purposes are lower than the available economic capital because non-controlling interests are in part treated as non-eligible under Solvency II. The available economic capital, the eligible own funds and the required risk capital include the volatility adjustment, i.e. the add-on to the risk-free yield curve envisaged in the Solvency II supervisory regime.

Apart from the Hannover Re Group, the legal entity Hannover Rück SE is also subject to regulatory capital requirements. The solvency ratio of Hannover Rück SE is typically higher than the solvency ratio of the Hannover Re Group because there are no restrictions with regard to the use of own funds attributable to non-controlling interests.

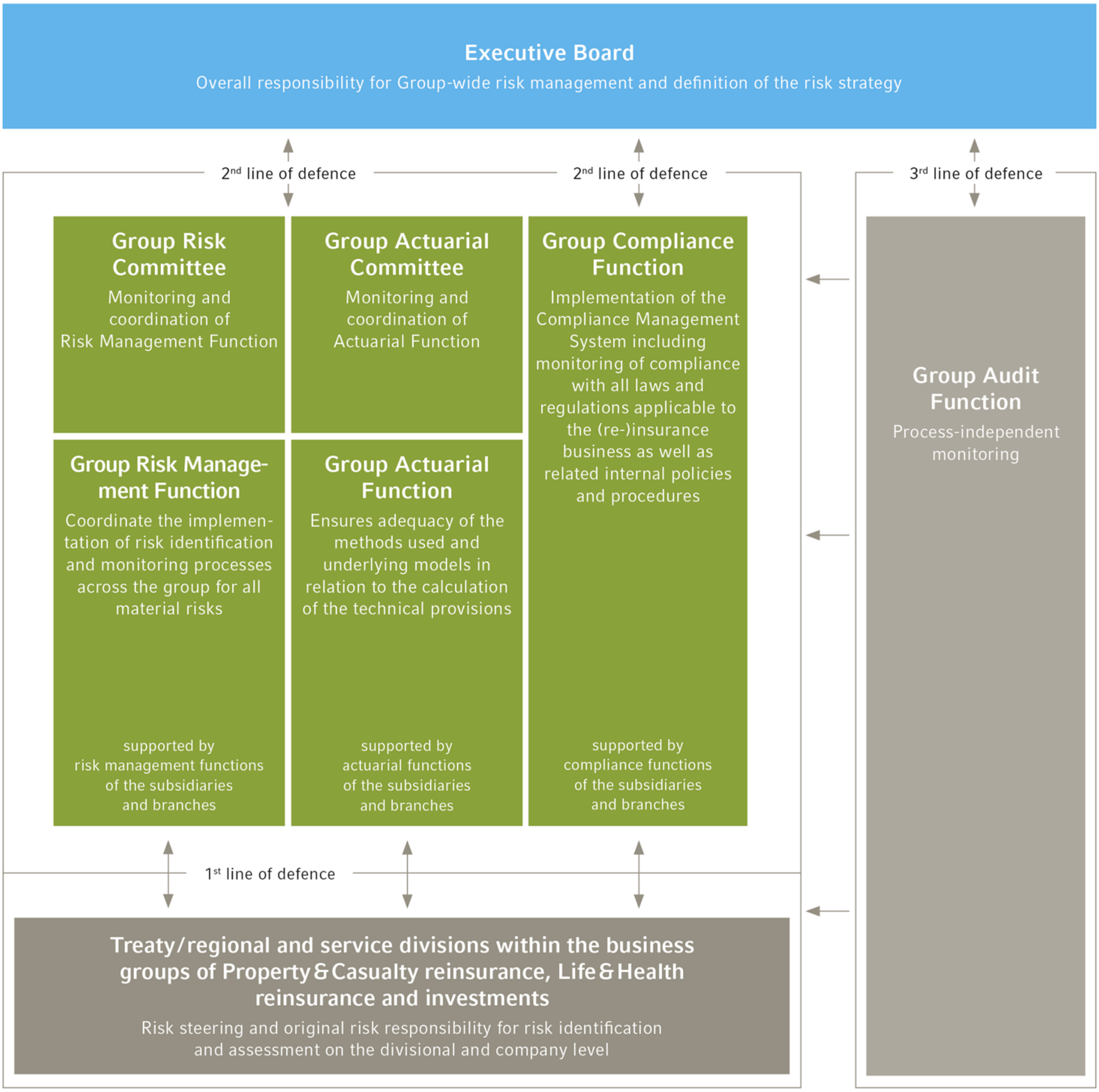
We strive for a rating from the rating agencies most relevant to our industry that facilitates and secures our access to all reinsurance business worldwide. Hannover Re is analysed by the rating agencies Standard & Poor's (S & P) and A.M. Best as part of an interactive rating process. The current financial strength is assessed as "AA-" (Very Strong, stable outlook) by Standard & Poor's and "A+" (Superior, stable outlook) by A.M. Best. In this context both Standard & Poor's and A.M. Best consider Hannover Re's risk management to be a very important aspect in the evaluation of financial strength and rate it as very good.

Against the backdrop of the planned growth of our business in property and casualty reinsurance and selected areas of life and health reinsurance, we continuously track the impacts on our capitalisation and rating. In order to safeguard an adequate level of capitalisation and our rating, we initiate measures promptly based on forecasts. Possible measures include, among others, adjusting the structure and scope of our retrocessions, adjusting the amount of debt capital and managing business growth through risk budgets.

Organisation and processes of risk management

Hannover Re has set up Group-wide risk management functions to safeguard an efficient and effective risk management system. The individual elements of the risk management functions are closely interlinked and the roles, tasks and reporting channels are clearly defined and documented. We have implemented the three lines of defence model. The first line of defence consists of the risk steering and the original risk responsibility at divisional and company level. The second line of defence is made up of the core functions risk management, the actuarial function and the compliance function. These functions are responsible for process-integrated monitoring and control. The third line of defence is the process-independent monitoring performed by the internal audit function. The following chart provides an overview of the central functions and bodies within the overall system as well as of their major tasks and powers.

Central functions of risk monitoring and steering



Group-wide risk communication and an open risk culture are important to our risk management. Regular global meetings attended by the actuarial units and risk management functions serve as a major anchor point for strategic considerations in relation to risk communication and risk culture. In addition, risk management requirements are formulated in guidelines that are discussed and published throughout the organisation.

Key elements of our risk management system

Our Risk and Capital Management Guideline, including the risk strategy and the system of limits and thresholds for material risks of the Hannover Re Group, describe the central elements of our risk management system. This is subject to a constant cycle of planning, execution, verification, and improvement. Systematic risk identification, risk analysis, risk assessment, risk steering and risk monitoring as well as risk reporting are especially crucial to the effectiveness of the overall system.

Our Guideline describes, among other aspects, the major tasks, rights and responsibilities, organisational frameworks and the risk control process. The rules, which are derived from the corporate strategy and the risk strategy, additionally take into account the regulatory requirements for risk management as well as international standards and developments relating to appropriate corporate governance.

Risk-bearing capacity concept

The establishment of the risk-bearing capacity involves determining the total available risk coverage potential and calculating the funds required to cover all risks. This is done in conformity with the parameters of the risk strategy and the risk appetite defined by the Executive Board. Individual risks and the risk position as a whole are measured using our internal capital model. A central system of limits and thresholds is in place to monitor material risks. This system incorporates the limits and thresholds derived from the corporate strategy. Adherence is verified on an ongoing basis.

Risk identification

The regular risk identification takes place on the basis of the documentation of all identified risks in the central risk register. It contains all material risks and is important for ensuring that our risk management is always up to date. Risks are identified through, among other things, interviews and scenario analyses as well as in the evaluation of new products and large transactions. External insights from associations and working groups are incorporated into the process.

Risk analysis and assessment

In principle, every risk that is identified and considered material is quantitatively assessed. Types of risks for which quantitative risk measurement is currently impossible or only possible with difficulty are primarily assessed qualitatively. This encompasses, among other things, strategic risks, reputational risks and emerging risks. Qualitative assessment can take the form of, for example, expert evaluations. Quantitative assessment of risks and the overall risk position is performed using Hannover Re's internal capital model. The model makes allowance for risk concentration and diversification.

Risk steering

The steering of all risks is the task of the operational business units on the divisional and company level. The identified and analysed risks are thereby either consciously accepted, avoided, increased or minimised. The risk / reward ratio is factored into the division's decision. Risk steering is assisted by the standards specified in the central and decentralised underwriting and investment guidelines, including the defined limits and thresholds.

Risk monitoring

The monitoring of all identified material risks is a core function of risk management. This includes, inter alia, monitoring execution of the risk strategy as well as adherence to the defined limits and thresholds and to risk-related methods and processes. A further major task of risk monitoring is the assessment of whether risk-steering measures were carried out and whether the planned effect of the measures suffices.

Risk communication and risk culture

Risk management is firmly integrated into our operational processes. It is assisted by transparent risk communication and dealing openly with risks as part of our risk culture. Risk communication takes place, for example, through internal and external risk reports, in the context of committee and project work, through information on current risk complexes in the intranet and by way of training activities for staff.

Risk reporting

Our risk reporting provides systematic and timely information about all material risks and their potential implications. The central risk reporting system consists primarily of regular risk reports, e. g. on the overall risk situation, adherence to the parameters defined in the risk strategy or on the capacity utilisation of natural catastrophe scenarios. Complementary to the regular risk reporting, immediate internal reporting on material risks that emerge at short notice takes place as necessary.

Process-integrated / -independent monitoring and quality assurance

Irrespective of internally assigned responsabilities, the Executive Board is responsible for the orderly organisation of the company's business. This also encompasses monitoring of the internal risk steering and control system. Process-independent monitoring and quality assurance of risk management is carried out by the internal audit function. The risk management system is rounded off with process-integrated procedures and rules, such as those of the internal control system.

Internal control system

The internal control system (ICS) serves, among other purposes, to secure and protect existing assets, prevent and reveal errors and irregularities and comply with laws and regulations. The core elements of Hannover Re's ICS are documented in a guideline that establishes a common understanding of the differentiated execution of the necessary controls. The guideline defines concepts, stipulates responsibilities and provides a guide for the description of controls. The ICS consists of systematically structured organisational and technical measures and controls within the company. These include, among other things, the principle of dual control, separation of functions, documentation of the controls within processes as well as technical plausibility checks and access privileges in the IT systems.

The proper functioning of the ICS necessitates the involvement of management, executive staff and employees on all levels.

Financial reporting must satisfy international and national financial reporting standards as well as regulatory requirements. This is safeguarded in the area of accounting and financial reporting by processes with integrated controls which ensure the completeness and accuracy of the annual and consolidated financial statements. A structure made up of differentiated criteria, control points and materiality thresholds assures our ability to identify and minimise the risk of errors in the annual and consolidated financial statements at an early stage.

We use a central IT solution with standardised accounting and consolidation processes, posting rules and interfaces for data delivery in order to draw up the consolidated financial statement. Access rights for the reporting systems are assigned through an approval process. All components of the accounting-related internal control system, the processes for the organisation and implementation of consolidation tasks and for the preparation of the consolidated financial statement as well as the accompanying controls are consistently documented. In order to safeguard and continuously improve the adequacy of the control system it is subject to regular review and evaluation. In this regard, the internal audit function ensures that the quality of the control system is constantly monitored. All relevant accounting principles are collated in a Group Accounting Manual that sets out uniform Group-wide rules for the recognition, measurement and reporting of items in the consolidated financial statement. The process for updating and, if necessary, adjusting these rules is clearly regulated with respect to information channels, responsibilities and period of validity. Not only that, we provide prompt Group-wide notification of significant developments and modified requirements in Group financial reporting.

Within the scope of our control system, the Group companies are responsible for Group-wide adherence to the accounting policies and the internal control guidelines. The management and chief financial officers of the Group companies defined as material in our control system affirm to the Executive Board of Hannover Rück SE at each closing date the completeness, correctness and reliability of the financial data that they pass on to Group Accounting. Data for the preparation of the consolidated financial statement is delivered using a networked IT application. The relevant data for Group financial reporting is collected in a database and processed via automatic interfaces in a consolidation system. As part of the financial reporting process, we perform preventive and detective checks on the reported figures in order to minimise the probability and reduce the impacts of a potentially incorrect disclosure. Depending upon the results of our checks, these figures can be corrected if necessary. Given that our Group financial reporting is heavily dependent on IT systems, these systems also need to be subject to controls; content-based and system-side checks have therefore been implemented for system access.

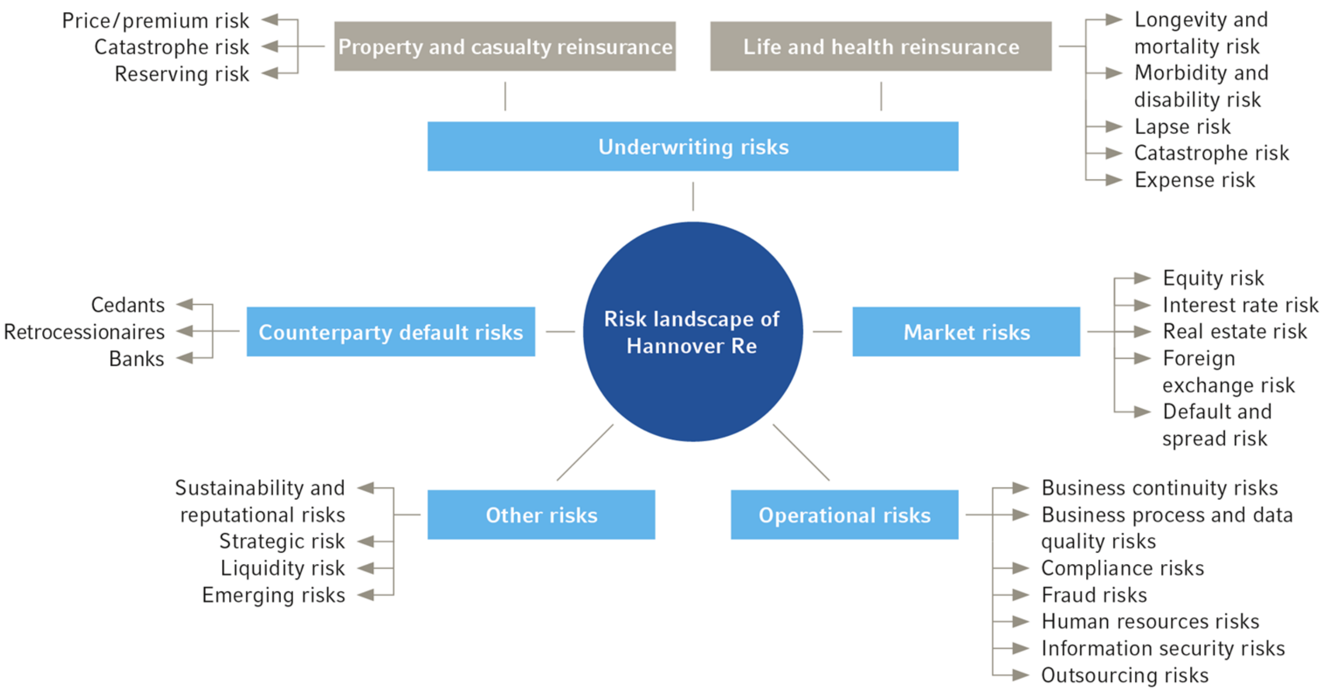
Risk landscape of Hannover Re

In the context of its business operations the Hannover Re Group is confronted with a broad variety of risks. These risks are deliberately accepted, steered and monitored as appropriate to the actions taken on the associated opportunities. The parameters and decisions of the Executive Board with respect to the risk appetite of the Hannover Re Group, which are based on the calculations of risk-bearing capacity, are fundamental to the acceptance of risks. In this context, crucial importance attaches to our risk management in order to ensure that, among other considerations, risks to the reinsurance portfolio remain calculable and even exceptional major losses do not have an unduly adverse impact on the result.

The risk landscape of Hannover Re encompasses:

- underwriting risks in property & casualty and life & health reinsurance which originate from our business activities and manifest themselves inter alia in fluctuations in loss estimates as well as in unexpected catastrophes and changes in biometric factors such as mortality,
- market risks which arise in connection with our investments, and also as a consequence of the valuation of sometimes long-term payment obligations associated with the technical account,
- counterparty default risks resulting from our diverse business relationships and payment obligations inter alia with clients, retrocessionaires and banks,
- operational risks which may derive, for example, from deficient processes or systems and
- sustainability and reputational risks, liquidity risks, strategic risks and emerging risks.

Risk landscape of Hannover Re



Currently, our most significant individual risks are the default and spread risks within the market risks, the reserving and catastrophe risks within the underwriting risks of property and casualty reinsurance and the longevity and mortality risks within the underwriting risks of life and health reinsurance.

The specific risk characteristics and the principal monitoring and steering mechanisms are described in the following sections.

Internal risk assessment

In this subsection we compare the available economic capital with the required risk capital.

Hannover Re calculates economic equity as the difference between the market-consistent value of assets and the market-consistent value of liabilities. While fair values are available for most investments, the market-consistent valuation of reinsurance treaties necessitates a specific valuation model. We establish the market-consistent value of technical items as the present value of projected payments using actuarial methods. This is adjusted by a risk loading that factors in the potential fluctuation in future payments. Such fluctuations result from risks that cannot be hedged by means of capital market products, such as underwriting risks. For the discounting of future cash flows we use the risk-free basic yield curves calculated in accordance with Solvency II requirements increased by the volatility adjustment. Market prices for options and guarantees embedded in insurance contracts are determined or approximated using option valuation models from the field of financial mathematics. The volume of these options and guarantees in our portfolio is, however, comparatively minor. The adjustments for assets under own management shown in the following table indicate the difference between fair value and book value of those investments recognised under IFRS at book value. Other adjustments largely relate to deferred taxes. The available economic capital, which is available as liable capital for policyholders, is composed of the economic equity and the hybrid capital, and includes the deduction of foreseeable dividends as required by Solvency II. Hybrid capital is recognised at market-consistent value as required by Solvency II, with changes in the own credit risk not being included in the valuation.

The available economic capital as of 31 December 2023 increased compared to 31 December 2022.

In life and health reinsurance we recorded strong, positive new business growth, additionally the changes in assumptions and experience variances from business in previous years also had a positive effect. The increase in risk capital led to an increase in the risk margin.

In our property and casualty segment we experienced a strong and positive development of the new business as well. We remained within the forecasted budget for major claims and could also release technical reserves from previous years' business. In property and casualty reinsurance we strengthened our reserves for inflation risks.

All in all, the changes in the market environment had a slightly positive impact on Hannover Re's economic capital. The main positive effect, caused by declining interest rates, was nearly offset by smaller negative effects from the development of exchange rates and credit spreads.

During the last year Hannover Re repaid a hybrid bond in the amount of EUR 500 million.

Reconciliation (economic capital/shareholders' equity)

in EUR million	31.12.2023[1]	31.12.2022[2]
Shareholders' equity including minorities	11,019.5	8,747.7
Adjustments for assets under own management	-475.6	211.1
Adjustments for technical provisions [3]	8,625.3	8,906.9
Adjustments due to tax effects and other	-1,716.5	-2,317.4
Economic equity	**17,452.7**	**15,548.3**
Hybrid capital	3,046.6	3,383.3
Foreseeable dividends	-912.3	-767.6
Available economic capital	**19,587.0**	**18,164.0**

[1] The figures are based on the Solvency II reporting as at 31 December 2023. The Solvency II balance sheet related audit procedures have still to be completed by the independent auditor. The remaining figures have not been audited.

[2] The reconciliation for 31 December 2022 was adjusted retroactively due to the transition to IFRS 17 and IFRS 9.

[3] Adjustments for technical provisions in life & health and property & casualty reinsurance including risk margin.

The required risk capital of the Hannover Re Group at the confidence level of 99.5% has increased only slightly over the course of the year. This is primarily a consequence of business growth, which has led to an increase in the underwriting risks of property and casualty reinsurance and life and health reinsurance. The decline in interest rates and the resulting increase in the market value of fixed-income securities contribute to the increase in risk. On the other hand, the stronger euro and improved diversification lead to a decline in the SCR.

Market risk increased slightly, primarily as a result of an increase in credit and spread risk due to higher market values of fixed-income securities as well as an increase in exchange rate risk and new investments in real estate. An increase in interest rate risk only contributes insignificantly to the increase in market risk.

The underwriting risks in property and casualty reinsurance have increased mainly as a result of higher premiums and reserves. The higher volumes result from business growth including higher capacities for natural catastrophe risks, claims development and the associated higher reserves.

The underwriting risks in life and health reinsurance are increasing mainly due to the higher business volume and the decline in interest rates. The increase particularly affects longevity risk and pandemic risk.

The slight decrease in counterparty default risk can be attributed principally to a smaller volume of cedants in life and health reinsurance.
The changes in the operational risk result above all from updated expert assessments regarding the impact of individual scenarios.

The increase in the diversification effect can be attributed to changes in the composition of the risks. The loss-mitigating effect from taxes remains largely stable.

The internal capital model is based on current methods from actuarial science and financial mathematics. In the case of underwriting risks, we are able to draw on a rich internal data history to estimate the probability distributions, e. g. for the reserve risk. For risks from natural perils we use external models, which are adjusted in the context of a detailed internal review process such that they reflect our risk profile as closely as possible. In the area of life and health reinsurance long-term payment flows are modelled under various biometric and lapse scenarios. With respect to all the aforementioned risks we use internal data to define scenarios and probability distributions. The internal data is enhanced by way of parameters set by our internal experts. These parameters are especially significant in relation to extreme events that have not previously been observed.

When it comes to aggregating the individual risks, we make allowance for dependencies between risk factors. Dependencies arise, for example, as a consequence of market shocks, such as the financial crisis, which simultaneously impact multiple market segments. What is more, several observation periods may be interrelated on account of market phenomena such as price cycles. Generally, however, it is our assumption that not all extreme events occur at the same time. The absence of complete dependency is referred to as diversification. Hannover Re's business model is based inter alia on building up the most balanced possible portfolio so as to achieve the greatest possible diversification effects and in order to deploy capital efficiently. Diversification exists between individual reinsurance treaties, lines, business segments and risks. We define the cost of capital to be generated per business unit according to the capital required by our business segments and lines and based on their contribution to diversification.

Required risk capital at the confidence level of 99.5%[1]

in EUR million	31.12.2023[1]	31.12.2022
Underwriting risk property and casualty reinsurance	6,085.3	5,664.2
Underwriting risk life and health reinsurance	2,741.0	2,509.9
Market risk	5,244.2	5,175.6
Counterparty default risk	432.1	434.7
Operational risk	653.6	620.8
Diversification	-5,520.2	-4,862.4
Tax effects	-2,603.5	-2,590.5
Required risk capital of the Hannover Re Group	**7,032.5**	**6,952.3**

[1] This information has not been audited by the independent auditor.

The risk capital at the confidence level of 99.5% reflects the loss from the respective risk that will not be exceeded with a probability of 99.5%. The risk capital required for specific risks is shown before tax in each case.

Underwriting risks in property and casualty reinsurance

Risk management in property and casualty reinsurance has defined various overall guidelines for efficient risk steering. These include, among other things, the use of retrocessions to reduce volatility and conserve capital. Furthermore it is important to utilize the available risk budgets based on the risk management parameters of the Hannover Re Group and to steer the acceptance of risks systematically through the existing central and local underwriting guidelines. Our conservative reserving level is a key factor in our risk management, too.

For risk steering purposes we make a fundamental distinction between risks that result from business operations of past years (reserve risk) and those stemming from activities in the current or future years (price / premium risk). Particularly in the latter case, special importance attaches to the catastrophe risk.

Diversification within the Property & Casualty reinsurance business group is actively managed through allocation of the cost of capital according to the contribution made to diversification. A high diversification effect arises out of the underwriting of business in different lines and different regions with different business partners. In addition, the active limitation of individual risks – such as natural catastrophes – enhances the diversification effect. The risk capital with a confidence level of 99.5% for underwriting risks in property and casualty reinsurance breaks down as follows:

Required risk capital[1] for underwriting risks in property and casualty reinsurance

in EUR million	31.12.2023	31.12.2022
Premium risk (including catastrophe risk)	4,405.3	4,119.8
Reserve risk	3,527.5	3,273.8
Diversification	-1,847.5	-1,729.4
Underwriting risk property and casualty	**6,085.3**	**5,664.2**

[1] Required risk capital with a confidence level of 99.5 %; information not audited by the independent auditor

A large share of the required risk capital for the premium risk (including catastrophe risk) is attributable to risks from natural disasters. They constitute the main concentration risk in property and casualty reinsurance. The following table shows the required risk capital for five of our largest natural hazards scenarios:

Required risk capital[1] for five large natural hazards scenarios

in EUR million	2023	2022
Hurricane US	2,415	2,273
Earthquake US West Coast	1,721	1,625
Winter storm Europe	1,435	1,017
Earthquake Japan	1,206	1,219
Earthquake Chile	1,503	1,361

[1] Required risk capital with a confidence level of 99.5% on an aggregate annual loss basis; information not audited by the independent auditor.

The reserve risk, i.e. the risk of under-reserving of incurred or foreseeable losses and the resulting burden on the underwriting result, is a high priority in our risk management. We attach importance to maintaining a conservative reserving level. In order to counter the risk of under-reserving we calculate our loss reserves based on our own actuarial estimations and establish, where necessary, additional reserves supplementary to those posted by our cedants for reported claims. Liability claims have a major influence on the latter reserve. Reserves are calculated on a differentiated basis according to line of business and regions.

In calculating the reserves, we use actuarial methods based on run-off triangles. Run-off triangles show the changes in the reserve over time due to paid claims and the recalculation of the reserves to be established as at the respective balance sheet date. Their adequacy is monitored by the actuarial departments.

Our own actuarial calculations regarding the adequacy of the reserves are also subject to annual quality assurance reviews in the form of an external analysis.

The price / premium risk lies in the possibility of a random claims realisation that diverges from the claims expectancy on which the premium calculation was based. Regular and independent reviews of the models used for treaty quotation as well as central and local underwriting guidelines are vital management components. We have put in place a quotation process to ensure the quality of our portfolios that considers the claims expectancy including anticipated rate of inflation, anticipated costs and cost of capital (volatility).

In addition, Hannover Re's treaty departments prepare regular reports on the progress of their respective renewals. They report on, among other things, significant changes in conditions, risks (e.g. in relation to the premium level) and also on emerging market opportunities as well as the strategy pursued in order to accomplish targets. The development of the combined ratio in property and casualty reinsurance in 2023 and prior years is shown in the table below:

Development of the combined ratio

in %	2023[3]	2022[1, 3]	2021[2]	2020[2]	2019[2]	2018[2]	2017[2]	2016[2]	2015[2]	2014[2]
Combined ratio (property and casualty reinsurance)	94,0	94,5	97,7	101,6	98,2	96,5	99,8	93,7	94,4	94,7

[1] Restated pursuant to IAS 8

[2] Pursuant to IFRS 4

[3] Reinsurance service result / reinsurance revenue (net)

For the purpose of assessing our material catastrophe risks from natural hazards (especially earthquake, windstorm and flood) we use licensed scientific simulation models, supplemented by the experience of our own specialist departments. The monitoring of the risks resulting from natural hazards is rounded out by scenario analyses. Major scenarios and stress tests are shown in the following table:

Stress tests for natural catastrophes after retrocessions

Aggregate annual loss in EUR million	2023	2022
	Effect on forecast net income	
Hurricane US		
100-year loss	-1,426	-1,378
250-year loss	-1,946	-1,859
Earthquake US West Coast		
100-year loss	-782	-758
250-year loss	-1,425	-1,385
Winter storm Europe		
100-year loss	-823	-614
250-year loss	-1,185	-874
Earthquake Japan		
100-year loss	-609	-645
250-year loss	-978	-966
Earthquake Chile		
100-year loss	-505	-513
250-year loss	-1,345	-1,180

As part of this process for steering risks connected with natural catastrophes, the Executive Board defines the risk appetite and the limit for natural perils once a year on the basis of the risk strategy.

Risk management considers numerous scenarios and extreme scenarios, determines their effect on portfolio and performance data, evaluates them in relation to the planned figures and identifies alternative courses of action.

For the purposes of risk limitation, maximum amounts are also stipulated for various extreme loss scenarios and return periods; the limits set take into account the profitability of the respective business. Risk management ensures adherence to these maximum amounts. The Executive Board, the Risk Committee and the P & C Executive Committee are kept regularly updated on the degree of capacity utilisation.

Net expenditure on major losses in the year under review amounted to EUR 1,620.6 million (EUR 1,705.7 million); the major loss budget for 2023 totalled EUR 1,725 million. Our company incurred the following catastrophe losses and major claims in the 2023 financial year:

Catastrophe losses and major claims[1] in 2023

in EUR million	Date	Gross	Net
Thunderstorm Italy	18–27 July 2023	313.1	313.1
Earthquake Turkey	6 February 2023	281.0	270.1
Wildfire Maui, USA	8–10 August 2023	176.0	96.8
Hurricane Otis, Mexico	22–25 October 2023	143.6	142.2
9 Man-made losses		**136.1**	**135.9**
Cyclone Gabrielle, New Zealand	10–17 February 2023	122.7	67.1
Flood Auckland, New Zealand	27 January–6 February 2023	93.7	46.8
Earthquake Marocco	8 September 2023	78.0	73.5
Storm/Flood, Australia	23–28 December 2023	55.2	43.8
Storm/Hail, USA	30 March–2 April 2023	52.0	36.6
Storm Ciarán, Europe	1–4 November 2023	51.3	27.5
Riots France	27 June–4 July 2023	49.7	48.2
3 Aviation losses		**42.9**	**36.9**
Hurricane Idalia, USA	28–31 August 2023	39.1	27.2
Storm Erwin, Europe	24–30 August 2023	33.3	16.6
Typhoon Doksuri, P.R.China, Taiwan	28 July 2023	30.2	30.2
Flood Eastern Europe	3–7 August 2023	28.3	28.3
1 Marine loss		**27.7**	**13.8**
Rain/Flood, Italy	16–22 May 2023	27.1	27.1
Storm Lambert, Germany	19–23 June 2023	26.9	12.7
Winterstorm/Hail, USA	1–4 March 2023	25.7	7.1
2 Credit losses		**24.6**	**24.6**
Windstorm/Flood Zoltan, Europe	23–31 December 2023	20.0	20.0
Wildfire, Chile	1 February–31 March 2023	19.2	19.2
1 Liability loss		**13.5**	**13.5**
Wildfire West Kelowna, Canada	15–31 August 2023	12.9	7.1
Thunderstorm/Hail, USA	3–6 April 2023	12.6	6.2
Thunderstorm/Tornados, USA	14–20 April 2023	12.4	8.4
Thunderstorm/Hail, USA	24–27 March 2023	11.2	11.1
Tornados/Hail, USA	19–23 July 2023	10.5	9.0
Total		**1,970.5**	**1,620.6**

[1] Natural catastrophes and other major claims in excess of EUR 10 million gross

Current developments, in particular the following highlighted risks, are monitored by risk management and accompanied by appropriate risk prevention measures.

Climate change

In the year under review, the cyclone Gabrielle and the flooding in New Zealand, the tornadoes in the USA, the hurricane Otis in Mexico and the hailstorm and flooding in Italy caused high losses.
Natural disasters should be viewed as inextricably linked to climate change. Climate change means that the probabilities of weather-related events occurring are changing, depending on the region and hazard. The associated impacts present a major challenge for risk management. We use both external and internal risk models for the stochastic modelling of the impacts of catastrophic events. Climate change trends are taken into account in the models. The monitoring of these risks is rounded off with scenario analyses. We are currently focussing on the dangers of storms, floods and forest fires, which are most strongly influenced by climate change in the short term.

Climate change, defined as naturally occurring or human-caused climatic changes, and the associated effects, is already influencing our lives today.

Climate change poses a significant macroeconomic risk and has also wide-ranging implications for the (re)insurance industry.

In 2015, with a view to combating climate change, the international community reached agreement on ambitious goals to protect the climate at the UN Climate Change Conference in Paris. Signed by 195 countries, the Paris Agreement seeks to limit the rise in the global average temperature to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. The path to achieving the Paris climate goal depends on a fundamental shift in the economic system and in human habits.

The consequences of climate change affect all areas of our business, not only in property & casualty and life & health reinsurance but also in our investing activities. At the same time, the implications of climate change represent the most significant sustainability risk for our company and are therefore closely analysed, monitored and controlled. The focus of climate change risk analysis is currently on changes in the frequency and severity of natural catastrophes (physical risks). In addition, we analyse investments (including transition risk), biometric factors and liability contracts in relation to risks from climate change (litigation risk). The climate-related dislocation of infectious diseases and their vectors to global zones where they were previously unknown also poses a risk for life and health reinsurance.

Physical risks affect us as a risk carrier primarily in property and casualty reinsurance, but also indirectly in life and health reinsurance. Changes in climate and weather events can, for example, cause higher and more frequent losses in property and casualty reinsurance as well as elevated numbers of deaths among the insured groups of persons, which in turn is associated with significant financial risks. Many forecasts in this connection are subject to uncertainty, especially if they refer to periods further in the future. In order to assess the possible consequences, we have developed scenarios designed to enable us to evaluate the physical, transitional and liability implications of climate change for all our business activities and initiate appropriate measures for steering the business. Various natural catastrophe scenarios are modelled, such as floods, hailstorms and tropical cyclones. Our interdisciplinary team for natural hazard modelling takes account of the insights gained in pricing for reinsurance solutions and in risk management, among other things, in determining the major loss budget. In addition, we conduct internal studies and explore the issue in international working groups so as to assess the risks posed by climate change. Currently, we primarily look at two scenarios (rise in temperature of 2°C or 4°C), under which we focus on the windstorm, flood and wildfire perils in the context of physical risks. The results of the analyses are presented to the Risk Committee and included in the annual Own Risk and Solvency Assessment (ORSA).

The economic transformation and the transition to a world largely free of greenhouse gas emissions also entails (transition) risks. For example, shares or bonds issued by companies could – gradually or abruptly – drop in value due to the failure of adopting the issuer's business model to the changing climate ("stranded assets").

In addition, ESG risks – in common with compliance risks that are generally associated with laws and regulations relating to environmental law or ESG standards – are subject to scrutiny under every New Product Process (NPP). Our Sustainability and Reputation Risk Management Guideline, which contains supplementary work instructions and definitions regarding climate change and other ESG issues, is applicable throughout the Group. Various committees and organisations similarly develop and discuss climate-related strategic goals and operational measures.

It is our expectation that over the long term (> 50 years) climate change will be material for all risk categories. Within the next five years we anticipate primarily impacts only on our P&C natural catastrophe business. The annual renewal of our treaties and the price adjustments described above, as well as the ongoing annual adjustment of the major loss budget, result in short response times for price / premium risk and reserve risk.

Climate change can result in shifts that are reflected in stronger demand for reinsurance products to protect against natural catastrophes and in new business opportunities. Hannover Re offers a wide range of products that help customers to protect themselves against increased losses and damage (both in terms of frequency and severity) from natural disasters. What is more, changes in temperature extremes around the world can lead to higher rates of mortality, which in turn may trigger stronger demand for our products in life and health reinsurance.

Inflation

The persistently high inflation worldwide potentially affects multiple factors of our business activities, such as the insured values and their premium calculation, the loss reserves, the large loss budget, the investments, and the administrative expenses. We have developed measures to deal with inflation in all these respects. It should be borne in mind here that the general rise in consumer prices needs to be differentiated from the claims and cost inflation that is relevant to our company. The Hannover Re-specific claims inflation index is a blend of different regions and currencies and depends on the line of business. These include wages and salaries for liability business, construction costs for property insurance including natural hazards and medical expenses for life and health insurance.

Inflation is considered in our reserving process. Essentially, this process is based on average past inflation rates. If there are indications of a future rise in inflation, we review the need to apply loadings. This is especially important in long-tail lines as multiple underwriting years can be affected at the same time.

We monitor inflation drivers over the entire course of the business and reduce them by, among other things, taking them into account in the premium calculation, means of index clauses and sliding-scale commissions.

To partially hedge inflation risks, Hannover Re holds securities in its portfolio whose coupon and redemption payments are inflation-linked. The bonds mentioned contribute to partial protection of these parts of the loss reserves against inflation risks.

Pandemic

With the worldwide decline in cases of illness and death attributable to infection with the Sars-Cov-2 virus, the claims burden for Hannover Re remains within expectations. Uncertainty exists with regard to the question of what proportion of primary insurance claims in a Taiwanese portfolio of short-term health reinsurance contracts is covered by reinsurance. The claims notifications from our cedants are continuously reviewed with regard to their appropriateness. Based on the information currently available, we do not expect any further significant effects on the result in health reinsurance. Should further information lead to the conclusion that this is no longer the case, this would have a negative impact on the IFRS result.

Cyber

Hannover Re offers reinsurance cover for cyber risks. The risks arising from the cyber portfolio are monitored and managed using the internal model, among other things. The management also includes cyber risks from insurance contracts that do not primarily cover this risk (silent cyber), although their weight has decreased due to the increased number of exclusions implemented in the past year. In addition, part of the risk is transferred via external protection cover.

The topics of information security and cyber security and the associated risks in underwriting are also dealt with by our Emerging Risks working group, which supports cross-departmental monitoring.

Further information on the topic of cyber can also be found in the section on operational risks and in the opportunities report.

Asbestos- and pollution related claims

Asbestos- and pollution-related claims account for only a small share of the Hannover Re Group’s loss reserves. It is particularly difficult to reliably estimate future loss payments for such claims. The adequacy of these reserves can be estimated using the so-called “survival ratio”. This ratio expresses how many years the reserves would cover if the average level of paid claims over the past three years were to continue. The survival ratio at the reporting date was 25,1 years.

Underwriting risks in life and health reinsurance

All risks directly connected with the life or health of an insured person are referred to as biometric risks. They include in particular the miscalculation of mortality, life expectancy, morbidity and occupational disability. Biometric risks are the material risks for our company in the area of life and health reinsurance. Our goal is to strike a balance between biometric risks. Furthermore, we are exposed to lapse risks because the cash flows resulting from our reinsurance treaties are in part dependent on lapse rates among policyholders. Counterparty default risks are also material since we partly prefinance our cedants’ new business acquisition costs. Furthermore, we are exposed to catastrophe risks, especially events involving a high number of fatalities in our insured portfolio such as those recorded in connection with the Covid-19 pandemic.

The reserves are determined on the basis of secure biometric actuarial bases in light of the information provided by our clients. The biometric actuarial bases used and the lapse assumptions are continuously reviewed with an eye to their adequacy and if necessary adjusted. This is done using the company’s own empirical data as well as market-specific insights. Our current risk profile in life and health reinsurance is dominated by mortality and longevity risks. This is due to the fact that under some of our contracts we pay death benefits, while under others we pay survival benefits. The volume of our annuity portfolio contributes to diversification within life and health reinsurance. We calculate the diversification effect between mortality and longevity risks prudently because the contracts are normally taken out for different regions, age groups and individuals. Morbidity risks are also playing a significant role. The required risk capital with a confidence level of 99.5% for underwriting risks in life and health reinsurance breaks down as follows:

Required risk capital[1] for underwriting risks in life and health reinsurance

in EUR million	31.12.2023	31.12.2022
Mortality risk [2]	1,782.2	1,791.5
Longevity risk	1,823.9	1,448.4
Morbidity and disability risk	1,337.5	1,369.9
Lapse risk	394.4	379.6
Expense risk	420.4	158.0
Diversification	-3,017.4	-2,637.5
Underwriting risk life and health	**2,741.0**	**2,509.9**

[1] Required risk capital with a confidence level of 99.5 %; information not audited by the independent auditor
[2] Mortality risk incl. catastrophe risk

The monitoring of the risk exposure is complemented by regular stress tests performed with regard to selected underlying underwriting risk factors. The impact (in % of the available economic capital) is within the following ranges:

Sensitivities of the underwriting risks (impact corridors in % of the available economic capital)

	2023	2022
Mortality +5% (excluding annuity business)	-6 to -4	-6 to -4
Morbidity +5%	-4 to -2	-4 to -2
Mortality -5% (annuity business only)	-3 to -1	-3 to -1
Lapse rate +10%	-2 to 0	-2 to 0
Costs +10%	-1 to 0	-1 to 0

Diversification is a central management tool for our company. We seek to spread risks as far as possible across different risk classes and different regions. In our pricing of reinsurance treaties we provide incentives to further increase diversification.

Through our quality assurance measures we ensure that the reserves established by ceding companies in accordance with local accounting principles satisfy all requirements with respect to the calculation methods used and assumptions made (e. g. use of mortality and morbidity tables, assumptions regarding the lapse rate). In addition, the assumptions are continuously reviewed on the basis of empirical data and modified if necessary. New business is written in all regions in compliance with underwriting guidelines applicable worldwide, which set out detailed rules governing the type, quality, level and origin of risks and how these considerations are factored into the pricing. These global guidelines are revised annually and approved by the Executive Board. Special underwriting guidelines give due consideration to the particular features of individual markets. By monitoring compliance with these underwriting guidelines we minimise the potential implications of an inability to pay or of deterioration in the financial status of cedants. Regular reviews and holistic analyses (e. g. with an eye to lapse risks) are carried out with respect to new business activities and the assumption of international portfolios. Large transactions are also examined by our risk management department. Individual actuarial reports and documentation ensure that regular scrutiny also takes place at the subsidiary level. The interest rate risk, which in the primary sector is important in life business owing to the guarantees that are given, is of only minimal relevance to our company thanks to the design of our reinsurance treaties. We have confidence in the entrepreneurial abilities of our underwriters and grant them the most extensive possible powers. In our decentralised organisation we manage risks where they arise using a consistent Group-wide approach in order to obtain an overall view of the risks in life and health reinsurance. Our global underwriting guidelines provide underwriters with an appropriate framework for this purpose.

In recent years we have reported regularly on the results of our US mortality business, which have been poorer than anticipated. The reason for this development was the negative earnings performance of a large portfolio that we, as reported at the time, acquired at the beginning of 2009.

As part of our inforce management measures we had initiated rate adjustments for the portfolio concerned in 2018. This process has now been completed successfully.

The losses from the Covid-19 pandemic for this portfolio have continued to decline. We are continuously monitoring the further development of the underlying mortality in the aftermath of the pandemic.

We monitor developments in the worldwide morbidity portfolio on an ongoing basis.

The impacts of Covid-19 on our morbidity portfolio in life and health reinsurance have been limited. We continuously track the potential implications of the Covid-19 pandemic for our worldwide life and health reinsurance business, expecting a minor strain going forward.

The risks arising out of life and health reinsurance are reflected in the internal capital model.

Market risks

Faced with a challenging capital market climate, particularly high importance attaches to preserving the value of assets under own management and the stability of the return. Hannover Re's portfolio is therefore guided by the principles of a balanced risk / return profile and broad diversification. Based on a risk-averse asset mix, the investments reflect both the currencies and durations of our liabilities. Market price risks include equity risks, interest rate risks, foreign exchange risks, real estate risks, spread and default risks. Our portfolio currently consists in large part of fixed-income securities, and hence default and spread risks account for the bulk of the market risk. We minimise interest rate and foreign exchange risks through the greatest possible matching of payments from fixed-income securities with the projected future payment obligations from our insurance contracts. Market risks derive from the investments managed by Hannover Re itself and from investment risks of ceding companies that we assume in connection with insurance contracts. The following table shows the risk capital with a confidence level of 99.5% for the market risks from investments under own and third-party management.

Required risk capital[1] for market risks

in EUR million	31.12.2023	31.12.2022
Default and spread risk	3,348.1	3,027.1
Interest rate risk	1,178.2	1,004.1
Foreign exchange risk	1,983.4	1,774.9
Equity risk [2]	1,700.5	2,021.9
Real estate risk	1,031.2	946.5
Diversification	-3,997.2	-3,598.9
Market risk	**5,244.2**	**5,175.6**

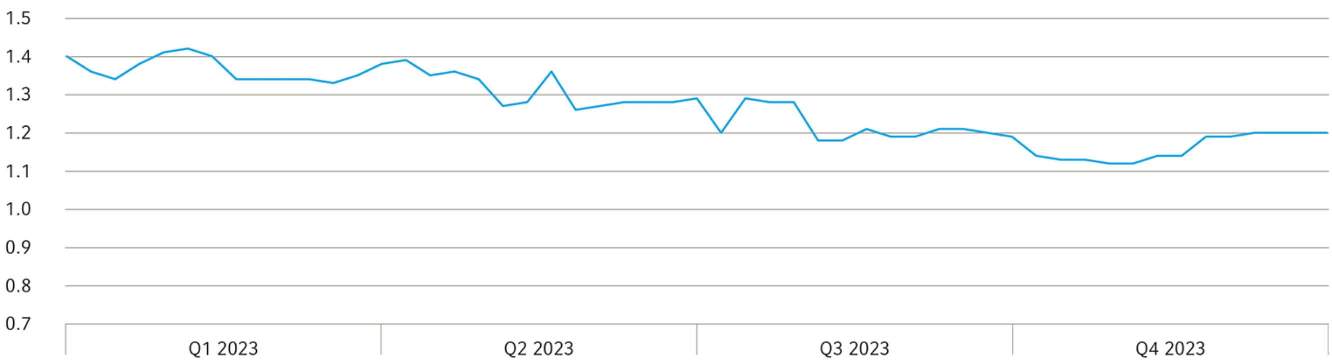
[1] Required risk capital with a confidence level of 99.5%; information not audited by the independent auditor
[2] Including private equity

With a view to preserving the value of our assets under own management, we constantly monitor adherence to a trigger mechanism based on a clearly defined traffic light system that is applied across all portfolios. This system defines clear thresholds and escalation channels for the cumulative fluctuations in fair value and realised gains / losses on investments since the beginning of the year. They are unambiguously defined in conformity with our risk appetite and trigger specified information and escalation channels if a corresponding fair value development is exceeded.

The predefined discussion and analysis mechanisms upon triggering of the escalation levels of the early-warning system were activated in the course of the year under review on account of interest rate and spread volatility as well as central bank moves in response to inflationary tendencies. In accordance with our guidelines, the Investment Committee therefore regularly discussed the potential implications for our invested asset classes and the current portfolio composition in each case. Thanks to the broad diversification and conservative posture of our investments, there was no need to modify the strategic orientation of our portfolios towards a more defensive investment strategy during the reporting period. In addition, we had already taken a rather cautious stance since the beginning of the previous reporting period in view of expected central bank activities and inflation developments at the turn of the year.

The short-term loss probability measured as the Value at Risk (VaR) is another vital tool used for operational monitoring and management of the market price risks associated with our securities positions. It is calculated on the basis of historical data, e. g. the volatility of the securities positions under own management and the correlation between these risks. As part of these calculations the decline in the fair value of our securities portfolio is simulated with a certain probability and within a certain period. The VaR of the Hannover Re Group determined in accordance with these principles specifies the decrease in the fair value of our securities portfolio under own management that with a probability of 95% will not be exceeded within ten trading days. A standard market model is used to calculate the VaR indicators for the Hannover Re Group. It is based on historical time series of relevant market parameters (equity prices, yield curves, spread curves and exchange rates). Against the backdrop of a very turbulent capital market and interest rate environment, volatilities – especially of fixed-income assets – again reached a high level at times in the year under review. Based on continued broad risk diversification and the orientation of our investment portfolio, our VaR was nevertheless clearly below the VaR upper limit defined in our investment guidelines. It amounted to 1.2% (1.3%) as at the end of the reporting period.

Value at Risk[1] for the investment portfolio of the Hannover Re Group



[1] VaR upper limit according to Hannover Re's investment guidelines: 2.5%

Stress tests are conducted in order to be able to map extreme scenarios as well as normal market scenarios for the purpose of calculating the Value at Risk. In this context, the loss potentials for fair values and shareholders' equity (before tax) are simulated on the basis of already occurred or notional extreme events.

Scenarios for changes in the fair value of material asset classes

in EUR million	Scenario	Portfolio change on a fair value basis	Change in equity before tax
Equity securities and private equity	Share prices -10%	-202.9	-202.9
	Share prices -20%	-405.7	-405.7
	Share prices +10%	+202.9	+202.9
	Share prices +20%	+405.7	+405.7
Fixed-income securities	Yield increase +50 basis points	-1,261.8	-1,261.8
	Yield increase +100 basis points	-2,455.6	-2,455.6
	Yield decrease -50 basis points	+1,333.5	+1,333.5
	Yield decrease -100 basis points	+2,747.9	+2,747.9
Real estate	Real estate market values -10%	-407.2	-198.2
	Real estate market values +10%	+407.2	+110.5

Further significant risk management tools – along with the various stress tests used to estimate the loss potential under extreme market conditions – include sensitivity and duration analyses and our asset/liability management (ALM). The internal capital model provides us with quantitative support for the investment strategy as well as a broad diversity of VaR calculations. In addition, tactical duration ranges are in place, within which the portfolio can be positioned opportunistically according to market expectations. The parameters for these ranges are directly linked to our calculated risk-bearing capacity. It should be borne in mind that the issued subordinated bonds and resulting induced interest rate exposure are actively factored into our ALM. Further information on the risk concentrations of our investments can be obtained from the tables on the rating structure of fixed-income securities as well as on the currencies in which investments are held. Please refer to our comments in the section "Notes on the individual items of the balance sheet", subsection "Investments" in the notes to the consolidated financial statements.

Equity risks result from the possibility of unfavorable changes in the value of shares, equity derivatives or equity index derivatives in our portfolio. However, their relevance for our investments was very low, as we had liquidated our equity fund portfolio at the beginning of the previous year. Our equity exposure therefore amounts to 0.0% (0.0%).

We continue to be exposed to the market for private equity. Here, changes in market value are based less on general market conditions and more on company-specific assessments. The risks primarily relate to the business model and profitability and, to a lesser extent, to the interest rate component of the cash flow forecasts. Please refer to our explanations in the section "Notes to the individual balance sheet items", subsection "Investments" in the notes to the consolidated financial statements.

The portfolio of fixed-income securities is exposed to an interest rate risk. Declining market yields lead to increases and rising market yields to decreases in the fair value of the fixed-income securities portfolio. The credit spread risk should also be mentioned. The credit spread refers to the interest rate differential between a risk-entailing bond and risk-free bond with the same maturity. Changes in these risk premiums, which are observable on the market, result – analogously to changes in pure market yields – in changes in the fair values of the corresponding securities. We minimise interest rate risks by matching the durations of payments from fixed-income securities as closely as possible with the projected future payment obligations under our insurance contracts.

Foreign exchange risks are especially relevant if there is a currency imbalance between the technical liabilities and the assets. Through extensive matching of currency distributions on the assets and liabilities side, we reduce this risk on the basis of the individual balance sheets within the Group. The short-term Value at Risk therefore does not include quantification of the foreign exchange risks. We regularly compare the liabilities per currency with the covering assets and optimise the currency coverage by regrouping assets. In so doing, we make allowance for collateral conditions such as different accounting requirements. Remaining currency surpluses are systematically quantified and monitored within the scope of economic modelling. A detailed presentation of the currency spread of our investments is provided in the section "Notes to the individual balance sheet items", subsection "Investments" in the notes to the consolidated financial statements.

Real estate risks result from the possibility of unfavourable changes in the value of real estate held either directly or through fund units. They may be caused by a deterioration in particular qualities of a property or by a general downslide in market values. Real estate risks have grown in importance for our portfolio in recent years owing to our ongoing involvement in this sector. We spread these risks through broadly diversified investments in high-quality markets worldwide; each investment is preceded by detailed analyses of the property, manager and market concerned. In the reporting period, there was global pressure on market values in the commercial real estate segment, which is important to us. This was reflected by recognizing property-specific impairments. We are not affected by the turmoils resulting from the insolvency of the Signa Group, which is primarily active in German-speaking countries. We do not currently consider any other significant parts of our exposure to be critical.

We use derivative financial instruments only to the extent needed to hedge risks. The primary purpose of such financial instruments is to hedge against potentially adverse developments on capital markets. A portion of our cash flows from the insurance business as well as foreign exchange risks arising because currency matching cannot be efficiently achieved are hedged to some extent using forward exchange transactions. Hannover Re holds further derivative financial instruments to hedge interest rate risks from loans taken out to finance real estate and to hedge inflation risks from the life reinsurance business written by our Australian branch. In addition, Hannover Re holds hedges in the form of equity swaps to hedge price risks in connection with the stock appreciation rights granted under the Share Award Plan. These are intended to neutralise changes in the fair values of the awarded stock appreciation rights. Contracts are concluded with reliable counterparties and for the most part collateralised on a daily basis so as to avoid credit risks associated with the use of such transactions. The remaining exposures are controlled according to the restrictive parameters set out in our investment guidelines.

Since 2019 we have entered into term repurchase agreements (repos) as a supplementary liquidity management tool. The holdings exchanged in this context are fully collateralised.

Some insurance derivatives linked to insurance business are also recognised under the investments due to IFRS financial reporting requirements. For a more detailed presentation of the underlying underwriting risks we would refer to the subsection "Derivative financial instruments in connection with reinsurance", subsection "Derivative financial instruments and financial guarantees" in the notes to the consolidated financial statements.

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

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

Rating structure of our fixed-income securities[1]

Rating classes	Government bonds		Securities issued by semi-governmental entities [2]		Corporate bonds		Covered bonds / asset-backed securities	
	in %	in EUR million	in %	in EUR million	in %	in EUR million	in %	in EUR million
AAA	20.1	4,213.7	55.1	4,521.1	0.5	82.3	52.6	1,916.8
AA	63.8	13,373.3	22.6	1,853.4	9.4	1,497.1	15.1	551.6
A	10.6	2,218.1	7.9	646.2	33.6	5,325.3	13.4	490.0
BBB	4.1	861.7	1.8	147.9	45.9	7,277.9	15.3	556.8
< BBB	1.4	292.2	12.6	1,030.9	10.5	1,662.9	3.6	130.3
Total	**100.0**	**20,959.0**	**100.0**	**8,199.4**	**100.0**	**15,845.5**	**100.0**	**3,645.6**

[1] Securities held through investment funds are recognised pro rata with their corresponding individual ratings.

[2] Including government-guaranteed corporate bonds

In general terms, Hannover Re gears its investment portfolio to the principles of a balanced risk / return ratio coupled with broad diversification. Accordingly, we counter the risk concentrations that nevertheless arise in individual asset classes with the broadest possible spread of different issuers per asset class. This is just as much a key component of our investment policy as credit rating assessment and management based on the quality criteria defined in the investment guidelines.

On a fair value basis EUR 5,761.9 million of the corporate bonds held by our company were issued by entities in the financial sector. Of this amount, EUR 4,687.1 million was attributable to banks. The vast majority of these bank bonds (70.0%) are rated "A" or better. Our investment portfolio under own management does not contain any written or issued credit default swaps.

Counterparty default risks

The counterparty default risk consists primarily of the risk of complete or partial unwillingness or inability to pay of counterparties and the associated default on payment. Counterparty default risks exist with respect to cedants, retrocessionaires and in connection with short-term deposits at banks. We address credit risks from fixed-income investments in the preceding section under market risks.

The following table shows the required risk capital for counterparty defaults with a confidence level of 99.5%.

Required risk capital[1] **for the counterparty default risk**

in EUR million	31.12.2023	31.12.2022
Counterparty default risk	432.1	434.7

[1] Required risk capital with a confidence level of 99.5 %; information not audited by the independent auditor

Since the business that we accept is not always fully retained, but instead portions are retroceded as necessary, the counterparty default risk is also material for our company in reinsurance transactions. Our retrocession partners are carefully selected and monitored in light of credit considerations in order to keep the risk as small as possible. This is also true of our broker relationships, which entail a risk inter alia through the potential loss of the premium paid by the cedant to the broker. We minimise these risks, among other measures, by reviewing broker relationships with an eye to criteria such as the existence of professional indemnity insurance, payment performance and proper contract implementation. The Security Committee decides on measures where necessary to secure receivables that appear to be at risk of default. This process is supported by a risk management application, which specifies cession limits for the individual retrocessionaires participating in protection cover programmes and determines the capacities still available for short-, medium- and long-term business. Depending on the type and expected run-off duration of the reinsured business, the selection of reinsurers takes into account not only the minimum ratings of the rating agencies Standard & Poor's and A.M. Best but also internal and external expert assessments. Overall, retrocessions conserve our capital, stabilise and optimise our results and enable us to act on market opportunities across a broader front, e. g. following a major loss event. A close and regular dialogue with our retrocessionaires gives us a reliable overview of the market and puts us in a position to respond quickly to capacity changes.

The following table shows how the proportion of assumed risks that we do not retrocede (i.e. that we run in our retention) has changed in recent years:

Gross written premium retained

in %	Group 31.12.2023 cumulated	Group 31.12.2022 cumulated	P&C 31.12.2023 cumulated	P&C 31.12.2022 cumulated	L&H 31.12.2023 cumulated	L&H 31.12.2022 cumulated
Retention	86.2	90.2	84.4	89.1	90.3	92.6

Alongside traditional retrocessions in property and casualty reinsurance we also transfer risks to the capital market. Any counterparty default risks associated with investors in a capital market transfer are collateralised via LOCs or a trust account (e.g. using cash) in favour of Hannover Re.

54.4% of our recoverables from reinsurance business are secured by deposits or letters of credit. For the majority of our retrocessionaires we also function as reinsurer, meaning that in most cases recoverables can potentially be set off against our own liabilities.

In terms of the Hannover Re Group`s major companies, EUR 669.7 million of our accounts receivable from reinsurance business were older than 90 days as at the balance sheet date. In the previous year, the amount was EUR 860.2 million.

Retrocession gives rise to claims that we hold against our retrocessionaires. These reinsurance recoverables – i.e. the reinsurance recoverables on unpaid claims – amounted to EUR 2,231.4 million (EUR 2,401.6 million) as at the balance sheet date.

The following table shows the expected cash flows contained in the reinsurers' shares of the provision for outstanding claims, broken down by rating class.

in Mio. EUR	2023	%
Secured	1,074.9	54.4
AAA	0.0	0.0
AA	250.7	12.7
A	243.6	12.3
< BBB, NR	406.3	20.6

The volume of assets subject to collateral arrangements is well below 60% of Hannover Re’s total assets. This statement is relevant for the calculation of the counterparty default risk with respect to Hannover Re.

Counterparty default risks, among other risks, are also relevant to our investments and in life and health reinsurance because we prefinance acquisition costs for our ceding companies. Our cedants, retrocessionaires and broker relationships as well as our investments are therefore carefully evaluated and limited in light of credit considerations and are constantly monitored and controlled within the scope of our system of limits and thresholds.

Lastly, short-term deposits at banks are also at risk of counterparty default.

Operational risks

Operational risk means the risk related to business operations and due to inadequate processes, human errors, system failures or external events. Within the overall framework of operational risks, we pay particularly close attention to business continuity risks, business process and data quality risks, compliance risks, fraud risks, human resources risks, information security risks and outsourcing risks.

Management of operational risks

In contrast to underwriting risks (e.g. the reserving risk), which we enter into in a deliberate and controlled manner in the context of our business activities, operational risks are an indivisible part of our business activities. The focus is therefore on risk minimisation. With the aid of half-yearly Group-wide self-assessments, in which all relevant corporate operations are actively involved, we determine the maturity level of our risk management system for operational risks and define action fields for improvements. The assessment is carried out by evaluating the maturity level of the corporate governance, the risk management function and the respective risk identification, analysis, evaluation, steering, monitoring and reporting. The assessment of the maturity level enables us, among other things, to prioritise operational risks. In order to calculate the capital commitment in our internal capital model we perform extensive scenario analyses and take the findings as a basis for specifying the parameters for the stochastic model. In this context, experts across all disciplines establish assumptions for the loss frequency and losses in joint workshops. In addition, internal loss events and near-losses are systematically recorded and examined with an eye to possible measures for improving the control system. The internal data are enhanced with insights gained from external events, which either become known through public channels or were reported through a loss data consortium of which we are a member.

Regular quarterly risk reporting to the Risk Committee and the Executive Board takes place with regard to all operational risks. In the context of the reporting, risks are also evaluated on the basis of risk indicators.

Required risk capital[1] for operational risks

in EUR million	31.12.2023	31.12.2022
Operational risk	653.6	620.8

[1] Required risk capital with a confidence level of 99.5 %; information not audited by the independent auditor

Unlike market, counterparty default and underwriting risks, operational risks are categorised as non-financial risks. We discuss below the subcategories of operational risks

Business continuity risks

Business continuity risks arise from natural or man-made hazards that threaten or disrupt business operations. The risk also includes the continuity of IT infrastructure and services. Our Business Continuity Management (BCM) system reduces the risk through preventive measures that are regularly tested. A special organisational and operational structure has been set up to deal reactively with a crisis event.

Overall, our focus in BCM is on the following five scenarios:

- Unavailability/loss of staff, e.g. as a consequence of a pandemic
- Outage of the local workplace environment
- Outage of local/central Information Technology, e.g. as a result of a cyber attack
- Outage of external infrastructure/external service companies
- Critical events without direct impact on our business operation

Business process and data quality risks

Business process risks are associated with the risk of inadequate or failed internal processes, which can arise inter alia as a consequence of an inadequate process organisation. We have defined criteria for managing the risk that result in a high process quality. Data quality is similarly a very critical success factor, especially in risk management, because for example the validity of the internal model is largely based on the data provided. As part of our data quality management, we have defined extensive automatic routines that continuously determine data quality in central systems.

Compliance risks

Compliance risks related to the risk of breaches of standards and requirements, non-compliance with which may entail lawsuits or official proceedings with not inconsiderable detrimental implications for the business activities of the Hannover Re Group. Compliance with regulatory standards, the company's Code of Conduct, tax regulations, data privacy requirements as well as the stipulations of anti-trust and competition law have a high relevance.

In conformity with a risk-based approach, sanctions screening software is used on the relevant parts of the Hannover Re Group's portfolio as well as on loss advices to filter out individuals who are subject to sanctions. Suitable steps are taken if such individuals are identified. Business partners are also screened in this way. Responsibilities within the compliance organisation are regulated and documented Group-wide and interfaces with risk management have been put in place. The set of tools is rounded off with regular compliance training programmes and awareness measures. Russia is categorised as "severe risk" due to the current situation. According to the Sanctions Guideline, for every transaction relating to "severe risk" countries a submission requirement and an in-depth review are mandatory in order to take into account the increased scope of sanctions. New business with Russian cedants is currently excluded.

We report on our compliance management system as part of our combined non-financial statement. For further information on compliance-related topics, including for example lawsuits, contingent liabilities and commitments, please see subsection "Lawsuits" and subsection "Contingent liabilities and commitments" in the notes to the consolidated financial statements.

Fraud risks

Fraud risks refer to the risk that results from intentional violations of laws or rules from own employees and/or from third parties in order to gain an advantage. This risk is reduced by the internal control system as well as by the audits conducted by Group Auditing on a Group-wide and line-independent basis. Should an instance of fraud nevertheless occur, established escalation processes to involve all relevant functions are in place and a risk-specific analysis (e.g. forensic investigation) is conducted including determination of appropriate measures.

Human resources risks

The generally increasing shortage of qualified specialists also poses challenges for the Hannover Re Group. In order to reduce this risk, we pay particular attention to the qualifications, experience and motivation of our employees. We encourage them through personnel development programmes as well as management activities and conduct regular employee surveys. The regular collection of key figures on staff turnover rates enables us to take targeted control measures in a timely manner.

Information security risks

Information security risks arise, inter alia, out of an inadequate protection of confidentiality, integrity or availability of information, which is stored/processed in Information Technology or handled by human beings.

Cyber attacks and the loss of sensitive information can be associated with considerable financial losses and also reputational risks. In our highly networked world it is therefore important to protect information and defend against cyber attacks.

With a view to protecting against these risks, Hannover Re has implemented an Information Security Management System (ISMS) that is closely aligned with international standards and harmonised with other management systems such as data protection or outsourcing management. Specific guidelines and standards regulate all technical and organisational measures including those relating to the confidentiality, integrity and availability of information assets. Consideration is given to all types of digital and physical information assets.

The Executive Board bears overall responsibility for information security. It is supported by the Risk Committee. The Information Risk & Security Committee (IRSC) is a sub-committee of the Risk Committee and is comprised of the Head of Risk Management, the Chief Information Security Officer (CISO) and the Head of IT. The IRSC evaluates and monitors the corresponding risks and steers any conflicts of interest in relation to information and IT security on a quarterly basis. It acts – in common with the risk management function and the CRO – independently of any instructions. The full Executive Board is provided with information at least annually by way of an information security report and also within the year if necessary.

The CISO, as the main process owner, is responsible for the planning, implementation and ongoing development of the ISMS as well as for coordinating the corresponding tasks within the Hannover Re Group. He is supported by local contacts and additionally bears responsibility Group-wide for the definition and monitoring of controls. The CISO cooperates closely with Information Risk Management (IRM), the central Compliance function and the Data Protection Officer. Both the CISO and the other specified functions form part of the second line of defence. Furthermore, every single member of staff is responsible for adhering to the relevant security standards. To this end, all employees undergo regular training in information security topics as well as awareness-raising, e.g. through phishing simulations.

When it comes to a transfer of knowledge in connection with cyber risks (cyber resilience), we participate in various cooperative projects undertaken by our industry.

Outsourcing risks

Outsourcing risks can result from the outsourcing of functions, services and/or organisational units to third parties. They also include intra-group outsourcings. Mandatory rules have been put in place to limit this risk; among other things, they stipulate that a risk analysis and partner assessment are to be performed prior to outsourcing. In the context of these analyses a check is carried out to determine, inter alia, which specific risks are associated with the outsourcing and what risk management measures need to be taken. The results of the analyses are subject to regular review.

In selected market niches we transact primary insurance business that complements our reinsurance activities. In so doing, just as on the reinsurance side, we always work together with partners from the primary sector – such as insurance brokers and underwriting agencies. This gives rise to risks associated with distribution channels, although these are minimised through the careful selection of agencies, mandatory underwriting guidelines and regular checks. The distribution channel risk forms an integral part of management of the outsourcing risk and of business partners.

Other risks

Under other risks we include emerging risks, strategic risks, sustainability and reputational risks as well as liquidity risks.

Management of other risks

Other risks are managed primarily using qualitative methods and on the basis of risk indicators. Risk management monitors and reduces the other risks through mitigation measures such as company-wide working groups and guidelines. Regular quarterly risk reporting to the Risk Committee and the Executive Board takes place with regard to the other risks. Risks are also evaluated as part of the reporting.

Within the risk management processes we also take into account any impact on the operational risks and the other risks in relation to environmental management, employee matters, social concerns, respect for human rights and the combating of corruption and bribery, as required by the CSR Directive Implementation Act.

Emerging risks

Emerging risks are risks that are in the process of forming or may shortly become relevant due to current developments. Emerging risks evolve gradually from weak signals to unmistakable tendencies. They can directly impact our treaty portfolio in both property & casualty and life & health reinsurance and influence our investments. A further hallmark is that their risk content cannot be reliably assessed, especially with respect to our treaty portfolio.

Current developments from emerging risks

Certain risks are subject to particular dynamics or future claims from damages or costs in business operations are to be expected. We were particularly concerned with the following risk complexes in the reporting year:

Opioids are drugs that have an opium-like effect and are often prescribed after serious injuries and surgical procedures. They are also administered for severe chronic pain.
The outbreak of the "opioid crisis" in the USA can be traced back to the over-prescription of strong opioid painkillers. As a result, more than 2 million Americans have fallen victim to addiction, either to prescription opioids or to heroin.

The public debate centres on four substances that are closely linked to the current crisis: Hydrocodone, oxycodone, fentanyl and heroin. In recent years, numerous states, cities and counties in the US have filed lawsuits against manufacturers, wholesalers and retailers of opioids. Nearly every state in the U.S. is currently involved in these lawsuits.

The impact of the opioid epidemic on liability insurance remains uncertain. The extent to which liability insurance policies may be affected and, additionally, the reinsurance coverage offered by Hannover Re, if any, has not yet been finalised.

Per- and polyfluoroalkyl substances (PFAS) are a group of chemicals with water-, grease- and dirt-repellent properties. Some PFAS have been categorised as hazardous. Possible health effects include cancer, reduced fertility, a weakened immune system, increased cholesterol levels and/or the risk of obesity and developmental delays in children. To date, several lawsuits against companies that manufacture PFAS and those that use PFAS in their products, particularly in the U.S., have been settled and/or are still pending. Although potential lawsuits in Europe are still at an early stage compared to the U.S., litigation over alleged PFAS groundwater and drinking water contamination is on the rise. Currently, there is no standardised global regulation for the definition, handling and restriction of PFAS use, but there is increasing regulatory activity on PFAS worldwide. Hannover Re is therefore monitoring this risk complex closely as it may have a negative financial impact on various lines of business.

Artificial intelligence (AI) offers opportunities for the automation of data processing and decision-making processes, among other things. Risks exist, for example, in relation to incorrect or incomprehensible data and decisions. It is therefore important to establish and continuously adapt rules for the use of AI in the company.

In principle, we expect AI to fundamentally change many aspects of human life and production processes in the future. This will also influence insurance-specific aspects, such as the frequency of diagnoses for certain diseases. Furthermore, AI represents an additional tool for cybercrime, which companies and individuals must take into account when protecting themselves against attacks.

Please refer to the subsection "Major external factors influencing risk management" in the risk report for the current state of regulation with regard to artificial intelligence.

Early detection and subsequent evaluation of risks are crucially important when it comes to emerging risks. For this reason, we deploy Hannover Re's internal, interdepartmental and multi-line expert working group on "Emerging Risks & Scientific Affairs" and we ensure its linkage to risk management. The analyses performed by this working group are used Group-wide in order to initiate any necessary measures. The working group is currently exploring around 20 risk complexes, some of them megatrends, to facilitate the identification and adequate evaluation of not only existing but also emerging risks. Megatrends are defined as developments with a trend cycle of at least 30 years. They are not presently associated with direct impacts on operations, but may potentially evolve in this direction. Thus, for example, a decline in biodiversity can be viewed in conjunction with emerging risks associated with scarcity of resources, air pollution, genetically modified organisms or food security and availability – but also goes hand-in-hand with a need for innovative (insurance) solutions and services. Action on climate change means new or refined technologies, such as renewable energies or hydrogen concepts and their various possible applications, for which insurance coverages are needed.

Another observed trend is urbanisation. The steady increase in urbanisation means the growth and change of cities. Those leaving the countryside and moving to the city are mostly young, hence altering both rural and urban age distributions. Correlated trends such as the ageing society and new types of mobility, increasingly against a backdrop of sustainability, are throwing up major questions. The significance of these trends and the speed of change are compelling the insurance industry to plan which role it wants to play in helping to shape the future. In this context it is important to consider both business opportunities and risks. Given that all this is affected by climate change, people's property – especially when value concentrations form in future megacities – will have to be insured against natural perils. In a worst-case scenario, this could mean that certain regions and risks become uninsurable if adequate urban planning – taking account of natural hazards – is neglected in the spread of large cities around the world. Urbanisation not only means new buildings, technologies and lifestyles that have to be insured; rather, living close together also has implications for people's physical and mental well-being, which is relevant to our portfolio of life and health insurance.

Hannover Re publishes summary position papers on various emerging risks which can be accessed on our website. In the year under review the papers on resistance to antibiotics, disruption of critical infrastructure, asbestos, advances in medicine and the risk posed by megacities, among others, were updated.

Hannover Re, represented by members of staff from Risk Management and other units, is a member of the Chief Risk Officer (CRO) Forum and a constant participant in the CRO Forum’s Emerging Risk Initiative, which continuously tracks and analyses various emerging risks, publishes information on those risks considering possible trends thereof and conducts corresponding impact analyses. The trends considered include "Ageing and health", "Economic instability", "Environment and climate". "ESG issues", "Changes in the geopolitical landscape", "Technological developments and their influence on society" as well as "Demographic and social change". New topics added in the year under review were "Energy storage systems", “Data ethics” and "New insurance competition".

The publications are publicly accessible on the CRO Forum website. An exploration of the carbon intensity of insured portfolios ("Carbon footprinting methodology for underwriting portfolios") written in 2020 is also available there.

Strategic risks

Strategic risks derive from a possible imbalance between the corporate strategy of the Hannover Re Group and the constantly changing general business environment, for example with respect to evolving regulatory requirements. Such an imbalance might be caused, for example, by incorrect strategic policy decisions, a failure to consistently implement the defined strategies and business plans or an incorrect allocation of resources. We therefore regularly review our corporate strategy in a multi-step procedure and adjust our processes and the resulting guidelines as and when required. We have defined performance criteria and indicators for operational implementation of the strategic principles and objectives; these are authoritative when it comes to determining fulfilment of the various targets. The process for the management of strategic risks continues to be assessed annually as part of the monitoring of business process risks.

Sustainability and reputation risks

The handling of sustainability risks has come into increasing focus in recent years, above all against the backdrop of climate change. Instead of sustainability risks, reference is often made to risks associated with environmental, social and governance (ESG) issues.

We make a fundamental distinction here between risks and impacts to which a company is exposed (outside-in perspective) as well as risks and impacts that a company causes through its business operations (inside-out perspective).

Sustainability risks corresponding to the outside-in perspective are financial risks due to the potential financial repercussions of environmental, social and governance (ESG) issues on Hannover Re. These financial risks encompass market, underwriting, counterparty default and operational risks and are integrated into the risk management processes for such risks.

The inside-out perspective refers to situations in which the activities of Hannover Re would be harmful to the environment or social norms or would reflect a failure of governance.

Reputation risks refer to the risk that the trust put in our company by clients, shareholders, employees or the public at large may be damaged. This risk has the potential to significantly jeopardise the business foundation of the Hannover Re Group. A good corporate reputation is therefore an indispensable prerequisite for our core business as a reinsurer. Reputation risks may arise out of all business activities conducted by the Hannover Re Group. Reputational damage may be caused, inter alia, by a data mishap that becomes public knowledge or financial difficulties on account of an underwriting risk. In addition to the risk identification methods already described, we use a number of different techniques for risk mitigation, such as our defined communication channels (e. g. Crisis Communication Guideline), a professional approach to corporate communications, tried and tested processes for specific crisis scenarios as well as our established Code of Conduct.

Above and beyond the general influence that sustainability risks have on a number of other risk categories (outside-in perspective), reputation risks form the bridge between the outside-in and inside-out perspective. We see a correlation between reputational and ESG risks (inside-out perspective). Reputation and sustainability risks are closely linked, as failure to fulfil societal expectations of sustainability can result in a reputation risk. Risk Management and the departments Group Sustainability & Strategy and Corporate Communications work together closely to identify ESG and reputation risks. This applies both to the assessment of ESG risks and to the monitoring of media reports, the analysis of NGO activities and the dialogue cultivated with relevant stakeholder groups.

Liquidity risks

The liquidity risk refers to the risk of being unable to meet our financial obligations when they become due. The liquidity risk consists of the refinancing risk (necessary cash could not be obtained or could only be obtained at increased costs) and the market liquidity risk (financial market transactions could only be completed at a lower price than expected due to a lack of market liquidity). Core elements of the liquidity management of our investments are, in the first place, management of the maturity structure of our investments on the basis of the planned payment profiles arising out of our technical liabilities and, secondly, regular liquidity planning as well as the asset structure of the investments. Above and beyond the foreseeable payments, unexpected and exceptionally large payments may pose a threat to liquidity. In reinsurance business, however, significant events (major losses) are normally paid out after a lead time that can be reliably planned. As part of our liquidity management we have nevertheless defined asset holdings that have proven to be highly liquid – even in times of financial stress such as the 2008 financial crisis. Our holdings of unrestricted German, UK and US government bonds as well as financial resources during the year under review were larger than possible disbursements for assumed extreme events, which means that our liquidity is assured even in the unlikely case of financial crises coinciding with an extreme event that needs to be paid out quickly. The liquid asset reserve stood at EUR 8.6 billion (EUR 9.1 billion) as at the balance sheet date. In addition, we manage the liquidity of the portfolio by checking on each trading day the liquidity of the instruments contained therein. When reinvesting in fixed-income securities during the reporting period, we increasingly invested in instruments with short-term maturities while only slightly reducing the average remaining maturity. By expanding the holding of short-term securities we further strengthened our liquidity base. As an additional liquidity management tool, we have been entering into temporary repurchase agreements (repo agreements) since 2019. These measures enable us to reduce our liquidity risk.

Opportunity report

Speed is one of the qualities used to measure successful adaptability. Hannover Re's ambition is to offer quick and effective solutions that keep us one step ahead of the competition. Hannover Re searches systematically for new business opportunities in order to generate sustainable growth and strengthen the company's profitable development. With a view to identifying opportunities and successfully translating ideas into business, Hannover Re adopts a number of closely related approaches in order to achieve holistic opportunity and risk management. Of significance here is the interplay without overlaps of the various functions within opportunity and risk management, which is ensured by defined interfaces.

The focus of Hannover Re's business opportunity management is on various market-specific innovations in the Life & Health and Property & Casualty reinsurance business groups (see "Forecast report" in the outlook).

Trends affecting these business groups are systematically identified and analysed with the support of external sources and partners and the needs of our clients are anticipated along the entire insurance-related value-added chain. Business opportunities that promise access to innovative technologies and enhance our appeal in the eyes of customers are specifically pinpointed. With this in mind, Hannover Re cultivates business-related partnerships with outside accelerators, incubators, company builders, start-ups and research institutes in order to boost our competitiveness in the insurtech sector and the field of digital solutions. Various competence centres have been set up in the Hannover Re Group to evaluate the strategic and technical significance of innovative new digital technologies and the goals pursued by these innovation units have been put on a strategic footing. The interplay between these units is based on a dedicated approach that enhances the activities with specific expertise and efficiency.

In-house accelerator units covering the areas of business (in each of the P&C and L&H business groups), technology and parametrics explore the specifics of their respective fields and maintain a close dialogue with one another. The tasks performed by these organisational units include, among others, global scaling of existing regional products and solutions, developing new sector- and customer-specific digital assets as well as providing systematic support for insurtechs as they build their digital business models. An intensive exchange and targeted collaboration with the market departments are crucially important here in order to build on existing networks and expertise. In this way, we strive to identify business opportunities at an early stage and provide the appropriate customers with innovative solutions.

This broad spectrum of tasks is geared to the clearly defined goals of generating new profitable premium potential for the Group, optimising risk assessment through the use of innovative tools, cultivating new strategic partnerships and acquiring new capabilities in the fields of digitalisation and data analytics.

Strengthening resilience in the face of natural perils

Insurance is increasingly used as a tool in development cooperation to strengthen the resilience of vulnerable population groups in the face of extreme weather events and other natural catastrophes. The growing frequency and severity of natural disasters are causing considerable social and economic costs. The gap between insured and economic losses is particularly large in emerging and developing countries. Against this backdrop, Hannover Re is continuously stepping up its involvement – particularly when it comes to protecting against climate-related natural disasters – through cooperation with both the public and private sector so as to further reduce the associated protection gap in affected countries. The goal is to effectively reach as many people as possible within vulnerable population groups.

By way of example, Hannover Re makes substantial capacity available to the Natural Disaster Fund (NDF). Through the NDF, as of year-end 2023, more than 40 million poor and vulnerable people have cumulatively already been provided with direct or indirect protection. In addition, Hannover Re is involved in developing insurance protection in selected exposed countries in the context of the trilateral agreement between the Insurance Development Forum, the Federal Ministry for Economic Cooperation and Development and the United Nations Development Programme. In the course of 2023, Hannover Re was particularly engaged in the related project in Colombia, which concluded with the design of a cover against natural catastrophe risks, and in the co-lead for the project in Argentina which took significant steps forward with the granted funding and the first workshops with the target cities. We further participate in regional risk pools against natural perils – such as in Morocco where a significant payout to the government occurred in 2023 for the rural uninsured population following a severe earthquake. Several other programmes with a bearing on reinsurance complement our respective portfolio.

The dynamic networking of the members of staff active in the field of innovation at Hannover Re gives rise to close links with other projects, working groups and bodies, such as with the working group on "Emerging Risks und Scientific Affairs" in regard to emerging risks and opportunities (see subsection "Other risks" in the risk report). This working group carries out qualitative assessments of emerging risks. As a result, however, not only are the potential risks explored but also any available business opportunities. Analyses are compiled here exploring how Hannover Re can counter megatrends such as climate change, digitalisation or shifting demographics with novel (re)insurance products or capital investments. In the year under review, for example, issues such as "Shifting political landscape", "Shifting range of pathogens" and "Microplastics" were analysed by the working group.

Cyber insurance

Cyber attacks on critical systems are becoming increasingly common. They can cause considerable financial losses and also damage corporate reputations. Not only that, they can severely hamper private and public life, especially if critical infrastructures are impacted – such as the health, transportation / traffic and energy sectors. In such instances supply bottlenecks with lasting effects as well as major disruptions to public safety may ensue. In a networked world the repercussions of cyber attacks are intensifying because the volume of globally stored data and the extent of system dependencies are constantly growing – and in this context it is not only one's own technical infrastructure that needs to be secured. On the contrary, the trend towards cloud computing is increasingly shifting the focus to third-party infrastructures and the associated network connection. As part of our holistic approach to risk and business opportunity management, we are also tackling the question of what new insurance products can be developed in order to protect against the relevant risks. The constant refinement of our systemic analyses for the assessment of cyber risks forms the basis for developing new (re)insurance solutions. We aim to bring transparency to the customer's cyber risks and we seek to cover the need for risk-mitigating measures by offering suitable solutions. To this extent, we also see an opportunity to generate additional reinsurance premium in this line of business

If a business idea is translated into reality and a new reinsurance product results, the normal procedure – provided the criteria defined for this purpose by Risk Management are applicable – is to work through the so-called new product process. This process is supported by Risk Management at Hannover Re. The process is always worked through if a contractual commitment is to be entered into in a form not previously used by Hannover Re or if a new type of risk is to be insured. If this is the case, all material internal and external influencing factors are examined beforehand by Risk Management (e. g. implications for the overall risk profile or the risk strategy) and evaluated. Risk Management ensures that before it can be used or sold a new reinsurance product must be approved by the Executive Board.

Enterprise management

Declaration on Corporate Governance pursuant to §§ 289f, 315d German Commercial Code (HGB)

This subsection is a part of the report that the legislator has expressly exempted from the audit of the financial statement / audit of the management report (§ 317 Para. 2 Sentence 6 and Sentence 4 German Commercial Code (HGB); unaudited information).

Hannover Re’s objective continues to be to consolidate its position as one of the leading, most profitable reinsurance groups operating worldwide. In aspiring towards this goal, it is particularly important to observe and fulfil the principles of good and sustainable corporate governance.

The Executive Board and Supervisory Board of Hannover Rück SE expressly support the suggestions and recommendations of the German Corporate Governance Code (DCGK) and are guided by them in their activities. Integrity in dealings with business partners, staff, shareholders and other stakeholder groups as well as value-based and transparent enterprise management are key pillars of corporate governance. The Supervisory Board, Executive Board and employees of Hannover Re identify with these principles, which thus form part of our corporate self-image.

Hannover Rück SE hereby provides insight into its enterprise management practices as part of the Declaration on Corporate Governance pursuant to § 289f German Commercial Code (HGB) and pursuant to § 315d German Commercial Code (HGB) in conjunction with § 289f German Commercial Code (HGB) for the Hannover Re Group:

Corporate Governance

As an instrument of self-regulation for the business world, the German Corporate Governance Code defines current best practices for corporate governance and is intended to make the German system of corporate governance transparent and comprehensible. It seeks to foster the trust of international and national investors, customers, employees and the general public in the management and supervision of German listed companies. Although the Code does not have binding legal force, the enterprises addressed by the Code are nevertheless required by § 161 Stock Corporation Act (AktG) to provide an annual declaration as to whether or not the recommendations of the Code were and are complied with in the reality of the company’s business activities. If recommendations were not acted upon, this is to be explained and disclosed as part of the Declaration of Conformity. Supplementary to the present declaration, the Declarations of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code for recent years are published on our website (https://www.hannover-re.com/200801/declaration-of-conformity).

Declaration of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code at Hannover Rück SE

Under § 161 Stock Corporation Act (AktG) it is incumbent on the Management Board and Supervisory Board of German listed companies to provide an annual declaration of conformity with the recommendations of the “German Corporate Governance Code Government Commission” published by the Federal Ministry of Justice and Consumer Protection or to explain which recommendations of the Code were/are not applied and why this is the case.

According to recommendation C.7 of the German Corporate Governance Code, more than half of the shareholder representatives on the Supervisory Board should be independent of the company and its Executive Board. A member of the Supervisory Board is independent of the company and its Executive Board if he or she has no personal or business relationship with the company or its Executive Board that could give rise to a material conflict of interest that is not merely of a temporary nature. When assessing the independence of its members from the company and the Executive Board, the shareholder side of the Supervisory Board should also consider whether a member has belonged to the Supervisory Board for more than twelve years. Dr. Pollak has been a member of the Supervisory Board since 3 May 2011, which is now twelve years. The Supervisory Board does not see any material conflicts of interest arising from Ms. Pollak's twelve years of Supervisory Board membership that directly influence her work on the Supervisory Board. However, the Supervisory Board comes to the conclusion that being a member of the Supervisory Board for many years could in principle give rise to conflicts of interest and will regularly review its assessment of Dr. Pollak's independence.

The Executive Board and Supervisory Board declare pursuant to § 161 Stock Corporation Act (AktG) that Hannover Rück SE is in conformity with all other recommendations of the German Corporate Governance Code contained in the version of the Code adopted on 28 April 2022 (announced on 27 June 2022) and also intends to remain in conformity with these recommendations in the future.

Hannover, 8 November 2023

Executive Board, Supervisory Board

Remuneration

Remuneration of the Executive Board

The applicable system of remuneration for the members of the Executive Board of Hannover Rück SE was adopted by the Supervisory Board at its meeting on 4 August 2020. It was presented to the Annual General Meeting for approval on 5 May 2021. The remuneration system was developed by the Supervisory Board with the support of an independent consultant and is in conformity with the requirements of the Stock Corporation Act (AktG) as well as the recommendations of the German Corporate Governance Code as amended on 28 April 2022 (announced on 27 June 2022). The remuneration system is submitted to the Annual General Meeting for approval if any material changes are made to the remuneration system, and at least every four years.

The remuneration report contains detailed information about the amount of remuneration received by the members of the Executive Board. The applicable remuneration system for the members of the Executive Board as well as the remuneration report submitted annually to the Annual General Meeting for approval (including the report of the independent auditor) can be accessed on the website of Hannover Rück SE: https://www.hannover-re.com/1849339/remuneration-report-and-system

Remuneration of the Supervisory Board

The system of remuneration for the members of the Supervisory Board is geared to the legal requirements and reflects the recommendations and suggestions of the German Corporate Governance Code. It is governed by § 14 of the company's Articles of Association, https://www.hannover-re.com/34118/statute-hannover-ruck-se.pdf.

The remuneration of the members of the Supervisory Board is balanced overall and commensurate with the responsibility and tasks of the Supervisory Board members and the position of the company, with consideration also given to the remuneration arrangements of comparable listed companies. The remuneration arrangements as well as the remuneration system are regularly reviewed by the Supervisory Board with an eye to their adequacy, in which regard the advice of external consultants may also be sought. The Annual General Meeting considers the remuneration of the Supervisory Board members at least every four years and if changes to the remuneration arrangements are proposed. The Annual General Meeting can confirm the existing system of remuneration for the Supervisory Board or adopt a resolution to amend it.

A breakdown of the individual remuneration received by the members of the Supervisory Board for the 2023 financial year is provided in the remuneration report, which can be accessed on Hannover Re's website: https://www.hannover-re.com/1849339/remuneration-report-and-system

Further enterprise management principles of Hannover Re

The Code of Conduct of Hannover Rück SE applies Group-wide and can be accessed online (https://www.hannover-re.com/200775/corporate-governance). Complementing our corporate strategy, it sets out the rules governing integrity in the behaviour of all employees of Hannover Re and is intended to help members of staff cope with the ethical and legal challenges that they face as part of day-to-day work. The rules defined therein reflect the high standards that guide our actions worldwide. It is our belief that integrity in dealings with our stakeholders constitutes the foundation of a successful enterprise. In both our strategic planning and our day-to-day business activities, we therefore aspire to consistently apply the highest ethical and legal standards; for our actions and the way in which every single one of us presents and conducts himself or herself are crucial in shaping the image of Hannover Re.

Risk monitoring and steering

The risk management system applicable throughout the entire Hannover Re Group is based on the risk strategy, which in turn is derived from the corporate strategy. A core component is the systematic and comprehensive recording of all conceivable risks that from the current standpoint could potentially jeopardise the company’s profitability and continued existence. Further details in this regard may be obtained from the risk report contained in the present Annual Report.

Adequacy and effectiveness of the internal control system and risk management system

A detailed description of the main elements of the internal control system (ICS) and risk management system (RMS) is included in the opportunity and risk report. The adequacy and effectiveness of the ICS and RMS are reviewed and evaluated at Hannover Re primarily through:

- a regular review of the controls established in the processes by the process owners in the context of an annual Control Self-Assessment,
- more in-depth scrutiny of the controls relating to information security by the CISO,
- an evaluation of controls relating to operational risks conducted annually in the so-called SAOR (Self-Assessment Operational Risks),
- systematic risk identification, analysis, assessment, steering and monitoring, including risk reporting,
- a continuous improvement cycle of Plan-Do-Check-Act in relation to risk management and the ICS, also including continuous monitoring and the rectification of deficiencies identified in the RMS/ICS,

- the annual assessment of the ICS and the RMS as part of the system of governance by the so-called SoGAC (System of Governance Assessment Committee),
- independent evaluation of the adequacy and effectiveness of implemented measures incl. compliance-related controls as part of continuously conducted compliance monitoring procedures, and
- regular audits conducted by the internal audit unit in relation to the ICS and RMS.

In connection with the aforementioned extensive measures, no facts or circumstances became known to the Executive Board in the reporting period that overall would argue against the adequacy and effectiveness of the ICS and RMS.

Sustainability of enterprise management

The considerable strategic and regulatory significance attached to ESG issues was again evident in the year under review. The associated risks and opportunities go hand-in-hand with increasing expectations placed on the role of corporate governance and on the management of sustainability risks. Requirements derive from, among other things, the G20/OECD Principles of Corporate Governance, Solvency II, the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ERS), the BaFin Guidance Notice on Dealing with Sustainability Risks, the German Corporate Governance Code (DCGK), the Supply Chain Due Diligence Act (LkSG), prospectively the Corporate Sustainability Due Diligence Directive (CSDDD) as well as the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD). In this respect, it is envisaged that corporate governance will assume a prominent role in shaping ESG topics and integrate them into enterprise management.

The Executive Board is responsible for the underlying strategies, the implementation of corresponding structures and provision of appropriate resources as well as the definition of responsibilities in the organisational guidelines. The Supervisory Board is tasked with providing advice and oversight for the Executive Board in its leadership of the company, inter alia with an eye to the handling of sustainability risks. The wide-ranging qualifications, skills and relevant experience of the members of both bodies facilitate a nuanced evaluation of the opportunities and risks in business operations and enable balanced actions and decisions to be taken on this basis.

The Executive Board is advised by the ESG Management Team, which plays a central role in ESG governance. This seasoned team is comprised of participants from various areas. The ESG Management Team ensures coordinated dovetailing with the Group strategy and serves as the interface to local units as well as the central point of contact for fulfilment of ESG-related regulatory requirements. It reports half-yearly to the Executive Board. More extensive submissions on sustainability issues are presented as necessary during the year.

The competency profile of the Supervisory Board recognises "ESG" as an important topic, with one of its members already designated as an ESG expert back in 2022. Furthermore, sustainability-related issues were again addressed at the meetings of the Finance and Audit Committee and the full Supervisory Board in the year under review.

Compliance

Hannover Re considers a properly functioning compliance structure to be an essential tool for ensuring compliance with external rules and regulations as well as requirements imposed internally by the company. Further details of the compliance management system are provided in the combined non-financial information statement. The results of our compliance activities are documented annually in the compliance report, which is submitted to the Finance and Audit Committee of the Supervisory Board and the full Supervisory Board; in this regard please see the report by the Supervisory Board included in this report.

Working practice of the Executive Board and Supervisory Board

The Executive Board and Supervisory Board of Hannover Rück SE work together on a trusting basis to manage and supervise the company and the Group as a whole. In accordance with § 13 of the Articles of Association and the Rules of Procedure of the Executive Board, matters of fundamental importance require the consent of the Supervisory Board. The Supervisory Board is comprised of nine members. Six members are elected as shareholder representatives by the shareholders at the Annual General Meeting. The three seats held by employee representatives, which are currently allocated to Germany pursuant to Part III. § 13 (3) of the Agreement regarding the Participation of Employees in Hannover Rück SE of 23 January 2013, are elected in accordance with the provisions of the SE Participation Act (SEBG) by the responsible representative body (currently the joint Employee Council of Hannover Rück SE and E+S Rückversicherung AG). The Supervisory Board appoints the members of the Executive Board. Since members of the Supervisory Board cannot at the same time belong to the Executive Board, a high degree of independence in the oversight of the Executive Board is thus already ensured by structural means. In addition, the Supervisory Board is kept informed on a regular and timely basis of the business development, the execution of strategic decisions, material risks and planning as well as relevant compliance issues.

The Chairman of the Supervisory Board stays in regular contact with the Chairman of the Executive Board in order to discuss with him significant business occurrences. The composition of

the Executive Board (including areas of responsibility) as well as of the Supervisory Board and its committees (including period of membership) is provided within this report.
The Rules of Procedure of the Executive Board are intended to ensure that a consistent business policy is elaborated and implemented for the company in accordance with its strategic objectives. Within the framework of a consistent business policy, the principle of "delegation of responsibility" enjoys special status. In the interests of shareholders, importance is expressly attached to an organisation that facilitates cost-effective, quick and unbureaucratic decision processes. Open and trusting co-operation geared to the interest of the whole is the foundation of success. In this context, the members of the Executive Board bear joint responsibility for the overall management of business. Irrespective of their overall responsibility, each member of the Executive Board leads their own area of competence at their individual responsibility within the bounds of the resolutions adopted by the Executive Board.

The Rules of Procedure of the Supervisory Board can be accessed on the company's website and provide inter alia that each member of the Supervisory Board must have the knowledge, skills and professional experience required for orderly performance of their tasks and that a sufficient number of independent members on the shareholder side shall belong to the Supervisory Board. Currently, at least three of the six shareholder representatives are independent as defined by the German Corporate Governance Code. Persons suggested to the Annual General Meeting as candidates for election to the Supervisory Board may not be older than 72 at the time of their election and shall normally not belong to the Supervisory Board as a member for longer than three full consecutive terms of office; the term of office commencing from the end of the 2014 Annual General Meeting is the first term of office to be counted for this purpose. Nominations shall take account of the company's international activities as well as diversity. Furthermore, it shall be ensured that the proposed person can allocate the expected amount of time. For their part, each sitting member of the Supervisory Board shall also ensure that they have sufficient time to discharge their mandate. The Supervisory Board meets at least twice each calendar half-year. The Supervisory Board's report provides information about the attendance of individual Supervisory Board members at the meetings. No more than two former members of the company's Executive Board may belong to the Supervisory Board.

The Supervisory Board decides in individual cases whether external advice should also be sought as a decision-making aid. A regular self-assessment is intended to survey the general efficiency of its working approach and assure it on a lasting basis.

Working practice of the committees of the Supervisory Board

In order to efficiently perform its tasks the Supervisory Board has formed a number of committees: the Finance and Audit Committee, the Standing Committee and the Nomination Committee. The Supervisory Board committees are each comprised of three members (further details of the names of the members and background information on the individual committee members can be found in this report). They prepare matters within their scope of competence for discussion and adoption of a resolution by the full Supervisory Board. Moreover, the committees are also assigned their own authority to adopt resolutions. The number of meetings of the committees in the period under review as well as the attendance of the committee members are discussed in greater detail in the report by the Supervisory Board.

The Finance and Audit Committee was made up of Dr. Ursula Lipowsky (Chairwoman), Mr. Torsten Leue and Mr. Herbert Haas in the year under review; Dr. Lipowsky can certainly be considered independent within the meaning of the German Corporate Governance Code. Dr. Lipowsky and Mr. Haas are financial experts pursuant to §100 Para. 5 Stock Corporation Act (AktG), with Dr. Lipowsky having the necessary expertise particularly in accounting matters and Mr. Haas in particular when it comes to the auditing of financial statements. The committee monitors the accounting process and the effectiveness of the internal control system, the risk management system and the internal auditing system. It also handles issues relating to compliance and the information system for the Supervisory Board and discusses the Quarterly Statements as well as the Half-yearly Financial Report prior to their publication. It prepares the Supervisory Board's examination of the annual financial statement, management report and proposal for the appropriation of profit as well as of the consolidated financial statement and Group management report. In this context, the Finance and Audit Committee receives detailed information on the auditor's view of the net assets, financial position and results of operations as well as explanations of the effects of any modified recognition and measurement principles on the net assets, financial position and results of operations together with available alternatives. In addition, the committee prepares the Supervisory Board's decision on the commissioning of the independent auditor for the financial statements. It considers matters associated with the necessary independence of the auditor, the awarding of the audit mandate to the independent auditor, the determination of the audit concentrations, the fee agreement and the quality of auditing. The agendas and minutes of the meetings of the Finance and Audit Committee are also made available to the members of the Supervisory Board who do not sit on the committee.

Mr. Torsten Leue (Chairman), Mr. Herbert Haas and Dr. Erhard Schipporeit came together in the period under review as the Standing Committee. The body prepares personnel decisions for the Supervisory Board. It bears responsibility for granting loans to the group of persons specified in §§ 89 Para. 1, 115 Stock Corporation Act (AktG) and those considered equivalent pursuant to § 89 Para. 3 Stock Corporation Act (AktG) as well as for approving contracts with Supervisory Board members in accordance with § 114 Stock Corporation Act (AktG). It exercises the powers arising out of § 112 Stock Corporation Act (AktG) in lieu of the Supervisory Board and – in cooperation with the Executive Board – ensures that long-term succession planning is in place. A systematic approach is taken in this regard and a list of potential candidates with their associated development periods is maintained, regularly updated and discussed by the committee in light of the diversity targets. This routinely constitutes an item for reporting and deliberation in the committee meetings and it is explored in detail – also in connection with the Executive Board's strategic objectives in the area of talent management.

The Nomination Committee – Mr. Torsten Leue (Chairman), Mr. Herbert Haas and Dr. Andrea Pollak – is tasked with proposing to the Supervisory Board appropriate candidates for the nominations that it puts forward to the Annual General Meeting for election to the Supervisory Board. The committee met twice in the year under review.

For further details of the activities of the Supervisory Board committees in the year under review, please see the explanatory remarks provided in the report by the Supervisory Board.

Targets pursuant to § 289f Para. 4 Sentence 1 in conjunction with Para. 2 No. 4 German Commercial Code (HGB)

Five members of the Supervisory Board of Hannover Rück SE were women in the year under review. A woman chairs the Finance and Audit Committee and one continues to serve as a member of its Nomination Committee. The proportion of women serving on the Supervisory Board was therefore 56% in 2023. This figure is thus above the target of 44% or four women set for the proportion of women serving on the Supervisory Board of Hannover Rück SE in the period from 1 July 2022 to 30 June 2027.

On the level of the Executive Board, the goal has hitherto been to appoint another woman as a member of the company's Executive Board by the year 2024. In the year under review the target for the proportion of women on the Executive Board of Hannover Rück SE was set at 29% or two women by 30 June 2027. In 2023 two women served on the body, which has altogether eight members.

A target of 25% (corresponding to 26 women) has been set for the two levels of senior management below the Executive Board in the period from 1 July 2022 to 30 June 2027.

Diversity concept – Goals for the composition of the Executive Board and Supervisory Board as well as status of implementation (§ 289f Para. 2 Number 6 German Commercial Code (HGB)

Description of the diversity concept for the composition of the Executive Board and Supervisory Board and goals

When appointments are made to the Executive Board and Supervisory Board, Hannover Rück SE is guided by a number of considerations including the principle of diversity. Wide-ranging qualifications, expertise and experience on the part of the members of the Executive Board and Supervisory Board facilitate a nuanced evaluation of the opportunities and risks associated with business operations and enable balanced and professional actions and decisions to be taken on this basis. Due consideration is given to the aspect of diversity when members of the Executive Board and Supervisory Board are appointed. In addition to specialist and personal qualifications (competencies), this aspect encompasses in particular age, gender, internationality, education and professional career. With a view to ensuring that the concept of diversity is applied on an ongoing basis, an assessment is made in the context of every new appointment to the Executive Board or Supervisory Board as to whether the envisaged appointment is also in keeping with the diversity concept.

In selecting members of the Executive Board the goal is to ensure that the members have the skills and experience needed to properly perform their tasks. The Supervisory Board considers diversity in the composition of the Executive Board. The age limit for the Executive Board is set at 65. The members of the Executive Board are appointed by the Supervisory Board for a term of at most five years. Members of the Executive Board are initially appointed for no more than three years.

The composition of the Supervisory Board shall be such that overall its members are equipped with the knowledge, abilities and specialist experience necessary for proper performance of the tasks. The make-up of the Supervisory Board shall ensure that the Executive Board in an internationally operating, broadly positioned reinsurance group receives qualified supervision and advice from the Supervisory Board. Above and beyond the legally required specialist expertise in investing, insurance practice and accounting, the topics of internationality, taxation, M & A, human resources, risk management, IT/digitalisation, compliance and ESG have been taken into account on a voluntary basis. The competency profile of the Supervisory Board is now published in a skills matrix. Moreover, special attention is to be paid to the integrity, character, commitment, professionalism and independence of individuals put forward for election. In accordance with the Rules of Procedure for the Supervisory Board, for example, members of the Supervisory Board shall ensure that they have sufficient time at their disposal for their activities and that potential conflicts of interest are avoided. Furthermore, candidates shall be put forward to the Annual General Meeting for election to the Supervisory Board only if they will not have passed the age of 72 by the time of their election and – with effect from the election of the new Supervisory Board in 2014 – provided they have not sat on the Supervisory Board for more than three full consecutive terms of office.

With an eye to Hannover Re's international orientation, it is to be ensured that a sufficient number of members with long-standing international experience belong to the Supervisory Board. The goal is to at least maintain the currently existing international profile.

On the shareholder side, the Supervisory Board shall include an adequate number of members considered to be independent. At least one independent member must have expertise in accounting and in the auditing of financial statements.

In addition, the Supervisory Board bears responsibility for developing and implementing the diversity concept for the composition of the Executive Board and Supervisory Board and the associated reporting, or for providing an explanation if no such diversity concept is to be pursued.

Implementation approach and results achieved in the financial year

Diversity on the Supervisory Board and Executive Board continued to be a major focus in the 2023 financial year. Since the end of the Annual General Meeting on 8 May 2019 altogether five women have belonged to the Supervisory Board. It remains the case that female members of the Supervisory Board sit on two of the three Supervisory Board committees. One woman serves on the Finance and Audit Committee, and one is a member of the Nomination Committee.

Furthermore, the Supervisory Board considers it important that an adequate number of Supervisory Board members are independent as defined by the German Corporate Governance Code (DCGK). In its own assessment, the Supervisory Board currently meets the target set by the Code because, after weighing up all the criteria, at least three members are independent within the meaning of Code Recommendation C.6. Dr. Schipporeit similarly largely fulfils the independence criteria according to the Code, but in view of the fact that he was first appointed on 3 May 2007 he has already belonged to the body for longer than twelve years. As indicated in the declaration pursuant to § 161 Stock Corporation Act (AktG), Dr. Pollak continues to be regarded as independent despite having been a member for twelve years.

The age diversity on the Executive Board ranged from 53 to 66 in the 2023 financial year. On the Supervisory Board the age range was from 50 to 74. There were two female members of the Executive Board in 2023. With the appointment of Ms. Sharon Ooi, the diversity concept for the Executive Board was satisfied and the Executive Board was strengthened in multiple ways, most notably in terms of its international experience.

Overview of qualifications of the members of the Supervisory Board of Hannover Rück SE in 2023

		Members of the Supervisory Board								
		Leue	**Haas[1]**	**Ardalan**	**Heitmüller**	**Hundes-hagen**	**Dr. Lipowsky[2]**	**Dr. Ollmann**	**Dr. Pollak[3]**	**Dr. Schippo-reit**
Length of service	**Member since**	2018	2002	2019	2012	2019	2018	2019	2011	2007
Personal fitness		√	√	√	√	√	√	√	√	√
Diversity	**Gender**	Male	Male	Female	Female	Female	Female	Male	Female	Male
Diversity	**Year of birth**	1966	1954	1972	1968	1973	1958	1958	1959	1949
Diversity	**Citizenship**	German	German	German/ British	German	German	German	German	Austrian	German
Diversity	**Qualification**	Trained banker; business admini-stration graduate	Business admini-stration graduate	Marketing and com-muni-cations spe-cialist	Financial accountant	Graduate in law	Fully quali-fied in law	Business admini-stration graduate	Business admini-stration and commerce graduate	Business admini-stration graduate
Expertise / professional competence[4]										
Investing		√	√				√	√	√	√
Underwriting		√	√	√	√	√	√	√		
Accounting / annual auditing		√	√	√	√	√	√	√	√	√
Internationality		√	√	√	√	√	√	√	√	√
M&A		√	√				√	√	√	√
Risk management		√	√		√		√	√	√	√
Compliance		√	√	√	√	√	√	√	√	√
Personnel		√	√	√	√	√	√	√	√	√
IT / digitalisation		√	√	√	√	√	√		√	√
ESG (Environmental, Social, Governance)		√	√	√			√		√	√

[1] Has expert knowledge in the field of annual auditing pursuant to § 100 Para. 5 Stock Corporation Act (AktG) ("financial expert").
[2] Has expert knowledge in the field of accounting pursuant to § 100 Para. 5 Stock Corporation Act (AktG) ("financial expert").
[3] Expert in the field of ESG (Environmental, Social, Governance).
[4] Evaluation based on annual self-assessment (2023). On a rating scale from A to E √ corresponds to an evaluation of at least B ("sound knowledge" or "good knowledge")

Information on share-based payment is provided in subsection 9.3 of the notes "Share-based payment" and with respect to the members of the Executive Board in the remuneration report on the Hannover Re website at https://www.hannover-re.com/1849339/ remuneration-report-and-system.

In addition to the present Declaration on Corporate Governance, the Declaration of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code and the associated reports of recent years are published on our website (https://www.hannover-re.com/200775/corporate-governance).

Outlook

Forecast

- Group net income under IFRS 17 of at least EUR 2.1 billion expected
- Reinsurance revenue under IFRS 17 expected to grow by more than 5%
- Improved prices and conditions in property and casualty reinsurance
- Life and health reinsurance: sustained strong demand for financial solutions
- Return on investment target of at least 2.8% for assets under own management

Economic developments

Global economy

In its November 2023 Economic Outlook, the Organisation for Economic Co-operation and Development (OECD) considers the three greatest challenges facing the global economy in 2024 to be inflation, slower growth and increasing fiscal pressure on governments. While inflation is coming down, the more restrictive policies adopted by central banks will likely be reflected in softer economic growth. The OECD expects global GDP to fall further to 2.7% in real terms (2023: 2.9%). Along with central bank policies, weak global trade and subdued economic confidence will take their toll. A soft landing is likely in the advanced economies, but by no means guaranteed. The relationship between inflation, the economy and labour markets has changed, making it difficult to assess the impacts of tighter monetary policy. Despite successes in the fight against inflation, it is still too early to sound the all-clear.

As in the previous year, global growth is likely to develop unevenly. According to the OECD, emerging markets should generally perform better than the advanced economies. The pace of expansion in Europe is likely to lag behind North America and the major Asian economies. The US economy has fared better than expected and there is a risk that inflation could prove to be more stubborn than anticipated. The OECD believes that the tightening of monetary policy in the eurozone has still to make itself fully felt and economic activity could be impaired more than expected in 2024. Many emerging markets proved to be very resilient last year, but countries with structural debt problems are being closely watched by the financial markets.

In view of what is already softer global trade, the OECD is rather cautious for 2024. It believes that not only cyclical but also structural factors will serve to slow the cross-border integration of value chains. Growth opportunities, for example through increased trade in services, will not be utilised. Greater diversification and a shift away from protectionism are needed to bring more stability to global value chains.

In terms of fiscal policy, the pressure on public finances is likely to grow in many countries. Demographic changes, measures to slow climate change and the combination of rising interest payments and sluggish growth will reduce the scope for fiscal policy actions. Bold steps are needed to ease this pressure and put growth more front and centre in political decision making. This includes pressing ahead with labour market and pension reforms, strengthening competition and using fiscal levers to encourage investments that boost productivity.

Growth in gross domestic product (GDP)

in %	2023 (provisional calculation)	2024 (forecast)	2025 (forecast)
World	2.9	2.7	3.0
USA	2.4	1.5	1.7
Europe			
Eurozone	0.6	0.9	1.5
Germany	-0.1	0.6	1.2
France	0.9	0.8	1.2
UK	0.5	0.7	1.2
Asia			
China	5.2	4.7	4.2
Japan	1.7	1.0	1.2
Australia	1.9	1.4	2.1

Source: OECD Economic Outlook, Volume 2023 Issue 2: Preliminary Version

Capital markets

In 2024, current and looming military conflicts and their impacts or expansion will likely have a greater impact on global energy, commodity and food supplies. In this respect, it is especially important to evaluate the extent to which increasingly emerging geopolitical tensions will fuel tendencies towards deglobalisation and the formation of blocs. Inflation will likely continue to be a key factor affecting capital markets in 2024, although levels are expected to be lower than in the last two years. Particularly where inflation is concerned, central bank policy will be a pivotal element for the economy and capital markets alike. Following the about-turn in the previous expansionary policy, central banks will again have to manage the difficult balancing act in 2024 of keeping inflation in check while at the same time still allowing sufficient impetus for economic momentum.

Along with the progressive march of digitalisation and the ongoing development and implementation of artificial intelligence, the necessary efforts to bring greater efficiency to the supply of energy and raw materials will likely have positive effects on the economy. On capital markets, a somewhat higher level of interest rates and continued elevated volatility on equity and credit markets are to be anticipated in what is a US election year. Markets for alternative and real asset classes should see a stable development or modestly downward tendency. If medium- and long-term interest rates come down over the course of the year, however, renewed upward pressure on valuations in these asset classes is likely. On the consumption side, diminishing catch-up effects are anticipated in the United States coupled with further restraint in Europe. Investment demand in the goods sector will probably tend to be muted, whereas in the service sector it should develop positively for a limited period.

As a consequence of the unusual capital market constellations seen over the past two years and the prevailing geopolitical tensions, market players find themselves no longer able to take their lead consistently from fundamentals.

Insurance industry

The market environment for reinsurers remains promising, but is subject to increased uncertainty. Fitch Ratings raised its assessment of the global reinsurance sector from "neutral" to "improving" in autumn 2023. The rating agency believes that the current positive price trends, strong pricing discipline, rising investment returns and robust demand for reinsurance cover should improve the industry's earnings situation. Rising reinsurance prices combined with more rigorous underwriting measures such as stricter conditions for inclusions and exclusions, reduced limits and lower total sums insured will also play a part here. Higher investment income and life reinsurance earnings back to pre-pandemic levels are additional factors.

Nevertheless, market conditions are likely to remain complex. Inflation-related uncertainties, the potential implications of geopolitical risks, deglobalisation and dynamic developments affecting risks such as climate change or cyber business are factors that are difficult to predict. Fitch expects that margins will peak in the 2024 underwriting year as short-term price increases continue to outpace cost trends. The rating agency also expects the reinsurance sector to maintain its very high capital adequacy due to prudent risk management and strong earnings performance. However, improved underwriting margins could pique the interest of institutional investors and boost the inflow of funds into alternative risk capital.

The increased use of data and technology is a trend that will remain a central theme for the reinsurance industry in 2024. Analysing large data sets to support underwriting and claims management is nothing new for reinsurers. Nevertheless, the rapid advances in the development of artificial intelligence will likely accelerate the trend in order to optimise processes in claims handling, contract design and risk transfer. In addition to the time-saving drafting of reinsurance contracts, generative AI has the potential to support underwriters and actuaries in the pricing of reinsurance risks. Forecasting models and computer-aided actuarial analyses have already been used in this area for years. Generative AI should take these models to the next level by delivering more accurate and efficient pricing results. On the claims side, cedants should be able to utilise generative AI to produce more accurate and consistent claims reports. This is particularly important for excess-of-loss contracts, where individual loss reports may be required for certain types of claims.

Property and casualty reinsurance

Overview

The treaty renewals in property and casualty reinsurance as at 1 January 2024 again passed off successfully. Building on the already very strong previous year, Hannover Re achieved additional improvements in prices and conditions and thereby further improved the quality of its business. The inflation- and risk-adjusted price increase on the renewed business averaged 2.3%, with prices in non-proportional reinsurance rising far more strongly than in proportional reinsurance.

Treaties with a premium volume of EUR 9,552 million were up for renewal on 1 January 2024, corresponding to 62% of the business in traditional property and casualty reinsurance (excluding facultative reinsurance, ILS business and structured reinsurance).

Hannover Re renewed a premium volume of EUR 8,671 million, while treaties worth EUR 881 million were either cancelled or renewed in modified form. Including increases of EUR 1,541 million from new treaties and from changes in prices and treaty shares, the total renewed premium volume grew by 6.9% to EUR 10,212 million in an attractive market environment.

Prices were generally stable or moved slightly higher. As in the previous year, Hannover Re expanded its book of non-proportional reinsurance more strongly in the renewals. Premium volume here grew by 10.6% to EUR 3,178 million, while the risk-adjusted price increase came to 4.4%. Proportional reinsurance grew by 5.3% to EUR 7,034 million. The price increase here amounted to 1.3% after risk adjustment.

We are thoroughly satisfied with the renewal of our retrocession covers. Based on our long-standing cooperation, we successfully renewed our retrocession programme with our retrocessionaires and thus covered our requirements according to our risk appetite. Our K-cession met with strong demand. We were able to renew our non-proportional covers with unchanged priorities and a slight deterioration in conditions on a risk-adjusted basis.

Expectations for the development of individual markets and lines in property and casualty reinsurance are described in greater detail below.

Regional Markets

Europe, Middle East and Africa

In **Continental Europe**, we were once again able to achieve significantly higher prices and improved conditions across all lines of business in the 1 January treaty renewals. We further restructured our portfolio with a view to improving premium quality and reduced proportional business in favour of non-proportional programmes.

Demand for high-quality reinsurance cover remains strong. Market conditions are therefore not expected to soften for the time being, and we anticipate stabilisation on a high level over the course of the year.

Hannover Re expects strong year-on-year growth in the primary insurance market in **Germany** in 2024. Significant premium growth is anticipated in the motor line as well as in the property lines in general in the wake of the sharp rise in claims expenditure. The widespread flooding in northern Germany at the turn of the year once again highlighted the exposure to natural hazards. Against the backdrop of the increased frequency of natural hazard claims, reinsurance treaties were again reviewed with an eye to retentions and prices and adjusted to the new circumstances. Questions around the implications of climate change for the insurability of natural perils risks and the further development and implementation of sustainability criteria in the insurance industry remain highly relevant. Developments relating to mobility and the applications of big data and artificial intelligence are also important topics facing the industry.

In the **United Kingdom, Ireland and the London Market** we achieved price increases in all major reinsurance lines in the treaty renewals as at 1 January 2024. We expect conditions on the original market to remain attractive in 2024.

Reinsurance business in the **Middle East** showed a positive price trend that was moderate in view of the low exposure to natural disasters and a comparatively low frequency of large losses in the recent past. Geopolitical uncertainties in the region have recently led to a significant increase in prices in specific segments such as covers for war and terrorism risks. We expect our premium volume in the Middle East and in our retakaful business to deliver moderate growth overall and we plan to continue selectively expanding our business in 2024 and beyond in view of the available growth opportunities.

In **South Africa,** the trend towards better conditions for reinsurers has continued and we expect further growth in 2024, particularly in non-proportional business written through reinsurance brokers at margins which are currently adequate.

Americas

Following the improvements in conditions achieved in previous years, it was possible to secure additional positive adjustments in the treaty negotiations in **North America** as at 1 January 2024. A disciplined approach was evident among market players here, with positive effects on reinsurance prices and conditions. Improvements in property lines were considerably more marked than in liability lines. Although loss payments will probably be driven higher by inflation, we expect a clear increase in margins for our written portfolio in 2024.

Following the recent natural catastrophe losses caused by Hurricane Otis, Hannover Re expects a further increase in demand for corresponding reinsurance covers in **Latin America**. Similarly, parametric covers continue to attract increasing interest.

The trend towards improved rates and conditions was sustained in the renewals as at 1 January 2024. Large parts of the traditional property and casualty reinsurance portfolio in Latin America are, however, only renewed by Hannover Re later in the year, most notably in the 1 July main renewal season. All in all, we are looking for further improvement in conditions on the reinsurance market against a backdrop of lower capacities for certain combinations of countries and perils.

Asia-Pacific

Insurance density in the **Asia-Pacific** region is still lower than in more mature markets. In the short term we expect to see consolidation in the business coupled with a greater focus on profitability. Over the medium to long term, we nevertheless continue to anticipate substantial growth in property and casualty reinsurance in the APAC region.

As far as the pandemic-related losses in accident and health insurance are concerned, we do not expect to incur any further strains in 2024.

At the same time, we are seeing a clear tendency towards improved profitability in the market due to corresponding pressure exerted by capital providers, regulators and market players. It is our expectation that the Chinese insurance industry, in particular, will improve considerably over the coming three to five years.

The major reinsurers have recalibrated their risk models and hence their risk assessment and exposures for the coverage of typhoon risks in Japan in recent years. The increase in prices for industrial and fire business already recorded in the year just ended looks set to continue.

It is our expectation that rates and conditions for business in Australia and New Zealand will continue to stabilise on a high level – on both the insurance and reinsurance markets – following the severe natural catastrophe losses of recent years.

Worldwide Markets

Structured Reinsurance and Insurance-Linked Securities

Given a sustained hard market around the world, we expect continued rising demand at attractive conditions in **structured reinsurance**. The global capacity shortage appears set to continue on a lower level than in the previous year.

In the area of **insurance-linked securities (ILS)** we anticipate rising demand over the long term. Investors are seeking a minimal correlation with other financial investments and hence greater diversification. We are responding to this demand with a strong emphasis on service, offering individually tailored solutions for the transfer of property and life reinsurance risks to the capital market. Over the coming years we expect further growth in business volumes not only in collateralised reinsurance but also when it comes to supporting catastrophe bond issues and in the transfer of life reinsurance risks. All in all, we are looking for our ILS activities to deliver a positive and consistently rising profit contribution. The capital market also remains a very important element in our own retrocession protection.

Facultative reinsurance

In **facultative reinsurance** we anticipate sustained attractive market conditions for the current financial year. Along with the potential that we continue to identify in Asia, we are focused on growth in property and liability business outside the United States. We also see opportunities in the engineering insurance segment.

Credit, Surety and Political Risks

In view of the global economic headwinds, it is to be expected that loss ratios – which have been comparatively low to date – will increase modestly in some countries in 2024 and prices will pick up for the **credit, surety and political risks** line on both the insurance and reinsurance side. A good result is expected for 2024.

Aviation and Marine

It is our expectation that the general aviation and product liability segments will continue to show a favourable or stable development in **aviation** primary insurance. As far as the airline segment is concerned, we do not currently anticipate a trend reversal in the short term despite rising reinsurance costs.

While we expect the positive developments to continue in 2024, it can be assumed that they will not be on a par with the previous year. Based on an adjustment to our Russia-Ukraine exclusion in response to the prevailing situation, we will also be able to resume business lost in the previous year and thus expand our portfolio again in the current positive market phase. In doing so, we will continue to focus heavily on the profitability of the portfolio and pay particular attention to maintaining the recently achieved improvements in contractual conditions for the long term.

The primary insurance market for space business is expected to see very significant rate increases due to enormous claims expenditures in 2023. Despite this positive market response, we shall scale back our reinsurance activities in favour of improving the composition of our portfolio.

Further moderate price adjustments and improvements in reinsurance conditions are expected in the **marine segment** for the 2024 treaty renewals. If rates are adequate and the structure is appropriate to the risk, we are confident that we will be able to build on our good market position and further expand the portfolio.

Agricultural Risks

We expect the quality of our portfolio in **agricultural business** to improve in 2024. We will continue to write our business with a strict focus on profitability. In Brazil, we achieved stable rates on a high level in the renewals as at 1 January 2024 and expect the trend to continue in the renewals during the year. In the United States, prices for non-proportional treaties are stable or rising. We are only prepared to renew proportional business if we can achieve improvements in prices and conditions. In India, we have reduced our exposure due to persistently unattractive reinsurance conditions and will continue to write selectively over the course of the year. A considerable improvement in reinsurance conditions and an increase in the retentions carried by primary insurers are also necessary.

Life and health reinsurance

Along with sustained intense competition, we continue to see good prospects for robustly capitalised reinsurers such as Hannover Re in life and health business in 2024. Promising opportunities should generally open up in all areas due to increased customer demand and changing local regulatory requirements.

In **Financial Solutions** business it is our assumption that the favourable trend on markets that have been the most important for our business to date, such as the United States and China, will continue. We also expect to see global growth in demand in this area.

Turning to **Longevity Solutions**, it is our expectation that coverage of longevity-related risks will remain important and continue to generate interest among primary insurers and pension funds around the world in corresponding solutions.

In the area of **Mortality and Morbidity Solutions**, we anticipate sustained brisk demand among our customers.

Investments

Given the geopolitical and economic uncertainties, we shall continue to invest major parts of our asset holdings conservatively. In particular, we believe that certain risks to global economic growth are not yet adequately reflected in credit spreads and equity prices. We are nevertheless monitoring markets very closely with an eye to entry opportunities commensurate with the risks and we shall continue to attach great importance to broad diversification. By maintaining the most neutral possible modified duration relative to the expected maturities of the liabilities, we shall ensure that the interest rate risk remains tightly managed.

The good operating cash flow based on the expected favourable development of business should be reflected in an enlarged asset portfolio and have a positive effect on investment income. The interest rates on short-term investments expected during the reporting period in our main currency areas are also beneficial in this respect. Despite retreating in the period under review, interest rates in the medium and longer maturity segment also remain clearly above the level of previous years, which will likely have similarly positive implications.

Overall, however, the level of returns on high-quality investments still tends to be rather low. We shall therefore continue to invest in products offering attractive credit spreads and increase our positions opportunistically in some cases. With this in mind, we also intend to moderately expand the portfolio of real assets or the financing of such asset classes. In so doing, we shall maintain a particular focus going forward – as in the past – on attractive risk-return profiles against the backdrop of the new interest rate landscape. We similarly intend to selectively grow our exposure, as appropriate, to the areas of private equity and emerging markets.

If the valuation levels of listed equities experience significant corrections and stabilise, we are prepared to moderately increase the portfolio of listed equities.

In terms of inflation, we expect the measured indices to show significantly less momentum than in previous years, leading to a lower return from the amortisation of our inflation-linked bonds.

Due to application of the accounting standard IFRS 9, we expect the income statement for investments to show increased market-driven volatility and somewhat reduced predictability. This is because the fair value changes of a significantly larger part of the investments are recognised directly in profit or loss.

Financial ambition over the strategy cycle 2024-2026

In the current strategy cycle 2024-2026 Hannover Re has set itself the following financial ambitions: we want to achieve a return on equity of more than 14% annually on average and growth of more than 5% in the operating result (EBIT). The contractual service margin (net) is planned to grow by more than 2% per year on average across the cycle. Furthermore, a capital adequacy ratio under Solvency II of more than 200% is targeted.

The increasing earnings anticipated across the strategy cycle will support further growth in the ordinary dividend. In the years 2024-2026 the ordinary dividend is expected to increase year-on-year. The ordinary dividend will be supplemented by a special dividend provided the capitalisation exceeds the capital required for future growth.

Outlook for the 2024 financial year

In view of the continued positive market climate for reinsurers, Hannover Re expects Group net income to grow to at least EUR 2.1 billion for the 2024 financial year. Based on constant exchange rates, reinsurance revenue should increase by more than 5%, with revenue growth in property and casualty reinsurance outpacing that in life and health reinsurance.

In **property and casualty reinsurance** we expect a combined ratio of less than 89% for the current financial year thanks to the improved market environment.

In response to the growth in the book of property and casualty reinsurance and the further increase in the loss expectancy from natural catastrophes, Hannover Re has raised its net large loss budget for 2024 to EUR 1.825 billion (EUR 1.725 billion).

Thanks to our good rating, our long-standing stable customer relationships and our low expense ratio, we should be able to generate another good result in property and casualty reinsurance.

In **life and health reinsurance** we anticipate a reinsurance service result of more than EUR 850 million for the current financial year.

In view of the expected positive cash flow that we generate from the technical account and the investments themselves, and assuming roughly stable exchange rates and interest rate levels, our portfolio of **investments** should continue to show moderate growth. The return generated on investments under own management should reach at least 2.8%.

As usual, all forward-looking statements regarding future targets are based on the assumption that there are no unforeseen distortions on capital markets and that large loss expenditure remains within the budgeted level.

Consolidated financial statements

Consolidated balance sheet as at 31 December 2023

Assets

in EUR million	Notes	31.12.2023	31.12.2022 [1]	1.1.2022 [1]
Financial investments – at fair value through OCI	6.1	50,619.1	46,941.9	47,836.5
Financial investments – at fair value through profit or loss	6.1	3,954.1	3,147.4	4,941.1
Investment property	6.1	2,536.5	2,319.3	1,818.8
Investments in associated companies and joint ventures	6.1	2,056.2	2,063.0	238.1
Other invested assets	6.1	963.0	813.5	336.4
Total investments		**60,128.9**	**55,285.1**	**55,170.9**
Reinsurance recoverables on liability for incurred claims	6.4	2,231.4	2,401.6	2,200.1
Reinsurance recoverables on liability for remaining coverage	6.4	-705.5	188.0	269.1
Recoverables on reinsurance contracts retroceded		**1,525.9**	**2,589.6**	**2,469.2**
Reinsurance contracts issued in an asset position	6.4	1,019.8	1,448.1	1,550.2
Goodwill	6.2	78.0	77.3	83.9
Deferred tax assets	7.5	627.9	457.7	492.8
Other assets	6.3	2,052.0	1,778.2	1,334.9
Cash and cash equivalents		1,054.8	1,323.2	1,355.1
Total assets		**66,487.3**	**62,959.2**	**62,457.0**

[1] Restated pursuant to IAS 8

Liabilities

in EUR million	Notes	31.12.2023	31.12.2022 [1]	1.1.2022 [1]
Liability for incurred claims (LIC)	6.4	46,214.1	42,925.5	38,212.9
Liability for remaining coverage (LRC)	6.4	-1,974.7	-1,156.5	3,882.7
Liabilities from reinsurance contracts issued	**6.4**	**44,239.4**	**41,769.0**	**42,095.6**
Reinsurance contracts retroceded in a liability position	6.4	698.9	556.7	654.8
Provisions for pensions	6.5	164.3	153.8	208.8
Financing liabilities	6.7	4,875.5	5,510.4	4,370.3
Taxes	7.5	225.9	172.8	92.0
Deferred tax liabilities	7.5	2,097.3	2,178.5	2,325.4
Other liabilities	6.6	3,166.5	2,661.1	1,661.1
Total liabilities		**55,467.8**	**53,002.3**	**51,408.0**
Shareholders' equity				
Common shares	6.8	120.6	120.6	120.6
Nominal value: 120.6 Conditional capital: 24.1				
Additional paid-in capital	6.8	724.6	724.6	724.6
Common shares and additional paid-in capital		**845.2**	**845.2**	**845.2**
Cumulative other comprehensive income				
Unrealised gains and losses on investments		-1,985.1	-3,154.0	1,107.6
Cumulative foreign currency translation adjustment		160.5	509.0	338.6
Cumulative reinsurance finance income and expenses		2,026.3	2,871.1	-15.2
Other changes in cumulative other comprehensive income		-44.1	-36.4	-80.5
Total other comprehensive income		**157.6**	**189.7**	**1,350.5**
Retained earnings		9,124.0	8,024.8	7,901.6
Equity attributable to shareholders of Hannover Rück SE		**10,126.8**	**9,059.7**	**10,097.3**
Non-controlling interests	6.9	892.7	897.2	951.7
Total shareholders' equity		**11,019.5**	**9,956.9**	**11,049.0**
Total liabilities		**66,487.3**	**62,959.2**	**62,457.0**

[1] Restated pursuant to IAS 8

Consolidated statement of income 2023

in EUR million	Notes	1.1.–31.12.2023	1.1.–31.12.2022 [1]
Reinsurance revenue (gross)	7.1	24,456.5	24,016.7
Reinsurance service expenses (gross)		20,802.1	22,297.7
Reinsurance service result (gross)		**3,654.4**	**1,719.0**
Reinsurance revenue (retroceded)		3,370.3	2,344.5
Reinsurance service expenses (retroceded)		1,374.2	1,961.9
Result from reinsurance contracts (retroceded)		**-1,996.1**	**-382.6**
Reinsurance service result (net)		**1,658.3**	**1,336.4**
Finance income or expenses from reinsurance contracts (gross)	7.3	-360.9	-1,160.0
Finance income or expenses from reinsurance contracts (retroceded)	7.3	-23.7	96.5
Reinsurance finance result (net)		**-384.6**	**-1,063.5**
thereof: Currency gains/losses from reinsurance finance result (net) [2]		495.7	-480.4
Reinsurance finance result (net) before currency gains/losses [2]		**-880.3**	**-583.1**
Ordinary investment income	7.2	1,981.5	1,961.1
Expected credit losses, impairment, depreciation and appreciation of investments	7.2	-155.8	-167.6
Change in fair value of financial instruments	7.2	76.0	-14.2
Profit/loss from investments in associated companies and joint ventures	7.2	16.3	-63.2
Realised gains and losses on investments	7.2	-153.9	-585.3
Other investment expenses	7.2	175.9	165.5
Investment result		**1,588.2**	**965.3**
Currency gains/losses on investments		-450.5	549.4
Currency gains/losses from reinsurance finance result (net) [2]		495.7	-480.4
Other currency gains/losses		41.5	-51.4
Currency result		**86.7**	**17.6**
Other income	7.4	233.1	424.3
Other expenses	7.4	714.8	644.8
Other income/expenses		**-481.7**	**-220.5**
Operating profit/loss (EBIT)		**1,971.2**	**1,515.7**
Financing costs	6,7	117.2	91.5
Net income before taxes		**1,854.0**	**1,424.2**
Taxes	7.5	26.4	525.9
Net income		**1,827.6**	**898.3**
thereof			
Non-controlling interest in profit and loss	6,9	2.8	117.5
Group net income		**1,824.8**	**780.8**
Earnings per share (in EUR)	**9.5**		
Basic earnings per share		15.13	6.47
Diluted earnings per share		15.13	6.47

[1] Restated pursuant to IAS 8

[2] In order to clarify the matching currency coverage of the technical liabilities by investments, the currency effects are initially eliminated from the reinsurance finance result within the meaning of IFRS 17 and subsequently reported in the net currency result

Consolidated statement of comprehensive income 2023

in EUR million	1.1.–31.12.2023	1.1.–31.12.2022 [1]
Net income	**1,827.6**	**898.3**
Not reclassifiable to the consolidated statement of income		
Actuarial gains and losses	-13.6	56.5
Investments in equity instruments	78.7	181.9
Changes from the measurement of associated companies	-0.1	–
Currency translation	-7.0	–
Tax income (expense)	3.0	-21.0
Total not reclassifiable to the consolidated statement of income	**61.0**	**217.4**
Reclassifiable to the consolidated statement of income		
Unrealised gains and losses on investments		
Gains (losses) recognised directly in equity	1,501.4	-6,986.1
Transferred to the consolidated statement of income	153.9	594.1
Currency translation		
Gains (losses) recognised directly in equity	-409.4	297.4
Transferred to the consolidated statement of income	3.2	-103.7
Changes from insurance contracts		
Gains (losses) recognised directly in equity	-1,196.6	4,345.9
Changes from the measurement of associated companies and joint ventures		
Gains (losses) recognised directly in equity	-20.9	–
Changes from hedging instruments		
Gains (losses) recognised directly in equity	2.8	10.1
Tax income (expense)	-116.2	447.5
Total reclassifiable income and expense recognised directly in equity	**-81.8**	**-1,394.8**
Total income and expense recognised directly in equity	**-20.8**	**-1,177.4**
Total recognised income and expense	**1,806.8**	**-279.1**
thereof		
Attributable to non-controlling interests	13.8	65.4
Attributable to shareholders of Hannover Rück SE	1,793.0	-344.5

[1] Restated pursuant to IAS 8

Consolidated statement of changes in shareholders' equity 2023

in EUR million	Common shares	Additional paid-in capital	Other reserves (cumulative other comprehensive income) Unrealised gains/losses	Currency translation
Balance as at 31.12.2021 as reported	**120.6**	**724.6**	**1,768.3**	**366.2**
Effects from initial application of new accounting standards	–	–	-660.7	-27.6
Balance as at 1.1.2022 (restated)	**120.6**	**724.6**	**1,107.6**	**338.6**
Net income [1]	–	–	–	–
Total income and expense recognised directly in equity [1]	–	–	-4,226.1	170.4
Total recognised income and expense [1]	**–**	**–**	**-4,226.1**	**170.4**
Dividends paid	–	–	–	–
Changes in ownership interest with no change of control status	–	–	–	–
Changes in the consolidated group	–	–	–	–
Directly reclassified to retained earnings	–	–	-35.5	–
Capital repayments	–	–	–	–
Balance as at 31.12.2022	**120.6**	**724.6**	**-3,154.0**	**509.0**
Balance as at 1.1.2023	**120.6**	**724.6**	**-3,154.0**	**509.0**
Net income	–	–	–	–
Total income and expense recognised in equity	–	–	1,168.9	-348.5
Total recognised income and expense	**–**	**–**	**1,168.9**	**-348.5**
Dividends paid	–	–	–	–
Changes in ownership interest with no change of control status	–	–	–	–
Capital increases/additions	–	–	–	–
Balance as at 31.12.2023	**120.6**	**724.6**	**-1,985.1**	**160.5**

[1] Restated pursuant to IAS 8

Continuation: Other reserves (cumulative other comprehensive income)			Retained earnings	Equity attributable to shareholders of Hannover Rück SE	Non-controlling interests	Total shareholders' equity
Insurance contracts	Hedging instruments	Actuarial gains/losses				
–	**-8.6**	**-71.9**	**8,985.8**	**11,885.0**	**871.2**	**12,756.2**
-15.2	–	–	-1,084.2	-1,787.7	80.5	-1,707.2
-15.2	**-8.6**	**-71.9**	**7,901.6**	**10,097.3**	**951.7**	**11,049.0**
–	–	–	780.8	780.8	117.5	898.3
2,886.3	8.8	35.3	–	-1,125.3	-52.1	-1,177.4
2,886.3	**8.8**	**35.3**	**780.8**	**-344.5**	**65.4**	**-279.1**
–	–	–	-693.4	-693.4	-30.0	-723.4
–	–	–	0.3	0.3	–	0.3
–	–	–	–	–	-89.8	-89.8
–	–	–	35.5	–	–	–
–	–	–	–	–	-0.1	-0.1
2,871.1	**0.2**	**-36.6**	**8,024.8**	**9,059.7**	**897.2**	**9,956.9**
2,871.1	**0.2**	**-36.6**	**8,024.8**	**9,059.7**	**897.2**	**9,956.9**
–	–	–	1,824.8	1,824.8	2.8	1,827.6
-844.5	1.0	-8.7	–	-31.8	11.0	-20.8
-844.5	**1.0**	**-8.7**	**1,824.8**	**1,793.0**	**13.8**	**1,806.8**
–	–	–	-723.6	-723.6	-45.0	-768.6
-0.3	–	–	-2.0	-2.3	-0.4	-2.7
–	–	–	–	–	27.1	27.1
2,026.3	**1.2**	**-45.3**	**9,124.0**	**10,126.8**	**892.7**	**11,019.5**

Consolidated cash flow statement 2023

in EUR million	1.1.–31.12.2023	1.1.–31.12.2022 [1]
I. Cash flow from operating activities		
Net income	1,827.6	898.3
Change in insurance contracts (gross)	3,853.1	-1,059.3
Change in reinsurance contracts held (retroceded)	1,170.5	-152.4
Change in other receivables/liabilities	449.8	192.2
Other non-cash expenses and income	-1,515.5	5,068.3
Cash flow from operating activities	**5,785.5**	**4,947.1**
II. Cash flow from investing activities		
Outflows for acquisition of investment property	-413.0	-527.5
Inflows from disposal of investment property	2.5	14.4
Outflows for acquisition of investments in affiliated companies and participating interests (not consolidated)	-91.6	-41.1
Inflows from disposal of investments in affiliated companies and participating interests (not consolidated)	2.8	34.2
Outflows for acquisition of investments valued at FV through OCI	-22,422.0	-16,555.0
Inflows from disposal of investments valued at FV through OCI	19,386.6	11,712.6
Outflows for acquisition of investments valued at FV through P&L	-3,341.5	-1,199.3
Inflows from disposal of investments valued at FV through P&L	2,834.0	1,247.2
Short-term Investments (net)	-128.3	-80.7
Outflows for acquisition of other invested assets	-5,921.0	-2,086.4
Inflows from disposal of other invested assets	5,611.2	2,228.1
Other changes	-29.5	177.0
Cash flow from investing activities	**-4,509.8**	**-5,076.5**
III. Cash flow from financing activities		
Cash inflow from financing liabilities/financial/puttable instruments	361.3	894.5
Cash outflow from financing liabilities/financial/puttable instruments	-1,118.6	-127.0
Cash inflow from capital measures	27.1	–
Cash outflow from capital measures	–	-0.1
Changes in interests in a subsidiary that do not result in a loss of control	-2.6	0.3
Cash outflow from dividends	-768.6	-723.4
Cash flow from financing activities	**-1,501.4**	**44.3**
IV. Exchange rate differences on cash	**-42.7**	**53.2**
Cash and cash equivalents at the beginning of the period	**1,323.2**	**1,355.1**
Change in cash and cash equivalents (I. + II. + III. + IV.)	**-268.4**	**-31.9**
Cash and cash equivalents at the end of the period	**1,054.8**	**1,323.2**
Supplementary information on the cash flow statement [2]		
Income taxes paid (on balance)	-320.8	-70.9
Dividend receipts [3]	82.3	245.7
Interest received	1,861.8	1,651.7
Interest paid – recognised in the cash flow from operating activities	-210.9	-324.7
Interest paid – recognised in the cash flow from financing activities	-130.9	-89.0

[1] Restated pursuant to IAS 8

[2] The income taxes paid, dividend received as well as interest received are included entirely in the cash flow from operating activities.

[3] Including dividend-like profit participations from investment funds

Notes to the consolidated financial statements 2023

1. Company information

Hannover Rück SE and its subsidiaries (collectively referred to as the "Hannover Re Group" or "Hannover Re") transact all lines of property & casualty and life & health reinsurance. Hannover Re is one of the world's leading reinsurance groups, with a network consisting of more than 170 subsidiaries, affiliates, branches and representative offices and a total workforce of roughly 3,700. The Group's German business is conducted by the subsidiary E+S Rückversicherung AG. Hannover Rück SE is a European Company, Societas Europaea (SE), which has its registered office at Karl-Wiechert-Allee 50, 30625 Hannover, Germany, and is entered in the commercial register of Hannover County Court under the number HR Hannover B 6778. 50.2% (rounded) of the shares of Hannover Rück SE are held by Talanx AG, Hannover, which in turn is majority-owned – with an interest of 76.7% – by HDI Haftpflichtverband der Deutschen Industrie V.a.G. (HDI), Hannover

2. Accounting principles

Hannover Rück SE and its subsidiaries are required to prepare a consolidated financial statement and group management report in accordance with § 290 German Commercial Code (HGB).

Pursuant to EU Regulation (EC) No. 1606 / 2002, the present consolidated financial statement and group management report of Hannover Re have been drawn up in accordance with the International Financial Reporting Standards (IFRS) that are to be applied within the European Union. In addition, we have made allowance for the regulations that are also applicable pursuant to § 315e Para. 1 German Commercial Code (HGB) and the supplementary provisions of the Articles of Association of Hannover Re.

Hannover Rück Beteiligung Verwaltungs-GmbH and FUNIS GmbH & Co. KG, both subsidiaries of Hannover Rück SE, made use of the option to be exempted from disclosure pursuant to § 264 Para. 3 German Commercial Code (HGB) and § 264b German Commercial Code (HGB).

The consolidated financial statement reflects all IFRS in force as at 31 December 2023 as well as all interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC), application of which was mandatory for the year under review. IFRS 17.121 et seq. "Insurance Contracts" requires disclosures on 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. Furthermore, § 315 Para. 2 Number 1 German Commercial Code (HGB) also contains requirements for insurance undertakings with regard to information on the management of underwriting and financial risks that is to be provided in the management report. The disclosures resulting from these requirements are included in the risk report. With regard to the disclosures required by IFRS 17 and IFRS 7, we would refer in particular to our remarks in the subsection "Underwriting risks in property and casualty reinsurance / Underwriting risks in life and health reinsurance" and the subsection "Market risks" respectively. These subsections of the Group management report are to be considered an integral part of the notes to the consolidated financial statements. In order to obtain a comprehensive overview of the risk situation to which Hannover Re is exposed, it is therefore necessary to consider both the risk report and the relevant information in the notes. For the sake of better orientation, we refer the reader accordingly to the corresponding remarks in the risk report and the notes.

The declaration of conformity required pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code has been submitted and, as described in the Declaration of the Executive Board regarding the Corporate Governance of the Company, made permanently available on the Hannover Re website.

The annual financial statements included in the consolidated financial statement were for the most part drawn up as at 31 December. Pursuant to IFRS 10 "Consolidated Financial Statements" there is no requirement to compile interim accounts for Group companies with diverging reporting dates because their closing dates are no earlier than three months prior to the closing date for the consolidated financial statement. Insofar as no interim accounts were drawn up, allowance has been made for the effects of significant transactions between the diverging reporting dates and the closing date for the consolidated financial statement.

The annual financial statements of all companies were drawn up in accordance with standard Group accounting and measurement rules pursuant to IFRS.

The consolidated financial statement was drawn up in euros (EUR); the amounts shown have been rounded to EUR millions. Unless otherwise explicitly indicated, amounts in brackets refer to the previous year.

Hannover Re is publishing its consolidated financial statement as at 31 December 2023 in accordance with the provisions of the German ESEF Implementation Act (ESEF = European Single Electronic Format).

The present consolidated financial statement was released for publication by a resolution of the Executive Board on 13 March 2024.

New accounting standards or accounting standards applied for the first time

With effect from 1 January 2023 Hannover Re applied the accounting standards IFRS 17 "Insurance Contracts" and IFRS 9 "Financial Instruments" for the first time. Both standards were initially applied retrospectively in observance of any options or transitional arrangements. The opening balance sheet in consideration of the principles of IFRS 17 and IFRS 9 was drawn up as at 1 January 2022.

IFRS 17 "Insurance Contracts" replaces the existing transitional arrangements of IFRS 4 and establishes a comprehensive accounting framework for the recognition, measurement and disclosure of insurance contracts. In addition, IFRS 17 requires extensive new disclosures in the notes. The standard is to be applied to insurance contracts written ("insurance contracts issued", including reinsurance contracts written / issued), reinsurance contracts held ("insurance contracts ceded") and reinsurance contracts retroceded ("retrocession contracts held", "retrocessions") as well as investment contracts with discretionary participation features. Unless otherwise explicitly indicated, the term "insurance" includes reinsurance in the following explanatory remarks.

Before a contract is recognised pursuant to IFRS 17, we check whether the contract contains components that are to be separated and recognised separately according to the provisions applicable to them. Hannover Re's business largely contains two categories of such components:

- cash flows related to embedded derivatives to be recognised separately under IFRS 9;
- cash flows related to distinct investment components that are similarly to be recognised under IFRS 9.

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 insurance contracts with a direct surplus participation 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. Hannover Re'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 in order to achieve consistent and comparable presentation and measurement within the portfolio of insurance and reinsurance contracts, Hannover Re is applying the general measurement model to its entire business.

The general measurement model measures receivables and payables from reinsurance business by the fulfilment value plus the contractual service margin.

The fulfilment value constitutes the risk-adjusted present value of the rights and obligations from a reinsurance treaty and is 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 deferred within the contractual service margin (CSM) and spread across the coverage period. Initial balance sheet recognition of contracts expected to be profitable thus has no effect on profit or loss.

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".

Hannover Re discounts all cash flows using currency-specific, risk-free yield curves that are adjusted to reflect the respective characteristics of the cash flows and the liquidity of the underlying insurance contracts ("bottom-up approach").

The risk adjustment for non-financial risk for a group of insurance contracts reflects the amount of compensation needed to carry the uncertainty surrounding the amount and timing of the cash flows that arise out of non-financial risks – such as the insurance risk itself, the cost risk and in particular the risk associated with policyholder behaviour.

The provisions of IFRS 17 open up the option of recognising discounting effects within the non-financial risk adjustment not separately in the reinsurance finance result but rather together with the release of the risk adjustment within the technical result. This option is exercised in the property and casualty reinsurance segment.

As a general principle, insurance and reinsurance contracts are grouped together and measured on an aggregated level. For this purpose, we define as a first step portfolios containing contracts with similar risks that are managed together. In a second step, we split these portfolios into groups of contracts according to profitability criteria and annual cohorts. With regard to the profitability expected at the time of initial recognition, a distinction is made between

- onerous contracts,
- contracts where there is no significant probability of them becoming onerous in subsequent periods and
- the remaining contracts;

these are allocated to separate groups of contracts. Contracts issued within a calendar year are combined into annual cohorts.

Under IFRS 17 there is a requirement to group contracts into such annual cohorts. In the context of the EU endorsement, however, an option to build annual cohorts was granted for certain types of contracts. Hannover Re is not using this EU exemption.

The standard must be applied retrospectively unless this is impracticable (IFRS 17 C3). In this case, especially if an adequate data basis for full retrospective application is not available, it is possible to apply either a modified retrospective approach or a fair value approach on the level of the group of contracts.

Using adequately robust information that is available without unreasonable effort, the modified retrospective approach is intended to arrive at an overall result that approximates retrospective application. In connection with application of the modified retrospective approach, the following main simplifications were utilised:

- Contracts issued in intervals of more than one year were combined
- No distinction was made between purchased insurance portfolios and directly written business
- Use of a yield curve approximating the estimated yield curve for at least three years directly prior to the date of transition to IFRS 17 that is based on the general approach used for calculating discount rates
- Restatement of the non-financial risk adjustment as at 1 January 2022 by the amount of the release of the non-financial risk adjustment expected prior to the transition date based on comparable contracts
- The OCI for the technical reserves as at 1 January 2022 is determined as the difference between the technical reserves discounted at the interest rate from the year of acquisition of the contracts and at the current rate on the closing date. Overall, the balance of the technical OCI positions and the investment OCI positions produces the OCI from investments not used to cover underwriting liabilities.

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 value calculated according to IFRS 17.

Hannover Re is applying each of the aforementioned transition arrangements, differentiated according to certain groups of contracts.

Measured by their net technical liability, the proportion of contracts for which the full retrospective approach was used was around 36%. The modified retrospective approach and the fair value approach were applied to roughly 26% and roughly 38% of the portfolio respectively.

The application of IFRS 17 has a number of implications for the structure of the consolidated balance sheet. In addition to the changed technical items under the general measurement model, certain items that are currently reported separately are eliminated and 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 consolidated statement of income and differentiates between the reinsurance result, which is composed of the reinsurance revenue and reinsurance service expenses, and the reinsurance finance income and expenses.

Gross written premium is no longer disclosed, instead being replaced with reinsurance revenue that is defined in such a way as to facilitate comparison with the revenue disclosures of other sectors. Neither savings / investment components nor certain ceding commissions can be recognised in the reinsurance revenue. Reinsurance revenue is instead reported when it is earned by recognising in each period the change in the liabilities for providing reinsurance coverage for which the reinsurance entity receives compensation, including the pro rata recognition of the contractual service margin in profit and loss, as well as the part of the premiums that covers acquisition costs.

Reinsurance 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 entirely as profit or loss in the statement of income or in part directly in equity. This "OCI option" can be exercised on the level of individual portfolios and is utilised by Hannover Re for a large part of its business.

IFRS 17 116 requires disclosures for groups of reinsurance contracts for which the option to recognise components of reinsurance finance income or expense directly in OCI on the date of transition was exercised and to which a portfolio of assets is directly allocated, the fair value changes of which are similarly recognised directly in OCI. There are no material circumstances within the Hannover Re Group that meet these criteria.

Changes in assumptions about future cash flows 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 reinsurance contracts that are expected to be loss-making. If this adjustment to the contractual service margin exceeds its carrying amount, a loss component is established analogously to the initial recognition of groups of contracts that are expected to be loss-making and 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 probably loss-making.

At the transition date of 1 January 2022, the initial application of IFRS 17 gave rise to the following changes in the measurement of key items in the balance sheet:

The amount of the technical liabilities and assets changes due to the concepts enshrined in the standard relating to the discounting of future cash flows, the establishment of the contractual service margin, loss components and risk adjustment and other measurement differences compared to IFRS 4, including for example the diverging definition of contract boundaries or the aforementioned grouping of contracts for measurement purposes.

In property and casualty reinsurance there is an overall decline of EUR 743.0 million in the amount of the net technical liability.

An anticipated significant increase of EUR 2,455.6 million was recorded in the technical liabilities in the life and health reinsurance segment. This is due primarily to the measurement of portfolios in the US and Asian markets as well as from the United Kingdom.

The retention of the reserving approach hitherto adopted by Hannover Re – insofar as this is possible under IFRS 17 – results in the recognition of a loss component for some groups of contracts at the time of initial recognition, although this may even out over time and lead to run-off profits.

IFRS 9 ”Financial Instruments” replaces IAS 39 “Financial Instruments: Recognition and Measurement” and contains new rules for classifying and measuring financial instruments, 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 could first be applied by Hannover Re at the same time.

In order to be able to take advantage of the temporary deferral, it was necessary to demonstrate that Hannover Re's predominant activity is the issuance of insurance and reinsurance contracts within the scope of IFRS 4. Hannover Re reviewed the application requirements based on the consolidated financial statement as at 31 December 2015 with a positive outcome and decided to make use of the option of temporary deferral. 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.

Hannover Re applied this approach, including the provisions of IFRS 9 regarding impairment losses, consistently to all eligible financial instruments.

The classification of financial instruments according to IFRS 9 is guided, on the one hand, by the cash flow characteristics of the financial instruments and, on the other, by the business model used to manage the financial instruments. On the basis of these two criteria, financial instruments are allocated to one of three measurement categories, namely “amortised cost” (business model ”hold”), “fair value through other comprehensive income” (FVTOCI) (business model “hold and sell”) or “fair value through profit or loss” (FVTPL) (business model “trading”). In general, the business model “hold“ is no longer applicable to Hannover Re, while EUR 2,799.9 million of the investments measured according to IAS 39 were still recognised at amortised cost prior to the transition date. In view of the nature of reinsurance business, the bulk of our portfolio of debt instruments is allocated to the business model “hold and sell”. A large portion of the financial instruments shown in the investments is therefore classified in the category ”fair value through other comprehensive income”. The holding of these financial instruments decreased in the opening balance sheet as at 1 January 2022 to EUR 48,169.2 million (IAS 39: EUR 49,671.8 million).

The new classification rules introduced by IFRS 9 also result in significantly more financial instruments in the investments being measured at fair value through profit or loss. As at 1 January 2022 Hannover Re recognises financial instruments in an amount of EUR 4,944.8 million at fair value through profit or loss (IAS 39: EUR 329.5 million). The bulk of this increase was attributable to unts in publicly offered funds, private equity investments and debt instruments that do not pass the SPPI ("solely payment of principal and interest") test due to their cash flow characteristics. This can lead to increased volatility in results in future financial years.

Primarily due to the disclosure of hidden reserves on securities previously measured at amortised cost, the transition to recognition of financial instruments under IFRS 9 gives rise to an increase of EUR 312.8 million in the book values of financial instruments.

Reduced by the mitigating effect of deferred taxes, the transition to the accounting standards IFRS 9 and IFRS 17 as at 1 January 2022 caused the reported shareholders' equity of Hannover Re to decrease by altogether EUR 1,707.2 million. The reduction in the reported shareholders' equity as at 1 January 2022 is opposed by the establishment of the contractual service margin as the present value of expected future earnings. For Hannover Re this amounts to EUR 6,144.1 million before tax at the transition date and is thus far greater than the reduction in the reported shareholders' equity. This decrease was attributable in particular to measurement in the life and health reinsurance segment and was driven principally by the prevailing interest rate level at the transition date of 1 January 2022. In the course of 2022, however, this effect was reversed as interest rates rose, with the result that the shareholders' equity of EUR 9,956.9 million as at 31 December 2022 is EUR 1,209.2 million higher than that reported in the Annual Report 2022 under IAS 39 and IFRS 4.

Along with the changes described in connection with initial application of IFRS 17 and IFRS 9, the following amendments to existing standards were applicable for the first time in the reporting period. These amendments did not have any significant implications for the consolidated financial statement:

- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies
- Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates
- Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction.

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

In connection with the introduction of global minimum taxation, the IASB issued "Amendments to IAS 12 Income taxes: International Tax Reform – Pillar Two Model Rules" in May 2023 after the OECD had previously released the Pillar Two Model Rules (Global Anti-Base Erosion Proposal, GloBE). The amendments to IAS 12 introduce a temporary, mandatory exception to accounting for deferred taxes arising from implementation of the Pillar Two Model Rules together with certain disclosure requirements. The temporary exception applies retrospectively in conformity with IAS 8 and immediately upon publication, while the new disclosure requirements were to be fulfilled effective year-end 2023. Hannover Re has begun preparations for implementation of the complex Pillar Two rules and has fulfilled the new disclosure requirements accordingly. With respect to the latter, we would refer to our remarks in section 7.5 "Taxes on income".

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

Further IFRS Amendments and Interpretations

Publication	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	1 January 2024 (EU endorsement 19 December 2023)
September 2022	Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback	1 January 2024 (EU endorsement 20. November 2023)
October 2022	Amendments to IAS 1 Presentation of Financial Statements: Non-current Liabilities with Covenants	1 January 2024 (EU endorsement 19 December 2023)
May 2023	Amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures: Supplier Finance Arrangements	1 January 2024 (still to be endorsed by the EU)
August 2023	Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability	1 January 2025 (still to be endorsed by the EU)

3. Accounting policies

3.1. Summary of major accounting policies

Classification of contracts: A contract is to be classified as a reinsurance contract issued or as a reinsurance contract held pursuant to FRS 17 if a significant insurance risk is thereby assumed or transferred. These contract types are treated according to the same rules, irrespective of whether the contracts were issued, acquired in connection with a merger or acquired as part of a transfer of contracts that do not constitute business operations. Contracts that may take the legal form of an insurance contract but do not transfer any significant insurance risk are classified as investment contracts. The recognition and measurement of such contracts follows the rules for the recognition of financial instruments according to IFRS 9.

Financial instruments are recognised and derecognised on acquisition or sale at the fulfilment date pursuant to IFRS 9. **Financial assets** are split into one of three categories on acquisition according to their cash flow characteristics and respective purpose: (i) amortised cost (AC), (ii) fair value through other comprehensive income (FVOCI) and (iii) fair value through profit or loss (FVPL). **Financial liabilities** are classified either as financial instruments at fair value through profit or loss or as financial instruments measured at amortised cost. For further information we would refer to our separate explanatory remarks in this section.

Debt instruments held are recognised **at amortised cost (AC)** and measured in subsequent periods at amortised cost using the effective interest rate method if the financial asset is held within a business model whose objective is collecting cash flows and the contractual cash flows consist of solely payments of principal and interest (SPPI). This business model is applied only in exceptional cases in the Hannover Re Group.

Debt instruments are classified as financial instruments at **fair value through other comprehensive income (FVOCI)** if the financial asset is held within a business model whose objective is both collecting contractual cash flows and selling the financial asset and the contractual cash flows meet the SPPI criterion. Financial assets classified in the FVOCI category are measured at fair value, with all changes in fair value recognised in OCI allowing for accrued interest and deferred taxes and disclosed in shareholders' equity under the other reserves. Premiums and discounts are spread across the maturity using the effective interest rate method. A large part of Hannover Re's investments fall under the business model with the objective of collecting cash flows and selling, because the investments are predominantly used to cover underwriting risks and sales are therefore influenced by the servicing of these obligations.

There is an option to designate equity instruments as FVOCI on initial recognition, without recycling to profit and loss. In this case, changes in fair value are recognised directly in OCI and not recycled to P&L even on disposal. As a general principle, Hannover Re exercises this option for equities and unconsolidated participations.

The **financial instruments measured at fair value through profit or loss (FVPL)** include all equity instruments that were not designated as FVOCI without subsequent recycling to profit and loss as well as all debt instruments whose cash flows do not meet the SPPI criteria or are not held within the business models whose objective is collecting contractual cash flows or collecting cash flows and selling the instrument.

This includes first and foremost complex structured products, units in investment funds and private equity investments as well as short-term investments. In addition, all derivative assets are measured at fair value through profit or loss and, provided they have positive fair values, recognised in this category. Derivatives with negative fair values are recognised under the other liabilities. All securities measured at fair value through profit or loss are carried at the fair value on the closing date. If market prices that can be used as fair values are not available, the book values of the relevant financial instruments are determined using recognised measurement methods. All unrealised gains or losses from measurements of this type are recognised in profit or loss just like realised gains and losses and reported in the investment income.

Valuation models

Financial instrument	Parameter	Pricing Model
Fixed-income securities		
Unlisted plain vanilla bonds, interest rate swaps	Yield curve	Present value method
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 and equity investments	Acquisition cost, cash flows, EBIT multiples, as applicable book value	Capitalised earnings method, discounted cash flow method, multiple-based approaches
Other financial assets		
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
Inflation swaps	Inflation swap rates (Consumer Price Index), historical index fixings, interest rate curve	Present value method with seasonality adjustment
Forward exchange transactions, foreign exchange swaps, non-deliverable forwards	Yield curves, spot and forward rates	Interest parity model
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

Establishment of the fair value of financial instruments carried as assets or liabilities: we establish the fair value of financial instruments carried as assets or liabilities using the methods and models described below. The fair value of a financial instrument corresponds to the amount that Hannover Re 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. Hannover Re uses a number of different valuation models for this purpose. The details are set out in the table above. 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. net asset value, the plausibility of which has previously been subjected to systematic review. For further information please see our explanatory remarks on the fair value hierarchy in section 6.1 “Investments”.

Impairments: The impairment rules set out in IFRS 9 apply to all debt instruments recognised at amortised cost or at fair value through other comprehensive income. Expected credit losses (ECL) as well as potential impairments and those actually established at the measurement date are calculated and presented in accordance with a three-stage model:

- Stage 1 consists of debt instruments in respect of which it is assumed that the credit risk has not significantly increased since initial recognition. The risk provision for such instruments is measured using, among other things, the default probabilities for the next 12 months.

- Stage 2 consists of debt instruments that are not credit-impaired, but whose credit risk has increased significantly since initial recognition. The significant increase in the credit risk is established primarily on the basis of the credit rating specific to the individual instrument or using alternative quantitative and qualitative information, a credit risk assessment and forward-looking information. The risk provision is calculated using the default probabilities for the entre remaining maturities of the instruments.
- Stage 3 consists of all debt instruments that are classified as credit-impaired.

For all three stages, the risk provision to be made and its reversal are determined at the reporting data and individually for each specific instrument. The resulting expense and income are recognised in the statement of income.

The determination of the risk provision to be made for Stages 1 and 2 is based on the potential default amount weighted by the risk of default. The following three parameters are primarily considered here:
- the probability of default (PD),
- the loss given default (LGD) and
- the exposure at default (EAD).

Year-specific probabilities of default are used for Stage 2 to establish the ECL for the entire remaining maturities of the assets. These input factors are regularly recalibrated to reflect the forecast development of macroeconomic conditions in accordance with the requirements of IFRS 9 through the use of region- and period-specific point-in-time (PIT) factors. If a debt instrument is classified as credit-impaired and hence carried in Stage 3, measurement of the risk provision is based on the fair value at the balance sheet date.

Upon acquisition, all financial instruments are initially allocated to Stage 1. In cases where the credit risk has significantly increased, they are transferred to Stage 2. Given that allocation to a stage is dependent on the rating at the time of acquisition, shares in a financial instrument acquired at different times can be allocated to both Stage 1 and Stage 2. A significant increase in the credit risk triggering the transfer from Stage 1 to Stage 2 exists if the financial instrument has a current issuer rating in the non-investment-grade range and the rating of the instrument has been downgraded at least twice since initial recognition. Hannover Re uses the optional simplification under which financial instruments with a low credit risk are not allocated to Stage 2 if they still have an investment-grade issuer rating.

The allocation of financial instruments to Stage 3, on the other hand, is made on the basis of the counterparty's default status.

If a significant increase in the credit risk exists but the financial instrument was not classified as credit-impaired, the financial instrument in question remains in Stage 2. If none of the aforementioned stage transfer criteria applies any longer and the financial instrument is not credit-impaired, it is allocated to Stage 1. In the event of credit impairment, it is allocated to Stage 3. If a previously credit-impaired financial instrument is no longer considered to be credit-impaired, it is reclassified to Stage 2 or Stage 1 depending on applicability of the stage-specific criteria.

An overview of the impairments on financial instruments can be found in section 6.1 “Investments”.

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.

Other invested assets: The other invested assets are participating interests in entities over which we are unable to exercise a significant influence or control. Subsidiaries that are not consolidated for reasons of materiality are also included in this item. These interests are normally measured at fair value in OCI.

Investments in associated companies and joint ventures are valued at equity on the basis of the proportionate shareholders’ equity attributable to the Group. Further information is provided in section 4.1 “Consolidation principles”.

Investment property is valued at cost less depreciation and impairment. Straight-line depreciation is taken over the expected useful life – at most 50 years. Under the impairment test the market value of investment property (recoverable amount) is determined using accepted valuation methods, compared with the book value and, where necessary, impairments are recognised. Maintenance costs and repairs are expensed. Value-enhancing expenditures are capitalised if they extend the useful life.

Cash and cash equivalents are carried at face value. Cash collateral that we have received for the hedging of positive fair values of derivatives is shown under other liabilities.

Repurchase agreements (repo transactions): fully collateralised, term repurchase agreements (repos) are entered into as a supplementary liquidity management tool. In this context the Group sells securities and at the same time commits to repurchase them at a later date for an agreed price. Given that the material risks and opportunities associated with the financial instruments remain within the Group, we continue to recognise these assets. The repurchase commitment arising out of the payment received is accounted for under “sundry liabilities”; any difference between the amount received for the transfer of the securities and the amount agreed for their repurchase is spread across the term of the repo using the effective interest rate method and shown in investment income.

Reinsurance recoverables on technical reserves: shares of our retrocessionaires in the technical reserves are calculated according to the contractual conditions on the basis of the gross technical reserves. An appropriate impairment is taken to allow for objective substantial indications of credit risks that are based on an event after initial recognition and suggest impairment, insofar as this can be reliably measured. For further information please refer to the subsection "Retrocession contracts" in this section.

Intangible assets: in accordance with IFRS 3 "Business Combinations" goodwill is not amortised; instead, impairments may be taken after an annual impairment test or as indicated. For the purposes of the impairment test, goodwill is to be allocated pursuant to IAS 36 "Impairment of Assets" to so-called "cash generating units" (CGUs). Each CGU to which goodwill is allocated should represent the lowest level on which goodwill is monitored for internal management purposes and may not be larger than a segment. Following allocation of the goodwill it is necessary to determine for each CGU the recoverable amount, defined as the higher of the value in use and the fair value less costs to sell. For impaired goodwill the recoverable amount is to be stated. The recoverable amount is to be compared with the book value of the CGU including goodwill. When the latter exceeds the recoverable amount, an impairment expense is to be recognised. For detailed information on the impairment method used and the goodwill recognised as at the balance sheet date, please see section 6.2 "Goodwill".

Purchased and proprietary software is recognised at acquisition cost less depreciation. Intangible assets are regularly tested for impairment and an impairment loss is recognised where necessary.

The other intangible assets include separately identifiable intangible assets in connection with business combinations, such as customer base or contractual / legal rights.

Deferred tax assets: IAS 12 "Income Taxes" requires that assets-side deferred taxes be established if assets have to be recognised in a lower amount or liabilities in a higher amount in the consolidated balance sheet than in the tax balance sheet and if these temporary differences will lead to reduced tax burdens in the future. In principle, temporary differences result from the valuation differences between the tax balance sheets drawn up in accordance with national standards and the IFRS balance sheets of the companies included in the consolidated financial statement drawn up in accordance with uniform group standards as well as from consolidation processes. Deferred tax assets and liabilities are not established if they arise out of assets or liabilities, the book value of which upon first-time recognition diverges from their initial tax base.

Deferred tax assets are also recognised on tax loss carry-forwards and tax credits. Insofar as the deferred taxes refer to items carried directly in equity, the resulting deferred taxes are also recognised directly in equity. Value adjustments are taken on deferred tax assets as soon as realisation of the receivable no longer appears likely. Deferred taxes are measured according to the tax regulations specific to the country concerned that are applicable or have been adopted as at the closing date.

Deferred tax assets may only be netted with deferred tax liabilities if an enforceable right exists to net actual tax refund claims with actual taxes owing. A precondition here is that the deferred tax assets and deferred tax liabilities refer to income taxes that are levied by the same revenue authority either for (i) the same taxable entity or for (ii) different taxable entities. In this regard, there must be an intention – in every future period in which the discharge or realisation of substantial amounts of deferred tax liabilities / deferred tax assets is to be expected – either to bring about the settlement of the actual taxes owing and refund claims on a net basis or to discharge the liabilities at the same time as the claims are realised.

Own-use real estate: the portfolio of own-use real estate is measured at cost less straight-line depreciation over a useful life of no more than 50 years. The fair values are determined for comparative purposes using the discounted cash flow method.

Right-of-use assets from lease contracts are measured at amortised cost in the amount of the initial measurement of the lease liability, adjusted for prepaid lease payments, lease incentives received, initial direct costs incurred and probable restoration costs (cf. here our comments on lease liabilities in the subsection "Financing liabilities"). Right-of-use assets are amortised on a straight-line basis over the term of the lease contract.

Other assets are accounted for at amortised cost.

Technical reserves, general measurement model – initial measurement: On initial recognition Hannover Re measures a group of reinsurance contracts as the sum of

- the fulfilment value, which is comprised of estimates of expected future cash flows, an adjustment that reflects the time value of money and the associated financial risks as well as a risk adjustment for non-financial risks, and
- the contractual service margin (CSM).

In the recognition of the corresponding technical reserves a fundamental distinction is made between a pre-claims phase (liability for remaining coverage; LRC) and a claims phase after occurrence of the insured event (liability for incurred claims; LIC).

Fulfilment value – cash flows: Components of the cash flows to be included are, among others, premium payments, payments to cedants, costs for acquisition and management of the contracts as well as for settlement of incurred claims. In this context, the cash flows included in the measurement model at each balance sheet date always constitute Hannover Re's current estimate and expectation in connection with the fulfilment of obligations.

Time value of money – discounting: Hannover Re discounts all cash flows with currency-specific, risk-free yield curves that are adjusted to reflect the respective characteristics of the cash flows and the liquidity of the underlying insurance contracts (bottom-up approach). The illiquidity premium used is based on risk-adjusted spreads of corporate and government bonds. These adjustments, which take the form of a supplementary illiquidity premium per currency, satisfy the following requirements / assumptions:

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

Risk adjustment for non-financial risk: The non-financial risk adjustment for a group of insurance contracts reflects the amount of compensation needed to carry the uncertainty surrounding the amount and timing of the cash flows that arise out of non-financial risks – such as the insurance risk itself, the cost risk and in particular the risk associated with policyholder behaviour. Hannover Re uses a “pricing margin approach” to determine the risk adjustment and regularly reviews the risk adjustment to ensure that it is always consistent with the compensation required to carry the risk. The approach refers to the fact that the question of the necessary compensation for the uncertainty of the cash flows is already answered in connection with the premium calculation. The loadings on the cash flows determined here form the risk adjustment pursuant to IFRS 17. Applying this approach and allowing for risk diversification among the companies belonging to the Hannover Re Group, the confidence level for our technical reserves at the balance sheet date is 83.1% (83.2%).

Contractual service margin (CSM): The contractual service margin defers a profit expected at the time of acquisition and spreads it according to provision of the service across the coverage period. Specifically, this means:

- If the present value of the expected cash inflows exceeds the present value of the expected cash outflows plus the risk adjustment, an expected profit exists that we recognise in the contractual service margin. Initial balance sheet recognition of contracts expected to be profitable thus has no effect on profit or loss.
- Subsequent measurement of the contractual service margin reflects the rendering of a service in the form of insurance contract service. The insurance contract service consists of the benefit paid in case of occurrence of the insured event and the policyholder's participation in income generated on the capital market through investment of paid insurance premiums. An amount is released from the CSM to profit or loss in the corresponding reporting periods as a service fee for rendering of this service and recognised in the statement of income as part of the insurance revenue. So-called “coverage units“ are used to measure this service in a reporting period.
- These coverage units are based on the quantities of benefits provided at the end of the reporting period relative to those expected to be provided over the entire contract duration in order to determine the service rendered for the period. We select the coverage units for each insurance transaction in such a way that they optimally reflect the service provided in each case.

Loss component: 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”.

General measurement model – subsequent measurement: The book value of a group of insurance contracts at each closing date is the sum of the liability for remaining coverage (LRC) and the liability for incurred claims (LIC).

- The liability for remaining coverage consists of the fulfilment value relating to future payments allocated to the group of contracts at this time as well as the CSM for the group at the closing date.
- The liability for incurred claims consists of the fulfilment value for incurred claims plus expenditures not yet paid, including claims already incurred but not yet reported.

The fulfilment value plus the estimates of current assumptions made by Hannover Re in earlier interim consolidated financial statements is updated at the end of each reporting period based on current estimates of the amount, timing and uncertainty of expected future cash flows and discount rates. Hannover Re splits the insurance finance income and expenses between P&L and OCI. Systematic allocation is ensured through use of the discount rate on initial recognition.

Changes in cash flows: Changes that relate to future payments and adjust the CSM include, among others:

- Changes to estimates of the present value of expected future cash flows in the LRC, with the exception of the changes described in the next paragraph;
- Variances between an investment component that is expected to be payable in the period and the investment component that is actually payable in the period. These variances are established through comparison (i) of the investment component actually payable in the period with (ii) the payment in the period that was expected at the beginning of the period, plus any insurance finance income or expenses in relation to the expected payment, before it becomes payable;
- Changes to the risk adjustment for non-financial risks that relate to future services;
- Experience-based adjustments due to premiums booked in the period that relate to future services, and associated cash flows such as acquisition costs and premium-based taxes.

The following changes do not result in an adjustment of the CSM and are therefore recognised directly in P&L:
- Changes in the fulfilment value due to the effects of the time value of money, the financial risks and changes in this regard;
- Changes in the fulfilment value in connection with the LIC;
- Experience-based adjustments due to premiums booked in the period that do not relate to future services, and associated cash flows such as acquisition costs and premium-based taxes;

The CSM of each group of contracts is calculated on each closing date as explained below. This means that the year-end results are not influenced by the treatment of accounting-related estimates made in earlier interim financial statements. The book value of the CSM at the closing date corresponds to the book value at the start of the year, adjusted for:
- the CSM of new contracts added to the group in the financial year;
- the interest accretion on the book value of the CSM with the interest rate determined on initial recognition (locked-in rate);
- changes in the fulfilment value connected with cash flows that relate to the fulfilment of future services. These are recognised through adjustment of the CSM for as long as the CSM is available. If an increase in the fulfilment value exceeds the CSM, the excess amount is recognised in insurance service expenses and a loss component is recognised;
- the impact of any exchange rate differences;
- the release of the CSM through insurance revenue that was calculated after allowance for all adjustments.

Retrocession contracts: The accounting policies described above are also applied as a general principle to reinsurance contracts held. Retroceded business is additionally subject to the special recognition and measurement principles described below. As with business assumed, the rules refer in each case to the aggregation level of a group of contracts:

Hannover Re reports reinsurance contracts held at the earlier of the following points in time:
- At the beginning of the coverage period of the contracts held, or
- At the time when a group of onerous underlying assumed contracts is recognised.

In the case of ceded reinsurance contracts with pro-rata coverage (predominantly proportional reinsurance), recognition does not take place until the date on which the underlying assumed contracts are recognised if this date falls after the inception of the coverage period of the ceded contracts.

On each balance sheet date Hannover Re estimates the future cash flows and their discounting based on current assumptions. The assumptions are consistent with the assumptions chosen for measurement of the underlying issued reinsurance contracts.

The risk adjustment for non-financial risk with respect to business retroceded is determined as the part of the risks effectively transferred to the retrocessionaire. In this regard, Hannover Re always strives for the greatest possible consistency with the determination of the risk adjustment for non-financial risks for the underlying gross business.

In contrast to the recognition of issued reinsurance contracts, the contractual service margin for ceded reinsurance contracts can be positive or negative.

In the case of prospective retrocession contracts, both a net profit and net costs are to be deferred on acquisition of the retrocession across the coverage period. Changes in fulfilment values are offset against the contractual service margin, insofar as these changes relate to future services. If, however, the changes in estimates are attributable to measurement adjustments to the underlying contracts recognised in profit or loss, we recognise their effect on the measurement of the ceded reinsurance contracts directly in profit or loss. This facilitates consistent mapping of the gross business with the ceded insurance contracts. The contractual service margin is spread across the remaining duration of the coverage period in the context of subsequent measurement on the basis of coverage units.

In contrast, in the case of retroactive retrocession contracts relating to insured events that occurred prior to acquisition of the retrocession, the net costs from acquisition of the retrocession are expensed in profit or loss. Expected net profits, on the other hand, are spread across the run-off period of the underlying contracts in a contractual service margin by selecting appropriate coverage units.

Loss-recovery component: Hannover Re establishes a loss-recovery component if a loss is reported für ceded gross business on account of onerous contracts. The loss component to be expensed for the gross business is thereby opposed with a loss-recovery component recognised in income proportionate to the expected relief. In this way, allowance is also made in the balance sheet for an effective retrocession and as a result only a non-reinsured loss from the gross business remains in profit and loss in the respective period. Reversals of the loss-recovery component cause the contractual service margin to be adjusted, provided these reversals do not involve changes in the fulfilment values of the group of ceded reinsurance contracts. In the context of subsequent measurement, the loss-recovery component is adjusted for changes in the loss component of the underlying reinsurance contracts. All in all, the loss-recovery component is of minor importance in Hannover Re's book of business.

Derecognition and contract modification: Contracts are derecognised when they are extinguished or their terms and condition are changed in such a way as to fundamentally impact the economic characteristics of the contractual properties. If this is not the case, the contract modification results in a change in the estimated fulfilment values.

Investment components: The investment component of an insurance contract is defined as the amount that an entity must repay to the policyholder even if the insured event does not occur. Investment components are not included in the reinsurance revenue or in the insurance service expenses, but rather are recognised in accordance with IFRS 9. Investment components include, for example, the inflows and outflows of savings elements in life primary insurance and certain commissions paid to cedants.

Provisions for pensions are established in accordance with IAS 19 "Employee Benefits" using the projected unit credit method. They are calculated according to actuarial principles and are based upon the commitments made by the Hannover Re Group for retirement, disability and widows' benefits. The amount of the commitments is determined according to length of service and salary level. The pension plans are defined benefit plans. The basis of the valuation is the estimated future increase in the rate of compensation of the pension beneficiaries. The benefit entitlements are discounted by applying the capital market rate for highest-rated securities. All changes in valuation, especially actuarial gains and losses, are captured immediately in cumulative other comprehensive income. Service cost and interest cost are recognised in the statement of income. Returns on plan assets are determined using the same interest rate as that used in the calculation of the present value of the defined benefit obligation.

Contributions to defined contribution plans are expensed when the beneficiary of the commitment has performed the work that entitles them to such contributions.

Deferred tax liabilities: in accordance with IAS 12 "Income Taxes" deferred tax liabilities must be recognised if assets are to be recognised in a higher amount or liabilities in a lower amount in the consolidated balance sheet than in the tax balance sheet and if these temporary differences will lead to additional tax loads in the future; please see our explanatory remarks on deferred tax assets.

Under the balance sheet item **Other liabilities**, we recognise not only the sundry non-technical provisions but also minority interests in partnerships. Direct minority interests in partnerships, i. e. liabilities to holders of minority shares in partnerships arising out of a long-term capital commitment which are puttable by the holder of the interest, are recognised as debt pursuant to IAS 32 and measured at amortised cost.

Sundry non-technical provisions are established according to a realistic estimate of the amount required and shown under the balance sheet item "Other liabilities". Allocation to such provisions is conditional upon the Group currently having a legal or actual obligation that results from a past event and in respect of which utilisation is probable and the amount can be reliably estimated.

Restructuring provisions are recognised if a detailed formal plan for restructuring measures exists and steps to implement it have already begun or if key details of the restructuring have been published. The provisions cover only expenditures arising directly as a consequence of restructuring that are not connected with the company's regular activities.

Partial retirement obligations are carried at present value according to actuarial principles. During the phase when the employee is still working a provision is set aside to cover the liability amounting to the working hours not yet compensated. Top-up payments are accumulated in instalments until the end of the work phase. In periods when the employee is remunerated according to the partial retirement arrangements without performing any work, the provision is released.

Share-based payments: The share-based payment models existing within the Hannover Re Group are remuneration plans with cash settlement. In accordance with the requirements of IFRS 2 "Share-based Payments", the services rendered by the eligible beneficiaries and the resulting liability are to be recognised at the fair value of the liability and expensed over the vesting period. Until settlement of the liability the fair value of the liability is remeasured at each closing date and at the settlement date. All changes in fair value are recognised in profit or loss for the period.

Financing liabilities consist of liabilities from lease contracts and above all long-term debt and notes payable. In some instances these involve subordinated liabilities that can only be satisfied after the claims of other creditors in the event of liquidation or bankruptcy. Both long-term debt and notes payable are measured at amortised cost using the effective interest rate method. The transaction costs as well as premiums / discounts arising in connection with the issuance of bonds are amortised and recognised together with the nominal interest as financing costs. **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. The discount factor used is the implicit interest rate of the lease contract or the lessee's incremental borrowing rate.

Financial liabilities including long-term debt and notes payable, insofar as they do not involve liabilities from derivatives and the financial obligations from investment contracts measured at fair value through profit or loss, are carried at amortised cost. The amortised cost is determined from the historic cost after allowance for amounts repayable, the amortisation of premiums and discounts recognised in profit and loss in accordance with the effective interest rate method and any impairment losses and reversal of impairment losses. Hannover Re measures liabilities from derivatives at fair value. Interest accretion on these financial liabilities is shown under the financing costs.

Shareholders' equity: the items "common shares" and "additional paid-in capital" are comprised of the amounts paid in by the shareholders of Hannover Rück SE on its shares. In addition to the statutory reserves of Hannover Rück SE and the allocations from net income, the retained earnings consist of reinvested profits generated by the Hannover Re Group companies in previous periods. What is more, in the event of a 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 measured at fair value through OCI are carried in cumulative other comprehensive income under unrealised gains and losses on investments. Translation differences resulting from the currency translation of separate financial statements of foreign subsidiaries are similarly recognised in OCI under cumulative foreign currency translation adjustments.

Non-controlling interests are shares in the equity of affiliated companies not held by companies belonging to the Group. IAS 1 "Presentation of Financial Statements" requires that non-controlling interests be recognised separately within Group shareholders' equity. The non-controlling interest in profit or loss is shown separately following the net income. Further information is provided in section 6.9 "Non-controlling interests".

Disclosures about financial instruments: IFRS 7 "Financial Instruments: Disclosures" requires more extensive disclosures according to classes of financial instruments. In this context, the term "class" refers to the classification of financial instruments according to their risk characteristics. A minimum distinction is required here between measurement at amortised cost or at fair value. A more extensive or divergent distinction should, however, be geared to the purpose of the corresponding disclosures in the notes. Essentially, the following classes of financial instruments are established, additionally broken down as appropriate into the underlying valuation models:

- Debt instruments (directly held)
- Equity instruments (directly held)
- Fund investments and other callable financial instruments
- Derivatives
- Other invested assets
- Short-term investments
- Real estate investments (directly held)
- Certain financial instruments in the balance sheet item "Other assets"
- Certain financial instruments in the balance sheet item "Other liabilities"
- Long-term debt
- Notes payable

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

Currency translation: financial statements of Group subsidiaries were drawn up in the currencies corresponding to the economic environment in which each subsidiary primarily operates. These currencies are referred to as functional currencies. The euro is the reporting currency in which the consolidated financial statement is prepared.

Transactions in foreign currencies reported in Group companies' individual financial statements are converted into the functional currency at the transaction rate. In accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates" the recognition of exchange differences on translation is guided by the nature of the underlying balance sheet item. Exchange differences from the translation of monetary assets and liabilities are recognised directly in the statement of income. Currency translation differences from the translation of non-monetary assets measured at fair value through the statement of income are recognised as profit or loss from fair value changes. Exchange differences from non-monetary items – such as equity securities – recognised at fair value through OCI are initially recognised outside income in a separate item of shareholders' equity and only realised in profit or loss when such non-monetary items are settled.

The method of currency translation is also relevant for groups of reinsurance contracts (GIC) formed pursuant to IFRS 17 for recognition and measurement purposes that contain contracts in different currencies. In the case of such multi-currency groups of contracts, the modelling currency of which differs from the so-called GIC currency – which reflects the dominant currency in the respective group of contracts – we use the latest exchange rates at the reporting date for conversion to the GIC currency in order to determine the effects on the CSM on the level of the group of contracts in the CSM calculation. The date when a contract is initially recognised will, however, continue to be used for future economic assumptions relating to calculations of future cash flows (such as yield curves and inflation rates) and for the discount rate itself.The Individual companies' statements of income prepared in the local currencies are converted into euro at the average rates of exchange and transferred to the consolidated financial statement. The conversion of foreign currency items in the balance sheets of the individual companies and the transfer of these items to the consolidated financial statement are effected at the mean rates of exchange on the balance sheet date. In accordance with IAS, differences from the currency translation of financial statements of foreign Group companies must be recognised in the consolidated financial statement as a separate item in shareholders' equity.

Currency translation differences resulting from long-term loans or lendings without specified maturity between Group companies are similarly recognised outside the statement of income in a separate component of shareholders' equity.

Key exchange rates

1 EUR corresponds to:	31.12.2023	31.12.2022	2023	2022
	Mean rate of exchange on the balance sheet date		Average rate of exchange	
AUD	1.6273	1.5710	1.6291	1.5188
BHD	0.4166	0.4025	0.4077	0.3985
CAD	1.4651	1.4449	1.4601	1.3763
CNY	7.8454	7.3650	7.6562	7.0861
GBP	0.8689	0.8872	0.8700	0.8538
HKD	8.6323	8.3241	8.4648	8.2743
INR	91.9631	88.3048	89.3312	82.8122
KRW	1,426.8600	1,345.4700	1,411.7731	1,352.0823
MYR	5.0776	4.7017	4.9218	4.6302
SEK	11.0896	11.1118	11.4537	10.6253
USD	1.1051	1.0675	1.0813	1.0570
ZAR	20.3788	18.0975	19.8975	17.2599

Reinsurance revenue: The Hannover Re Group books reinsurance revenue when it renders services in connection with groups of reinsurance contracts. In this context, the reinsurance revenue of the reporting period represents the sum of the changes in the LRC resulting from the rendering of services in this period for which the Hannover Re Group expects a consideration. The reinsurance revenue is defined in such a way as to bring about comparability with revenue reporting in other industries and derives from the following revenue sources:

- Expenditures incurred in the reporting period for reinsured losses and other insurance services (excluding repayments of investment components and amounts allocable to a potential loss component)
- Changes in the risk adjustment for non-financial risks in relation to services in the current reporting period.
- CSM release, measured by the coverage units provided.
- Other amounts, including experience-based adjustments to premium received for services in the current or in past periods.

No insurance revenue is recognised in the amount of the investment components because this involves those parts of the premium that are always paid back to the cedant, irrespective of whether or not the insured event occurs. At Hannover Re, this particularly includes certain commissions paid to cedants. The reduction of the revenue by the amount of the investment components has no influence on the reinsurance service result because the insurance service expenses are also correspondingly reduced.

Reinsurance service result: The reinsurance service expenses include, in particular, the incurred claims (excluding repayments of investment components) as well as the management and acquisition expenses. The acquisition expenses are allocated systematically to the respective periods of the coverage duration and recognised in the same amount as reinsurance revenue and as reinsurance service expenses. Within the reinsurance service result, the profit components from contracts retroceded are shown as separate items distinct from the gross reinsurance revenue and gross reinsurance service expenses from issued business.

In the **reinsurance finance result**, the reinsurance finance income and expenses include the effects from the discounting of the present value of net cash flows, the risk adjustment for non-financial risks and the contractual service margin. We recognise the effects of changes in interest rates, on the other hand, largely outside profit and loss in the OCI within shareholders' equity. In our consolidated statement of income we present the net reinsurance finance result both before and after currency effects. We first present the reinsurance finance result in accordance with IFRS 17 including currency effects. In order to clarify the matching currency coverage of the technical liabilities by investments, the currency effects are subsequently eliminated from the reinsurance finance result pursuant to IFRS 17 and shown separately in the net currency result.

Revenue from contracts with customers is realised when control of the promised goods or services is transferred to the customer. The amount of revenue realised corresponds to the consideration that Hannover Re expects to receive in return for the transfer of goods or services to the customer. Under its contracts that fall within the scope of application of IFRS 15 Hannover Re generally acts as a principal, because it normally controls the services or goods before transferring them to the customer.

Taxes: the taxes are comprised of the actual tax load on corporate profits of the Group companies, to which the applicable local tax rates are applied, as well as changes in deferred tax assets and liabilities. Income and expenses arising out of interest or penalties payable to the revenue authorities are shown under other income / expenses. The calculation of the deferred tax assets and liabilities is based on tax loss carry-forwards, unused tax credits and temporary differences between the book values of assets and liabilities in the consolidated balance sheet of the Hannover Re Group and their carrying amounts in the tax balance sheet. Further information on deferred taxes is provided in our remarks on deferred tax assets and liabilities.

Non-current assets held for sale and discontinued operations: in accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", non-current assets and disposal groups are classified as held for sale if the relevant book value is realised largely through sale rather than through continued use. Components of an entity that can be clearly distinguished from the rest of the entity for operational and accounting purposes and were classified as sold or for sale are recognised as discontinued operations. Measurement is at the lower of book value and fair value less costs to sell. Depreciation or amortisation is not taken on non-current assets as long as they are classified as held for sale. Impairment losses on fair value less costs to sell are recognised in profit or loss; a gain for any subsequent increase in fair value less costs to sell leads to the realisation of profit up to the amount of the cumulative impairment. If the impairment loss to be taken on a disposal group exceeds the book value of the corresponding non-current assets, the need to establish a provision within the meaning of IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" is reviewed.

3.2. Major discretionary decisions and estimates

In the consolidated financial statement, it is to some extent necessary to make estimates and assumptions which affect the assets and liabilities shown in the balance sheet, the information on contingent claims and liabilities as at the balance sheet date and the disclosure of income and expenses during the reporting period.

Risks connected with the impacts of climate change are of great significance to a reinsurance company's business model. The estimation of occurrence probabilities and loss amounts for climate-related storms, floods or droughts is a major integral component of our risk management system. It exerts a considerable influence on our underwriting policy for catastrophe-exposed risks and requires appropriate risk capital to be kept available. Physical risks such as extreme weather events and their consequences as well as long-term changes in climatic and environmental conditions, such as precipitation amounts, the rise in sea levels or the increase in average temperatures, can also affect the value of our real estate holdings or the measurement of securities in our investment portfolio.

Along with the influence of these physical risks, the measurement of our investment portfolio is also subject to transition risks as a consequence of climate change. Transition risks refer to those risks connected with the effects of climate change that result from the shift towards a low-carbon economy. This transition is substantially initiated and supported by political regulatory policies. Insofar as such regulatory measures negatively affect, for example, issuers of shares or corporate bonds in our asset portfolio, there are corresponding implications for the measurement of these instruments.

All in all, the evaluation of climate risks is considered inter alia in the context of the impairment test for non-financial assets, including goodwill pursuant to IAS 36, in the determination of the useful life and residual value of assets pursuant to IAS 16 or IAS 38, in connection with the recognition and subsequent measurement of investments pursuant to IFRS 9 as well as in the establishment of provisions and the disclosure of contingent liabilities pursuant to IAS 37.

Estimation uncertainties also arose in the reporting period in connection with the conflict in Ukraine. We conducted probability-weighted scenario analyses for all relevant lines of business, taking into consideration the market insights available to us at the present moment in time and using them to determine our reserves on the basis of our own estimates. The affected lines at the balance sheet date primarily encompass political violence and other property covers, political risk, marine and aviation. Our expenditure for this loss complex increased minimally in the year under review compared to the previous year. The range of potential loss scenarios nevertheless remains considerable and can result in significantly higher loss payments at a later point in time in the event of adverse developments not currently anticipated or unfavourable court decisions. In particular, legal uncertainties continue to surround the status of leased aircraft still in Russia. Business with Russian cedants has been discontinued in conformity with existing sanctions regulations.

The conflict in Ukraine and its impacts had implications for worldwide commodity and energy prices and hence also for inflation rates. Inflation is factored into our reserving process at least on the basis of average inflation rates in past years. Furthermore, premium calculations make allowance for realistic inflation assumptions and additional provisions are established in the reserving for individual underwriting years, thereby also enabling us to offset inflationary trends to some extent. In addition, a substantial part of the business is protected against adverse inflation effects by index clauses. Hannover Re's investment portfolio contains inflation-linked bonds which protect against some of the negative effects of inflation. A scenario analysis was carried out to ensure that adequate allowance is made for inflation in the technical reserves. The various scenarios for a future inflation trend were compared with historically observed inflation to estimate a possible impact on the technical reserves. Scenarios involving more protracted higher inflation are among those considered. Currently, it is our expectation that inflation rates will be above the targets set by central banks.

Discretionary decisions, estimates and assumptions are of considerable significance when it comes to the assets and liabilities from reinsurance contracts issued or held: the classification, the aggregation level and the measurement of reinsurance and retrocession contracts entail discretionary decisions. Depending on the assessment of whether they transfer a significant insurance risk, contracts are classified either as reinsurance or investment contracts. An appropriate aggregation level must be found because it is necessary to differentiate between contract portfolios by separating groups of contracts that are onerous upon initial recognition from those that do not have a significant probability of subsequently becoming onerous. In addition, assumptions are made and estimation uncertainties exist regarding the measurement of reinsurance and retrocession contracts. In measuring such contracts, the measurement method is to be defined that is used for estimating the risk adjustments for non-financial risks and the quantity of services to be rendered under a contract. Changes in material assumptions relating to discount rates (including illiquidity premiums), loss experience or future cash flows and differences between interest on credit balances and discount rates could result in significant changes in fulfilment values in the following financial year or in adjustment of the contractual service margin.

Supplementary or complete estimates of the corresponding profit and loss items, assets and liabilities including relevant retrocessions are made where ceding company accounts with substantial premium income are missing. Missing ceding company accounts with a low premium volume are included in the following year.

In order to measure the ultimate liability in property and casualty reinsurance the expected ultimate loss ratios are calculated for all lines. Actuarial methods such as the "chain ladder" method provide the starting point for these calculations. The realistically estimated future settlement amount is recognised in the balance sheet. The development until completion of the run-off is projected on the basis of statistical triangles from the original notifications of ceding companies. The more recent underwriting years in actuarial projections are of course subject to greater uncertainty, although this can be considerably reduced with the aid of a variety of additional information on improvements in the rates and conditions of the business written and on loss trends.

The amounts arrived at as the difference between the projected ultimate losses and the reported losses are set aside either in the IBNR reserve for losses that have been incurred but are not yet known or have still to be reported or in the liability for remaining coverage.

In applying statistical methods, separate consideration is given to large losses. By analysing a broad range of observable information it is possible to classify losses as major individual loss events. Measurement of the obligations existing in this connection is carried out using a separate process, which is based largely on contract-specific estimates.

For further particulars, including information required by IFRS 17, the reader is referred to our remarks on the underwriting risks in property and casualty reinsurance in the risk report – for example, with regard to the modelling of natural catastrophe scenarios and the assumptions relating to asbestos and pollution risks. We would further refer to our explanatory remarks on the technical reserves in section 3.1 "Summary of major accounting policies" and section 6.4 "Technical assets and liabilities".

In life and health reinsurance, too, the calculation of reserves and assets is crucially dependent on actuarial projections of the covered business. Modelling is based on policy data or so-called model points are defined according to the type of business covered. The main distinguishing criteria include, among others, the age, sex and (non-)smoker status of the insured, tariff, policy period, period of premium payment and amount of insurance. The portfolio development is simulated for each policy or each model point, in which regard the key input parameters are either predefined by the tariff (e. g. allowance for costs, amount of premium, actuarial interest rate) or need to be estimated (e. g. mortality or disability rates, lapse rates). These assumptions are heavily dependent on country-specific parameters, type of reinsurance and other framework conditions of the reinsurance treaty. Superimposition gives rise to a projection of the future cash flows of the reinsurance treaty, which incorporates inter alia assumptions concerning the portfolio composition and the commencement of covered policies within the year. Such assumptions are defined at the inception of a reinsurance treaty and subsequently adjusted to the actual development. In this context we would refer the reader to our comments on technical assets and provisions in section 3.1 ”Summary of major accounting policies”.

In determining the carrying amounts of certain financial assets it is sometimes necessary to make assumptions in order to calculate fair values and determine the risk provisioning for expected credit losses. In this regard we would refer the reader to our comments on financial instruments measured at fair value through profit or loss and on impairments in section 3.1 “Summary of major accounting policies” as well as on investment property in section 6.1 “Investments”.

4. Consolidation

4.1. Consolidation principles

Capital consolidation

The capital consolidation is carried out according to the requirements of IFRS 10 “Consolidated Financial Statements” on the basis of a consistent consolidation model for all entities that identifies control as the single basis for verifying the consolidation requirement, irrespective of whether control is substantiated in company law, contractually or economically. Group companies are consolidated from the point in time when Hannover Re gains control over them. Control exists if Hannover Re directly or indirectly has decision-making power over a Group company on the basis of voting rights or other rights, if it has exposure or rights to positive and negative variable returns from its involvement with the Group company and if it can use its power to influence these returns. All of these criteria must be met. Other circumstances may also give rise to control, for example the existence of a principal-agent relationship. In this case a party outside the Group with decision-making powers (agent) acts for Hannover Re, but does not control the company since it merely exercises decision-making powers that have been delegated by Hannover Re (principal). These principles are also applied to structured entities, on which further information is provided in section 4.2 “Consolidated companies and complete list of shareholdings”. Group companies are consolidated until the Hannover Re Group loses control over them. If investments in subsidiaries are retained and a loss of control exists, measurement effects recognised for these subsidiaries in the other reserves in conformity with IFRS 10 are entirely released to profit or loss rather than merely pro rata in the amount of the interests disposed of. The accounting policies of Group companies are adjusted, where necessary, in order to ensure consistent application of the Hannover Re Group’s accounting policies.

The capital consolidation is based on the acquisition method. Goodwill derives from the acquisition of subsidiaries and corresponds to the sum of the consideration rendered, the amount of all non-controlling interests in the acquired company and the fair value of the equity interests previously held in the acquired company less the fair value of the acquired net assets. Under IFRS 3 goodwill is not amortised, but instead impairment is taken where necessary on the basis of annual impairment tests. Immaterial and negative goodwill are recognised in the statement of income in the year of their occurrence. Costs associated with acquisition are expensed.

Companies over which Hannover Re is able to exercise a significant influence or whose relevant activities can only be decided with the unanimous approval of the parties sharing control and in which we only have rights to the net assets are included as associated companies or joint ventures using the equity method of accounting. Under this method, we measure investments in associated companies and joint ventures with the proportion of the equity attributable to the Group. In accordance with the equity method of accounting required by IAS 28 ”Investments in Associates and Joint Ventures”, the goodwill attributable to associated companies and joint ventures is recognised together the carrying amount of the investments in associated companies and joint ventures. The share of the year-end result of an associated company or joint venture relating to the Group is included in the investment income and recognised separately in the consolidated statement of income. The equity and result are taken from the last available financial statement of the associated company or joint venture.

A significant influence is presumed to exist if a company belonging to the Hannover Re Group directly or indirectly holds at least 20% – but no more than 50% – of the voting rights. We also derive evidence of significant influence over an associated company from representation on a governing body of such entity, participation in its policy-making processes – e. g. with respect to dividends or other distributions –, the existence of material inter-company transactions, the possibility of interchanging managerial personnel or the provision of key technical information for the entity. Further particulars on companies consolidated using the equity method of accounting are provided in the subsection “Associated companies and joint ventures” in section 6.1 “Investments”.

Only subsidiaries which are of minor importance – both individually and as a whole – for the net assets, financial position and results of operations of the Hannover Re Group are exempted from consolidation. Hannover Re assesses whether a subsidiary is of minor importance on the basis of the company's total assets and net income relative to the corresponding values for the Group as a whole on average over the last three years. For this reason, 14 (13) companies at home and abroad were not consolidated in the year under review. A further 3 (3) individual companies were not included at equity in the consolidated financial statement for the same reason. The business object of these altogether 17 (16) companies is for the most part the rendering of services for reinsurance companies within the Group.

Consolidation of business transactions within the Group

Receivables and liabilities between the companies included in the consolidated financial statement were offset against each other. Profits and expenses from business transactions within the Group were also eliminated. Transactions between a disposal group and the continuing operations of the Group were similarly eliminated in accordance with IFRS 10.

4.2. Consolidated companies and complete list of shareholdings

In addition to Hannover Rück SE as the parent company of the Group, the scope of consolidation of the Hannover Re Group encompasses the companies listed in the table below:

Information on subsidiaries

Scope of consolidation

Number of companies	2023	2022
Consolidated companies (Group companies)		
Germany	12	11
Abroad	118	113
Total	**130**	**124**
Companies included at equity		
Germany	3	3
Abroad	2	4
Total	**5**	**7**

Altogether eight companies were newly added to the scope of consolidation in the financial year just ended, while two companies were removed from the scope of consolidation.

Information on the non-controlling interests in shareholders' equity and profit or loss as well as on the major non-controlling interests is provided in section 6.9 “Non-controlling interests”. On the balance sheet date there were no significant restrictions on access to or the use of Group assets due to protective rights in favour of non-controlling interests.

The sale or transfer of shares of E+S Rückversicherung AG takes place by way of an endorsement and is permissible only with the approval of the company's Supervisory Board. The Supervisory Board enjoys the right to grant or deny approval unconditionally, without being obliged to state reasons in the event of denial.

National provisions of company law or requirements of supervisory law may in certain countries limit the ability of the Hannover Re Group to transfer assets between companies belonging to the Group. These limitations result principally from local minimum capital and solvency requirements as well as to a lesser extent from foreign exchange restrictions.

List of shareholdings

The following information is the list of shareholdings in accordance with § 313 Para. 2 German Commercial Code (HGB). We make use of the exemptions pursuant to § 313 Para. 3 German Commercial Code (HGB). The stipulations of IFRS 12.10 and IFRS 12.21 have also been observed. With regard to the major acquisitions and disposals in the year under review, please see our remarks in the following subsections of this section.

List of shareholdings

Name and registered office of the company	Proportionally calculated participation in %
Domestic companies	
Affiliated consolidated companies	
Hannover Rück Beteiligung Verwaltungs-GmbH, Hannover, Germany	100.00
FUNIS GmbH & Co. KG, Hannover, Germany	100.00
Hannover Re Global Holding GmbH, Hannover, Germany	98.24
Hannover RE AA PE Partners III GmbH & Co. KG, Hannover, Germany	98.24
Hannover Re Global Alternatives GmbH & Co. KG, Hannover, Germany	94.72
Hannover Re Euro PE Holdings II GmbH & Co. KG, Hannover, Germany	94.01
Hannover Re Euro RE Holdings GmbH, Hannover, Germany	87.68
cor F 25. GmbH & Co.KG, Berlin, Germany	87.68
HR GLL Central Europe GmbH & Co. KG, Munich Germany	87.67
HR GLL Central Europe Holding GmbH, Munich, Germany	87.67
HR AI Komplementär GmbH, Hannover, Germany	82.40
E+S Rückversicherung AG, Hannover, Germany	64.79
Affiliated non-consolidated companies	
HILSP Komplementär GmbH, Hannover, Germany	100.00
mertus 313. GmbH, Frankfurt a.M., Germany	87.68
Associated companies	
Joint HR MR Private Equity GmbH, Munich, Germany	46.95
WeHaCo Unternehmensbeteiligungs-GmbH, Hannover, Germany	32.96
HANNOVER Finanz GmbH, Hannover, Germany	27.78
Other participations	
PT Beteiligungs GmbH, Hannover, Germany	27.65
Hannover America Private Equity Partners II GmbH & Co. KG, Hannover, Germany[1]	13.79
Hannover Re Euro PE Holdings GmbH & Co. KG, Hannover, Germany[1]	13.18
Neue SEBA Beteiligungsgesellschaft mbH, Nuremberg, Germany	14.36
Internationale Schule Hannover Region GmbH, Hannover, Germany	9.17
FinLeap GmbH, Berlin, Germany	8.41
VST Gesellschaft für Versicherungsstatistik mit beschränkter Haftung, Hannover, Germany	5.89
ELEMENT Insurance AG, Berlin, Germany	0.08
Foreign companies	
Affiliated consolidated companies	
Hannover Finance (Luxembourg) S.A., Röser, Luxembourg	100.00
Hannover Finance (UK) Limited, London, United Kingdom	100.00
Hannover Re Holdings (UK) Limited., London, United Kingdom	100.00
Hannover Life Reassurance Company of America, Orlando, USA	100.00
Hannover Life Reassurance Company of America (Bermuda) Ltd., Hamilton, Bermuda	100.00
Hannover Re (Ireland) Designated Activity Company, Dublin, Ireland	100.00

Name and registered office of the company	Proportionally calculated participation in %
Hannover Life Re of Australasia Ltd, Sydney, Australia	100.00
Hannover Re (Bermuda) Ltd., Hamilton, Bermuda	100.00
Hannover ReTakaful B.S.C. (c), Manama, Bahrain	100.00
Hannover Services (UK) Limited, London, United Kingdom	100.00
Inter Hannover (No. 1) Limited, London, United Kingdom	100.00
Integra Insurance Solutions Limited, Bradford, United Kingdom	100.00
Argenta Holdings Limited, London, United Kingdom	100.00
Argenta Private Capital Limited, London, United Kingdom	100.00
APCL Corporate Director No.1 Limited, London, United Kingdom	100.00
APCL Corporate Director No.2 Limited, London, United Kingdom	100.00
Fountain Continuity Limited, Edinburgh, United Kingdom	100.00
Names Taxation Service Limited, London, United Kingdom	100.00
Argenta Secretariat Limited, London, United Kingdom	100.00
Argenta Continuity Limited, London, United Kingdom	100.00
Argenta Employee LLP, London, United Kingdom	100.00
Argenta General Partner Limited, Edinburgh, United Kingdom	100.00
Argenta General Partner II LLP, Edinburgh, United Kingdom	100.00
Argenta LLP Services Limited, London, United Kingdom	100.00
Argenta SLP Continuity Limited, Edinburgh, United Kingdom	100.00
Argenta Syndicate Management Limited, London, United Kingdom	100.00
Argenta Tax & Corporate Services Limited, London, United Kingdom	100.00
Argenta Underwriting No.1 Limited, London, United Kingdom	100.00
Argenta Underwriting No.2 Limited, London, United Kingdom	100.00
Argenta Underwriting No.3 Limited, London, United Kingdom	100.00
Argenta Underwriting No.4 Limited, London, United Kingdom	100.00
Argenta Underwriting No.7 Limited, London, United Kingdom	100.00
Argenta Underwriting No.9 Limited, London, United Kingdom	100.00
Argenta Underwriting No.10 Limited, London, United Kingdom	100.00
Argenta Underwriting No.11 Limited, London, United Kingdom	100.00
Residual Services Corporate Director Limited, London, United Kingdom[2]	100.00
Residual Services Corporate Director Limited, London, United Kingdom	100.00
Argenta Underwriting Asia Pte. Ltd., Singapore, Singapore	100.00
Glencar Underwriting Managers, Inc., Chicago, USA	100.00
Glencar Insurance Company, Orlando, USA	100.00
Kubera Insurance (SAC) Ltd, Hamilton, Bermuda	100.00
Leine Investment General Partner S.à r.l., Luxembourg, Luxembourg	100.00
Leine Investment SICAV-SIF, Luxembourg, Luxembourg	100.00
LI RE, Hamilton, Bermuda	100.00
Fracom FCP, Paris, France[3]	100.00
Hannover Finance, Inc., Wilmington, USA	100.00
Sand Lake Re, Inc., Burlington, USA	100.00
Hannover Reinsurance Group Africa (Pty) Ltd., Johannesburg, South Africa	100.00
Hannover Re South Africa Limited, Johannesburg, South Africa	100.00
Hannover Africa Limited, Johannesburg, South Africa[4]	100.00

Name and registered office of the company	Proportionally calculated participation in %
Compass Insurance Company Limited, Johannesburg, South Africa	100.00
Annuity Reinsurance Cell A1, Hamilton, Bermuda	100.00
Argenta Underwriting (Europe) Limited, Dublin, Ireland	100.00
Argenta International Limited, London, United Kingdom	100.00
Hannover Re Real Estate Holdings, Inc., Orlando, USA	95.25
HR US Infra Equity LP, Wilmington, USA	95.24
320AUS LLC, Wilmington, USA	95.15
GLL HRE CORE Properties, L.P., Wilmington, USA	95.15
101BOS LLC, Wilmington, USA	95.15
402 Santa Monica Blvd, LLC, Wilmington, USA	95.15
111ORD LLC, Wilmington, USA	95.15
140EWR LLC, Wilmington, USA	95.15
7550IAD LLC, Wilmington, USA	95.15
Nashville West, LLC, Wilmington, USA	95.15
590ATL LLC, Wilmington, USA	95.15
975 Carroll Square, LLC, Wilmington, USA	95.15
Broadway 101, LLC, Wilmington, USA	95.15
River Terrace Parking, LLC, Wilmington, USA	95.15
3290ATL LLC, Wilmington, USA	95.15
1600FLL LLC, Wilmington, USA	95.15
2530AUS LLC, Wilmington, USA	95.15
7550BWI LLC, Wilmington, USA	95.15
7659BWI LLC, Wilmington, USA	95.15
7653BWI LLC, Wilmington, USA	95.15
HRE Core Properties Chile Holding SpA, Santiago, Chile	95.15
Apoquindo CL SpA, Santiago, Chile	95.15
Apoquindo 5400 Chile Holding S.A., Santiago, Chile	95.15
Magdalena CL SpA, Santiago, Chile	95.15
Magdalena Chile Holding S.A., Santiago, Chile	95.15
Ombú CL SpA, Santiago, Chile	95.15
Ombú Chile Holding S.A., Santiago, Chile	95.15
1375MCO LLC, Wilmington, USA	95.15
PLC Elite Mexico Logistics, S. de R.L. de C.V., Mexico City, Mexico	95.15
11809AUS LLC, Wilmington, USA	95.15
M8 Property Trust , Sydney, Australia	94.72
Markham Real Estate Partners (KSW) Pty Limited, Sydney, Australia	94.72
PAG Real Estate Asia Select Fund Limited, George Town, Cayman Islands	94.72
Ubitech Hub Pte. Ltd., Singapore, Singapore	94.72
ASF Spectrum Limited, George Town, Cayman Islands	94.72
CC Aeolus Pte. Ltd., Singapore, Singapore	94.72
CC Anchor Pte. Ltd., Singapore, Singapore	94.72
HR US Infra Debt LP, George Town, Cayman Islands	94.71
Peace G.K., Tokyo, Japan	93.77
Morea Limited Liability Company, Tokyo, Japan	93.77

Name and registered office of the company	Proportionally calculated participation in %
Rocky G.K., Tokyo, Japan	93.77
Kaith Re Ltd., Hamilton, Bermuda	90.40
Star Grafton One S.à r.l., Luxembourg, Luxembourg	87.68
Highgate sp. z o.o., Warsaw, Poland	87.67
3541 PRG s.r.o., Prague, Czech Republic	87.67
HR GLL Liberty Corner SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ, Warsaw, Poland	87.67
HR GLL Griffin House SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ, Warsaw, Poland	87.67
92601 BTS s.r.o., Bratislava, Slovakia	87.67
Akvamarín Beta s.r.o., Prague, Czech Republic	87.67
HR GLL Europe Holding S.à r.l., Luxembourg, Luxembourg	87.67
HR GLL CDG Plaza S.r.l., Bucharest, Romania	87.67
193 BCN, S.L., Madrid, Spain	87.67
Callisto, Milan, Italy	87.67
Bowen Investment Limited Partnership, Auckland, New Zealand	75.77
Commercial & Industrial Acceptances (Pty) Ltd., Johannesburg, South Africa	74.80
Lireas Holdings (Pty) Ltd., Johannesburg, South Africa	70.00
MUA Insurance Acceptances (Pty) Ltd., Cape Town, South Africa	70.00
Firedart Engineering Underwriting Managers (Pty) Ltd., Johannesburg, South Africa	70.00
Film & Entertainment Underwriters SA (Pty) Ltd., Johannesburg, South Africa	70.00
Transit Underwriting Managers (Pty) Ltd., Durban, South Africa	63.00
Garagesure Consultants and Acceptances (Pty) Ltd., Johannesburg, South Africa	63.00
Hospitality Industrial and Commercial Underwriting Managers (Pty) Ltd., Johannesburg, South Africa	59.50
Landmark Underwriting Agency (Pty) Ltd., Bloemfontein, South Africa	45.85
Real Assist (Pty) Ltd., Pretoria, South Africa	38.15
Affiliated non-consolidated companies	
HR Hannover Re, Correduría de Reaseguros, S.A., Madrid, Spain	100.00
Hannover Re Services Japan, Tokyo, Japan	100.00
Hannover Re Consulting Services India Private Limited, Mumbai, India	100.00
Hannover Services (México) S.A. de C.V., Mexico City, Mexico	100.00
Hannover Re Services USA, Inc., Itasca, USA	100.00
Hannover Mining Engineering Services LLC, Itasca, USA	100.00
Hannover Rück SE Escritório de Representação no Brasil Ltda., Rio de Janeiro, Brazil	100.00
Hannover Re Risk Management Services India Private Limited, New Delhi, India	100.00
Dynastic Underwriting Limited, London, United Kingdom	100.00
Bristol Re Ltd., Hamilton, Bermuda	100.00
Hannover Re Services Italy S.r.l., Milan, Italy	100.00
Inter Hannover (No.2) Limited, London, United Kingdom	100.00
Associated companies and joint ventures	
Clarendon Transport Underwriting Managers (Pty) Ltd., Johannesburg, South Africa	22.87
Monument Insurance Group Limited, Hamilton, Bermuda[5]	20.00
Monument Midco Limited, Hamilton, Bermuda[5]	15.20
Other participations	
Reaseguradora del Ecuador S.A., Guayaquil, Ecuador	30.00
Investsure Technologies Proprietary Limited, Johannesburg, South Africa[4]	26.35

Name and registered office of the company	Proportionally calculated participation in %
Kopano Ventures (Pty) Ltd, Johannesburg, South Africa[4]	20.34
FLS Group AG, Baar, Switzerland	19.73
Trinity Underwriting Managers Ltd., Toronto, Canada	19.70
Meribel Mottaret Limited, St. Helier, Jersey	18.96
YOUPLUS Holding AG, Freienbach, Switzerland	15.00
Mosaic Insurance Holdings Limited, Hamilton, Bermuda	14.18
Inqaku FC (Pty) Ltd, Port Elizabeth, South Africa	10.56
Sureify Labs, Inc., Wilmington, USA	10.01
Acte Vie S.A., Schiltigheim, France	9.38
Different Technology (Pty) Ltd, Johannesburg, South Africa	8.61
BriteCo Inc., Dover, USA	8.14
Pineapple Tech (Pty) Ltd, Johannesburg, South Africa	7.28
Centaur Animal Health, Inc., Olathe, USA	6.90
Somerset Holdings International Ltd., Hamilton, Bermuda	5.25
Liberty Life Insurance Public Company Ltd, Nicosia, Cyprus	3.30
LifeQ Global Limited, Dublin, Ireland[1]	1.71
B3i Services AG, Zürich, Switzerland[4]	1.46

[1] Further shares are held through Joint HR MR Private Equity GmbH.

[2] The company holds 45 subsidiaries with capital and reserves of altogether EUR 0.7 million.

[3] Investment fund

[4] The company is in liquidation.

[5] The company is included in measurement at equity through a consolidated financial statement.

Material branches within the Group

Hannover Rück SE maintains branches that are listed below according to the amount of reinsurance revenue in the current financial year.

Material branches within the Group

Group Company/Branch	Reinsurance revenue [1]		Net income [1]	
Figures in EUR million	2023	2022	2023	2022 [2]
Hannover Rück SE				
Hannover Rück SE Shanghai Branch, Shanghai, China	1,136.7	1,250.3	-55.3	-131.4
Hannover Rueck SE Malaysian Branch, Kuala Lumpur, Malaysia	819.9	712.6	7.2	46.9
Hannover Rueck SE Australian Branch, Sydney, Australia	674.6	453.3	53.0	31.2
Hannover Rück SE Canadian Branch, Toronto, Canada	636.7	508.5	97.8	106.0
Hannover Rück SE Succursale Francaise, Paris, France	501.1	508.9	83.8	35.8
Hannover Re UK Life Branch, London, United Kingdom	418.9	417.8	45.1	83.7
Hannover Rück SE, Tyskland Filial, Stockholm, Sweden	289.4	274.4	39.0	-32.3
Hannover Rück SE, Hong Kong Branch, Wanchai, Hong Kong	217.7	269.1	6.6	-10.2
Hannover Rück SE - India Branch, Mumbai, India	139.0	38.5	16.7	17.5
Hannover Rueck SE Bahrain Branch, Manama, Bahrain	115.2	123.1	27.0	24.7
Hannover Rück SE Korea Branch, Seoul, South Korea	12.4	18.6	1.9	6.4

[1] IFRS figures before consolidation.
[2] Restated according to IAS 8

In addition, other companies belonging to the Hannover Re Group maintain further branches that both individually and collectively are to be classified as immaterial to the Group.

Consolidation of structured entities

Business relations with structured entities are to be examined in accordance with IFRS 10 with an eye to their implications for consolidation. In the context of their operational activities some companies belonging to the Hannover Re Group enter into business relations with structured entities that are to be analysed and accounted for according to these new provisions.

Structured entities are entities designed in such a way that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. A structured entity frequently has some or all of the following features or attributes:

- restricted activities;
- a narrow and well-defined business objective;
- insufficient equity to allow it to finance its activities without subordinated financial support;
- financing in the form of multiple contractually linked instruments issued to investors that create concentrations of credit or other risks (tranches)

In accordance with the consistent consolidation model, a structured entity – just like a subsidiary – must be consolidated if Hannover Re gains control over the said entity. With regard to the criteria for control please see also section 4.1 “Consolidation principles”. Within the Hannover Re Group the requirement to consolidate structured entities is examined as part of an analysis that encompasses both transactions in which a structured entity is initiated by us with or without the involvement of third parties and those in which we enter into contractual relations with an already existing structured entity with or without the involvement of third parties. Consolidation decisions are reviewed as necessary and at least once a year. The list of all consolidated structured entities forms part of the list of shareholdings.

Consolidated structured entities

The following structured entities were consolidated as at the balance sheet date:

- Kaith Re Ltd., Hamilton, Bermuda
- Kubera Insurance (SAC) Ltd, Hamilton, Bermuda
- LI RE, Hamilton, Bermuda

Kaith Re Ltd. is a so-called segregated accounts company (SAC), the sole object of which is the securitisation of reinsurance risks in the form of investment products. Under this transformation a complete underwriting risk transfer always takes place to the investor in question. In a SAC further segregated accounts exist under a general account; it is in these segregated accounts, which for liability purposes are entirely separate from one another and from the general account, that the aforementioned securitisations take place for the investors.

Kubera Insurance (SAC) Ltd is similarly a segregated accounts company, the object of which is to establish segregated accounts that are made available to non-Group companies for structured finance transactions.

Pursuant to IFRS 10 we consider the general account and the segregated accounts to be separate units to which the principles of so-called "silo accounting" are applied. In accordance with this concept, Hannover Re is required to consolidate the general account of Kaith Re Ltd. and Kubera Insurance (SAC) Ltd and is contractually responsible for the fees due to external service providers that are to be covered from the general account's own funds. Each individual segregated account is to be examined separately with an eye to a consolidation requirement and consolidated according to the particular contractual arrangements in each case.

LI RE is a segregated account of Kaith Re Ltd., the purpose of which – as with all segregated accounts under Kaith Re Ltd. – is the securitisation of underwriting risks. In contrast to the other segregated accounts, the sole investor and hence the risk carrier of LI RE is the Hannover Re Group through its subsidiary Leine Investment SICAV-SIF, Luxembourg.

As at the balance sheet date Hannover Re had not rendered any financial or other support for a consolidated structured entity. Hannover Re does not intend to render financial or other support for one or more of such entities without being contractually required to do so

Unconsolidated structured entities

The business relations of Hannover Re Group companies with structured entities set out below do not give rise to consolidation because the criteria for control pursuant to IFRS 10 contained in our consolidation principles are not met.

Investing activities and investments in catastrophe bonds (ILS)

Within the scope of its investment activities Hannover Re participates inter alia in numerous structured entities. These are predominantly special purpose entities in the form of funds, which for their part transact certain types of equity and debt capital investments. These investments encompass private equity funds, fixed income funds, collateralised debt obligations, real estate funds, index funds and other public funds. The volume of these transactions is derived from the book values of the respective investments and amounted to EUR 3,124.2 million (EUR 2,729.6 million) as at the balance sheet date. The maximum risk of loss corresponds to the book values.

Hannover Re participates through its subsidiary Leine Investment SICAV-SIF, Luxembourg, in a number of structured entities that issue catastrophe bonds for the securitisation of catastrophe risks by investing in such bonds. Leine Investment General Partner S.à.r.l. is the managing partner of the asset management company Leine Investment SICAV-SIF, the business object of which is to build, hold and manage a portfolio of insurance-linked securities (catastrophe bonds) – including for third-party investors outside the Group. The volume of these transactions is derived from the book values of the respective investments and amounted to EUR 157.4 million (EUR 125.5 million) as at the balance sheet date. The maximum risk of loss corresponds to the book values.

Retrocession and securitisation of reinsurance risks

The securitisation of reinsurance risks takes place largely through the use of structured entities.

By way of its “K” transactions Hannover Re has raised underwriting capacity for catastrophe risks on the capital market. The “K Cession”, which was placed with investors in North and South America, Europe and Asia, involves a quota share cession on worldwide natural catastrophe business as well as aviation and marine risks. Of the total volume of the “K Cession”, a large part equivalent to EUR 646.8 million (EUR 370.0 million) was securitised via structured entities as at the balance sheet date. The transaction has an indefinite term and can be cancelled annually by the investors. Segregated accounts of Kaith Re Ltd. are used for transformer purposes for part of this transaction. Hannover Re also uses further segregated accounts of Kaith Re Ltd. and other structured entities outside the Group for various retrocessions of both its traditional and ILS covers, which in each case are passed on to institutional investors in securitised form. The volume of these transactions is measured by the ceded exposure limit of the underlying retrocession agreements and amounted to altogether EUR 6,789.5 million EUR (5,988.9 million) as at the balance sheet date. The structured entities are in all cases fully funded by contractually defined investments in the form of cash and equivalent liquid assets. Given that the entire exposure limit of the structured entities is therefore wholly collateralised in each case, there is no risk of loss for Hannover Re.

Collateralised fronting (ILS)

As part of its extended insurance-linked securities (ILS) activities, Hannover Re has concluded so-called collateralised fronting arrangements under which risks assumed from ceding companies are passed on to institutional investors outside the Group using structured entities. The purpose of such transactions is to directly transfer clients’ business. The volume of the transactions is derived from the ceded exposure limit of the underlying retrocession agreements and amounted to EUR 6,278.0 million (EUR 6,182.7 million) as at the balance sheet date. Part of the ceded exposure limit is funded and collateralised by contractually defined investments in the form of cash and equivalent liquid assets; a further part remains uncollateralised or is collateralised by less liquid assets. The maximum risk of loss from the uncollateralised exposure limit amounted to EUR 1,851.2 million (EUR 1,864.8 million) as at the balance sheet date. This does not, however, correspond to the economic risk of loss, which is established using recognised actuarial methods. The expected loss on a modelled basis in a worst-case scenario of 10,000 years amounts to at most EUR 42.8 million (EUR 43.7 million).

The book values of the assets and liabilities from the specified transactions with unconsolidated structured entities were as follows as at the balance sheet date:

Book values from business relations with unconsolidated structured entities

in EUR million	31.12.2023 General investing activities	Investment in catastrophe bonds (ILS)	Retrocession incl. securitisations and ILS transactions
Assets			
Financial investments – at fair value through OCI	1,725.1	–	–
Financial investments – at fair value through profit or loss	1,399.1	157.4	–
Other invested assets	–	–	–
Reinsurance recoverables on liability for incurred claims	–	–	710.3
Reinsurance recoverables on liability for remaining coverage	–	–	-524.6
Total assets	**3,124.2**	**157.4**	**185.7**
Liabilities			
Reinsurance contracts ceded in a liability position	–	–	297.6
Total liabilities	**–**	**–**	**297.6**

in EUR million	31.12.2022 [1] General investing activities	Investment in catastrophe bonds (ILS)	Retrocession incl. securitisations and ILS transactions
Assets			
Financial investments – at fair value through OCI	1,457.2	–	–
Financial investments – at fair value through profit or loss	1,272.4	125.5	–
Other invested assets	–	–	–
Reinsurance recoverables on liability for incurred claims	–	–	960.9
Reinsurance recoverables on liability for remaining coverage	–	–	-208.6
Total assets	**2,729.6**	**125.5**	**752.3**
Liabilities			
Reinsurance contracts ceded in a liability position	–	–	227.6
Total liabilities	**–**	**–**	**227.6**

[1] Restated pursuant to IAS 8

The income and expenses from business relations with unconsolidated structured entities are shown in investment income insofar as they result from general investment activities or investments in catastrophe bonds and are recognised in the technical account insofar as they are attributable to retrocessions and securitisations.

As at the balance sheet date Hannover Re had not rendered any financial or other support for an unconsolidated structured entity. Hannover Re does not intend to render financial or other support for one or more of such entities without being contractually required to do so.

Kubera Insurance (SAC) Ltd established a segregated account that gathered investor capital by means of issued bonds and was made available to an Australian intermediary of insurance business under a swap agreement for the financing of the latter's business. Repayment of the bonds is contingent on the development of the intermediary's business. Hannover Re is an investor in this bond through one of its subsidiaries along with other external parties. The segregated account can be used flexibly for additional rounds of financing. Hannover Re is not the owner of the segregated account.

With regard to commitments and obligations that we do not consider to be support, particularly outstanding capital commitments from special investments, please see our remarks in section 9.7 "Contingent liabilities and commitments".

4.3. Major acquisitions and new formations

No major acquisitions occurred in the 2023 financial year.

4.4. Major disposals and retirements

No major disposals occurred in the 2023 financial year.

5. Segment reporting

Based on the "management approach" of IFRS 8, which requires segment information to be presented as it is reported internally to management and normally used by the chief operating decision maker to decide upon the allocation of resources to a segment and evaluate its performance, Hannover Re has identified the reportable segments of property & casualty reinsurance and life & health reinsurance. With regard to the object of business operations within the two segments please see our explanatory remarks on Hannover Re's business model in the management report. The report on economic position contains remarks on the economic environment in which the Group operates.

The segment information shown has been restated to reflect the new measurement principles of IFRS 9 and IFRS 17 as well as the modified presentation in the consolidated balance sheet and statement of income and it follows the system used for internal reporting purposes, on the basis of which the full Executive Board regularly evaluates the performance of segments and decides on the allocation of resources to them.

The "Consolidation" column includes not only the elimination of cross-segment transactions but also, more significantly, companies whose business operations cannot be unambiguously allocated to property and casualty reinsurance or life and health reinsurance. These are principally the service and financing companies belonging to the Group.

During the financial year no material changes occurred in the organisational structure that could have influenced the composition of the segments. Since the performance indicators used to steer the segments correspond to the system according to which the consolidated financial statement is prepared, a separate reconciliation of the segment results with the Group result is not provided.

There is no cross-segment gross reinsurance revenue between the segments of property & casualty reinsurance and life & health reinsurance. To this extent, the reinsurance revenue shown involves exclusively amounts from business with external third parties.

Consolidated segment report

Segmentation of assets	Property and casualty reinsurance	
in EUR million	31.12.2023	31.12.2022 [1]
Assets		
Financial investments – at fair value through OCI	39,841.3	36,712.7
Financial investments – at fair value through profit or loss	3,458.1	2,436.9
Investment property	2,536.5	2,319.3
Investments in associated companies and joint ventures	1,974.3	1,972.5
Other invested assets	505.1	434.5
Total investments	**48,315.4**	**43,875.9**
Reinsurance recoverables on liability for incurred claims	1,890.4	2,269.6
Reinsurance recoverables on liability for remaining coverage	-555.0	-100.9
Recoverables on reinsurance contracts retroceded	**1,335.3**	**2,168.7**
Reinsurance contracts issued in an asset position	153.8	318.9
Cash and cash equivalents	698.8	1,129.0
Other segment assets	3,778.9	3,756.3
Total segment assets	**54,282.2**	**51,248.8**
Deferred tax assets and tax receivables		
Total assets		

Segmentation of liabilities		
in EUR million		
Liabilities		
Liability for incurred claims (LIC)	37,421.0	34,571.6
Liability for remaining coverage (LRC)	-2,155.6	-2,162.3
Liabilities from reinsurance contracts issued	**35,265.4**	**32,409.3**
Reinsurance contracts retroceded in a liability position	417.2	221.0
Financing liabilities	849.0	982.6
Other segment liabilities	2,163.4	1,926.1
Total segment liabilities	**38,695.1**	**35,539.0**
Taxes		
Deferred tax liabilities		
Total liabilities		

[1] Restated pursuant to IAS 8

Life and health reinsurance		Consolidation		Total	
31.12.2023	31.12.2022 [1]	31.12.2023	31.12.2022 [1]	31.12.2023	31.12.2022 [1]
10,748.6	10,200.7	29.2	28.4	50,619.1	46,941.9
494.9	709.9	1.2	0.6	3,954.1	3,147.4
–	–	–	–	2,536.5	2,319.3
81.9	90.5	–	–	2,056.2	2,063.0
457.8	379.0	–	–	963.0	813.5
11,783.1	**11,380.1**	**30.4**	**29.1**	**60,128.9**	**55,285.1**
341.0	131.9	–	–	2,231.4	2,401.5
-150.5	289.0	–	–	-705.5	188.0
190.6	**420.9**	**–**	**–**	**1,525.9**	**2,589.6**
866.0	1,129.2	–	–	1,019.8	1,448.1
350.0	187.9	6.0	6.3	1,054.8	1,323.2
809.2	375.3	-2,617.5	-2,438.8	1,970.5	1,692.7
13,998.9	**13,493.3**	**-2,581.1**	**-2,403.4**	**65,699.9**	**62,338.6**
				787.4	620.6
				66,487.3	**62,959.2**

8,793.1	8,353.9	–	–	46,214.1	42,925.4
180.9	1,005.8	–	–	-1,974.7	-1,156.5
8,974.0	**9,359.6**	**–**	**–**	**44,239.4**	**41,769.0**
281.7	335.7	–	–	698.9	556.7
31.3	37.5	3,995.2	4,490.3	4,875.5	5,510.4
3,765.4	3,301.3	-2,597.9	-2,412.5	3,330.8	2,814.8
13,052.3	**13,034.1**	**1,397.2**	**2,077.7**	**53,144.6**	**50,650.9**
				225.9	172.8
				2,097.3	2,178.6
				55,467.8	**53,002.3**

Consolidated segment report

Segment statement of income	Property and casualty reinsurance	
in EUR million	1.1.–31.12.2023	1.1. - 31.12.2022 [1]
Reinsurance revenue (gross)	16,823.9	16,264.9
Reinsurance service expenses (gross)	14,088.4	15,113.4
Reinsurance service result (gross)	**2,735.5**	**1,151.4**
Reinsurance revenue (retroceded)	2,626.4	1,767.6
Reinsurance service expenses (retroceded)	739.4	1,417.5
Result from reinsurance contracts (retroceded)	**-1,887.0**	**-350.1**
Reinsurance service result (net)	**848.5**	**801.3**
Reinsurance finance result (net) before currency gains/losses	-722.0	-475.2
Investment result	1,170.7	607.9
thereof		
Expected credit losses, impairment, depreciation and appreciation of investments	-153.4	-159.3
Change in fair value of financial instruments	-3.2	-120.6
Profit/loss from investments in associated companies and joint ventures	15.4	10.5
Currency result	100.0	26.3
Other income/expenses	-298.6	-93.0
Operating profit/loss (EBIT)	**1,098.6**	**867.3**
Financing costs	2.0	2.3
Net income before taxes	**1,096.5**	**865.0**
Taxes		
Net income		
thereof		
Non-controlling interest in profit and loss		
Group net income		

[1] Restated pursuant to IAS 8

Life and health reinsurance		Consolidation		Total	
1.1.–31.12.2023	1.1. - 31.12.2022 [1]	1.1.–31.12.2023	1.1.–31.12.2022 [1]	1.1.–31.12.2023	1.1. - 31.12.2022 [1]
7,632.5	7,751.9	–	–	24,456.5	24,016.7
6,713.7	7,184.3	–	–	20,802.1	22,297.7
918.9	**567.6**	**–**	**–**	**3,654.4**	**1,719.0**
743.9	576.9	–	–	3,370.3	2,344.5
634.9	544.4	–	–	1,374.2	1,961.9
-109.1	**-32.5**	**–**	**–**	**-1,996.1**	**-382.6**
809.8	**535.1**	**–**	**–**	**1,658.3**	**1,336.4**
-158.2	-107.9	–	–	-880.3	-583.1
415.4	357.4	2.1	–	1,588.2	965.3
-2.4	-8.3	–	–	-155.8	-167.6
79.2	107.5	–	-1.1	76.0	-14.2
0.9	-73.6	–	–	16.3	-63.2
-13.4	-8.6	0.1	-0.1	86.7	17.6
-182.4	-125.6	-0.7	-1.9	-481.7	-220.5
871.2	**650.3**	**1.5**	**-1.9**	**1,971.2**	**1,515.7**
0.9	1.3	114.3	87.9	117.2	91.5
870.3	**649.0**	**-112.9**	**-89.8**	**1,854.0**	**1,424.2**
				26.4	525.9
				1,827.6	**898.3**
				2.8	117.5
				1,824.8	**780.8**

6. Notes on the individual items of the balance sheet

6.1. Investments

Investments are classified and measured in accordance with IFRS 9 "Financial Instruments". Hannover Re classifies investments according to the categories at fair value through OCI and at fair value through profit or loss, while measurement at amortised cost is applied only in exceptional cases. The allocation and measurement of investments is guided by the respective investment intent (business model) and the type of cash flows.

The investments also include investment property, investments in associated companies and joint ventures as well as other invested assets. Real estate and investments held by disposal groups for which an intention to sell exists in accordance with IFRS 5 are shown separately in the consolidated balance sheet if appropriate facts and circumstances apply.

The following table shows the regional origin of the investments.

Investments

in EUR million	2023	2022 [1]
Regional origin		
Germany	11,065.3	10,464.8
United Kingdom	3,245.4	2,875.7
France	2,152.1	1,920.1
Other	7,544.0	6,774.4
Europe	**24,006.9**	**22,035.0**
USA	20,191.5	19,242.5
Other	4,683.4	4,148.7
North America	**24,874.8**	**23,391.2**
Asia	6,002.5	5,759.4
Australia	3,821.1	2,989.1
Australasia	**9,823.6**	**8,748.5**
Africa	191.2	204.0
Other	1,232.4	906.5
Total	**60,128.9**	**55,285.1**

[1] Restated pursuant to IAS 8

Maturities of fixed-income and variable-yield securities

in EUR million	2023		2022 [2]	
	Amortised cost [1]	Fair value	Amortised cost [1]	Fair value
Financial investments – at fair value through OCI				
due in one year	8,152.6	8,112.0	8,873.5	8,844.7
due after one through two years	4,579.2	4,493.1	4,019.7	3,913.6
due after two through three years	6,626.4	6,440.1	3,680.3	3,515.0
due after three through four years	3,237.5	3,111.5	5,613.7	5,304.1
due after four through five years	4,334.3	4,217.1	2,837.1	2,605.8
due after five through ten years	15,310.2	14,134.5	15,459.6	13,543.7
due after more than ten years	11,348.3	9,862.4	11,069.5	8,958.7
no maturity	248.3	248.3	255.5	256.4
Total	**53,836.8**	**50,619.1**	**51,808.9**	**46,941.9**
Financial investments – at fair value through profit or loss				
due in one year	1,435.8	1,435.8	768.2	768.2
due after one through two years	173.9	173.9	122.6	122.6
due after two through three years	102.1	102.1	86.8	86.8
due after three through four years	49.8	49.8	32.7	32.7
due after four through five years	11.1	11.1	27.3	27.3
due after five through ten years	32.3	32.3	35.5	35.5
due after more than ten years	199.9	199.9	173.3	173.3
no maturity	1,949.1	1,949.1	1,901.1	1,901.1
Total	**3,954.1**	**3,954.1**	**3,147.4**	**3,147.4**

[1] Including accrued interest

[2] Restated pursuant to IAS 8

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.

Variable-rate bonds (so-called “floaters”) are shown under the maturities due in one year and constitute an interest-related, within-the-year reinvestment risk.

Amortised cost, unrealised gains and losses and accrued interest on financial instruments at fair value through OCI as well as their fair value

	2023				
in EUR million	Cost or amortized cost incl. accrued interests	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Debt instruments					
Government debt securities of EU member states	5,570.4	24.4	14.3	557.0	5,027.8
US Treasury notes	11,660.7	60.1	24.0	703.2	10,981.5
Other foreign government debt securities	5,471.0	41.5	35.5	174.0	5,332.4
Debt securities issued by semi-governmental entities	9,399.9	93.0	63.7	543.5	8,920.1
Corporate securities	17,282.3	195.8	113.5	1,266.0	16,129.8
Covered bonds/asset-backed securities	4,176.3	46.8	18.3	242.6	3,951.9
Other	276.2	1.4	–	0.7	275.5
Total	**53,836.8**	**463.0**	**269.4**	**3,487.0**	**50,619.1**
Equity instruments					
Shares	1.2	–	–	1.2	–
Total	**1.2**	**–**	**–**	**1.2**	**–**
Total	**53,837.9**	**463.0**	**269.4**	**3,488.2**	**50,619.1**

	2022 [1]				
in EUR million	Cost or amortized cost incl. accrued interests	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Debt instruments					
Government debt securities of EU member states	6,187.6	22.5	2.5	753.9	5,436.2
US Treasury notes	11,944.5	40.4	0.6	775.6	11,169.4
Other foreign government debt securities	4,661.7	31.6	10.5	262.8	4,409.4
Debt securities issued by semi-governmental entities	8,220.1	73.5	33.9	760.3	7,493.6
Corporate securities	16,586.5	197.2	17.7	1,987.3	14,616.9
Covered bonds/asset-backed securities	3,951.6	37.5	4.8	397.1	3,559.3
Other	257.0	227.8	–	–	257.0
Total	**51,808.9**	**630.4**	**70.0**	**4,937.0**	**46,941.9**
Equity instruments					
Shares	1.2	–	–	1.2	–
Total	**1.2**	**–**	**–**	**1.2**	**–**
Total	**51,810.1**	**630.4**	**70.0**	**4,938.1**	**46,941.9**

[1] Restated pursuant to IAS 8

The carrying amount of the debt instruments is arrived at from the amortised cost including accrued interest as well as the unrealised gains and losses.

Fair values before and after accrued interest as well as accrued interest from financial instruments at fair value through profit or loss

in EUR million	2023	2022 [1]	2023	2022 [1]	2023	2022 [1]
	Fair value before accrued interest		Accrued interest		Fair value	
Debt instruments						
US Treasury notes	–	19.5	–	–	–	19.5
Debt securities issued by semi-governmental entities	0.6	0.7	–	–	0.7	0.7
Corporate securities	425.0	324.4	5.2	4.1	430.2	328.5
Covered bonds/asset-backed securities	1.5	1.9	–	–	1.5	1.9
Other	53.3	69.5	–	0.1	53.3	69.5
	480.5	**415.9**	**5.2**	**4.2**	**485.7**	**420.1**
Derivative instruments	263.6	458.7	-1.2	-1.4	262.5	457.3
Investment funds measured at fair value through profit or loss	2,233.0	1,716.2	–	–	2,233.0	1,716.2
Short-term investments	949.1	536.7	11.3	3.6	960.4	540.3
Other financial instruments at fair value through profit and loss	12.6	13.5	–	–	12.6	13.5
	3,458.3	**2,725.1**	**10.2**	**2.1**	**3,468.4**	**2,727.3**
Total	**3,938.7**	**3,141.0**	**15.4**	**6.4**	**3,954.1**	**3,147.4**

[1] Restated pursuant to IAS 8

The carrying amounts of the financial instruments at fair value through profit or loss correspond to their fair values including accrued interest.

Hannover Re recognised in this category as at the balance sheet date primarily debt instruments and investment funds that do not meet the SPPI ("solely paymernt of principal and interest") test due to the characteristics of their cash flows.

Analysis of the fair value changes in the portfolio of fixed-income securities at fair value through profit or loss indicated that, just as in the previous year, no fair value changes were attributable to a changed credit risk. We additionally use an internal rating method to back up this analysis. Our internal rating system is based on the corresponding credit ratings of securities assigned by the agencies Standard & Poor's and Moody's and in each case reflects the lowest of the available ratings.

For further information please see the explanatory remarks in section 9.1 "Derivative financial instruments and financial guarantees ".

Changes in ECL

in EUR million	2023							
	Opening balance	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Additions	Disposals	Other [1]	Closing balance
Stage 1	48.4	6.0	-4.1	–	17.1	9.7	-11.1	46.7
Stage 2	14.9	-6.0	11.1	-8.5	–	7.5	12.4	16.4
Stage 3	116.0	–	-7.0	8.5	–	2.5	7.8	122.9
Simplified impairment model	0.4	–	–	–	–	–	0.3	0.7
Total	**179.7**	**–**	**–**	**–**	**17.1**	**19.6**	**9.4**	**186.7**

[1] Including changes in underlying risk parameters, including probability of default, point-in-time adjustment factor

in EUR million	2022							
	Opening balance	Transfer to Stage 1	Transfer to Stage 2	Transfer to Stage 3	Additions	Disposals	Other [1]	Closing balance
Stage 1	37.1	1.8	-4.8	-0.5	13.0	9.3	11.2	48.4
Stage 2	9.1	-1.8	4.8	-46.5	–	10.0	59.2	14.9
Stage 3	1.8	–	–	46.9	–	2.8	70.1	116.0
Simplified impairment model	0.3	–	–	–	–	–	0.1	0.4
Total	**48.3**	**–**	**–**	**–**	**13.0**	**22.1**	**140.5**	**179.7**

[1] Including changes in underlying risk parameters, including probability of default, point-in-time adjustment factor

For further explanatory remarks on the impairment criteria please see section 3.1 “Summary of major accounting policies”.

Rating structure of fixed-income securities

in EUR million	2023								
	AAA	AA	A	BBB	BB	B	C	Other	Total
Financial investments – at fair value through OCI	12,158.7	17,241.6	9,392.4	8,884.0	1,220.3	264.4	80.3	1,377.3	50,619.1
Financial investments – at fair value through profit or loss	45.1	0.8	77.9	153.6	37.4	1.7	0.4	168.8	485.7
Total	**12,203.9**	**17,242.4**	**9,470.3**	**9,037.6**	**1,257.7**	**266.2**	**80.7**	**1,546.2**	**51,104.8**

in EUR million	2022 [1]								
	AAA	AA	A	BBB	BB	B	C	Other	Total
Financial investments – at fair value through OCI	22,163.5	5,726.4	8,400.7	7,788.3	1,188.9	267.2	81.8	1,325.1	46,941.9
Financial investments – at fair value through profit or loss	20.2	0.2	34.9	134.8	30.9	0.4	–	198.7	420.1
Total	**22,183.7**	**5,726.6**	**8,435.6**	**7,923.1**	**1,219.8**	**267.6**	**81.8**	**1,523.9**	**47,362.0**

[1] Restated pursuant to IAS 8

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

Breakdown of investments by currencies

in EUR million	2023								
	AUD	CAD	CNY	EUR	GBP	USD	ZAR	Other	Total
Financial investments – at fair value through OCI	4,016.9	2,382.1	2,729.3	12,754.8	2,872.2	22,725.8	244.4	2,893.6	50,619.1
Financial investments – at fair value through profit or loss	-212.6	-51.4	–	1,948.0	321.8	861.2	61.2	1,026.0	3,954.1
Investment property	81.1	–	–	960.4	–	838.0	–	657.1	2,536.5
Investments in associated companies	–	–	–	2,055.3	–	–	0.9	–	2,056.2
Other invested assets	–	–	–	674.2	–	285.7	3.1	–	963.0
Total	**3,885.4**	**2,330.7**	**2,729.3**	**18,392.7**	**3,194.0**	**24,710.7**	**309.6**	**4,576.7**	**60,128.9**

in EUR million	2022 [1]								
	AUD	CAD	CNY	EUR	GBP	USD	ZAR	Other	Total
Financial investments – at fair value through OCI	3,619.8	1,942.7	2,696.6	11,903.4	3,000.0	21,040.0	309.9	2,429.5	46,941.9
Financial investments – at fair value through profit or loss	-239.2	-456.0	-40.0	1,157.4	109.8	1,800.8	63.3	751.3	3,147.4
Investment property	84.5	–	–	987.2	–	714.0	–	533.6	2,319.3
Investments in associated companies	–	–	–	2,061.6	–	–	1.4	–	2,063.0
Other invested assets	–	–	–	803.9	–	8.3	1.2	–	813.5
Total	**3,465.1**	**1,486.7**	**2,656.6**	**16,913.5**	**3,109.8**	**23,563.1**	**375.8**	**3,714.4**	**55,285.1**

[1] Restated pursuant to IAS 8

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

Associated companies and joint ventures

Investments in material joint ventures

On 22 December 2022 Hannover Rück SE (roughly 41.3%) and E+S Rückversicherung AG (roughly 8.7%) together purchased 50% of the shares in MR Beteiligungen 23. GmbH, a wholly owned subsidiary of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft. The joint venture was subsequently renamed Joint HR MR Private Equity GmbH. Through the share purchase Hannover Rück SE and E+S Rückversicherung AG together with Münchener Rückversicherungs-Gesellschaft AG acquired joint control of the entity as defined by IFRS 11.16. The capital shares correspond to the distribution of voting rights. The purpose of the joint venture is, in particular, to acquire, hold and manage participations in private equity firms.

After the contribution of shares in subsidiaries to the joint venture as at 31 December 2022, the equity book value as at the balance sheet date was around EUR 1.9 billion. Consolidated business figures for the 2023 financial year are shown below, giving rise to an unchanged equity book value of EUR 1.9 billion.

Joint HR MR Private Equity GmbH – condensed balance sheet

in EUR million	2023	2022
Cash and cash equivalents	130.9	80.8
Other current assets	288.7	557.0
Non-current assets	3,756.6	3,603.7
Current liabilities	39.7	108.4
Non-current liabilities	9.0	12.1
Equity	4,127.5	4,121.1
thereof non-controlling interests	324.3	319.4

[1] Restated pursuant to IAS 8

Joint HR MR Private Equity GmbH – reconciliation to book values

in EUR million	2023	2022
Equity as at 1.1.	4,121.1	–
Capital increases / additions	7.3	4,121.1
Capital repayments	0.3	–
Net income	48.5	–
Income and expense recognised directly in equity	-49.1	–
Equity as at 31.12.	**4,127.5**	**4,121.1**
thereof non-controlling interests	324.3	319.4
Group interest in capital	50%	50%
Group share of equity	1,901.6	1,900.8
Goodwill	0.8	0.5
Book value of Group share	1,902.4	1,901.3

Joint HR MR Private Equity GmbH – condensed statement of comprehensive income

in EUR million	1.1. - 31.12.2023	1.1. - 31.12.2022
Net income from investments	68.6	–
Interest income	15.4	–
Interest expense	1.7	–
Other income and expenses	-7.8	–
Tax expense	26.0	–
Net income	48.5	–
Income and expense recognised directly in equity	-49.1	–
Comprehensive income	**-0.6**	**–**
thereof non-controlling interests	5.1	–
Group share of net income	14.5	–
Dividend receipts	–	–

Investments in associated companies

The associated companies included at equity in the consolidated financial statement that both on an individual basis and in their entirety are not material for the Hannover Re Group pursuant to IFRS 12 are comprised of

- WeHaCo Unternehmensbeteiligungs-GmbH, Hannover, Germany,
- HANNOVER Finanz GmbH, Hannover, Germany,

as well as the following company included at equity within the subgroup Hannover Reinsurance Group Africa (Pty) Ltd., Johannesburg, South Africa:

- Clarendon Transport Underwriting Managers (Pty) Ltd., Johannesburg, South Africa,

The following table shows combined financial information on the Hannover Re Group's individually non-material investments in associated companies.

Financial information on investments in non-material associated companies

in EUR million	1.1.–31.12.2023	1.1.–31.12.2022
Group share of net income from continuing operations	1.0	10.5
Group share of income and expense recognised directly in equity	–	–
Group share of total recognised income and expense	**1.0**	**10.5**

The carrying amount of the investments in non-material associated companies changed as follows in the year under review:

Investments in non-material associated companies

in EUR million	2023	2022
Net book value at 31 December of the previous year	**71.2**	**66.2**
Currency translation at 1 January	-0.2	–
Net book value after currency translation	**71.0**	**66.2**
Additions	4.0	2.4
Disposals	0.3	–
Profit or loss on investments in associated companies	1.0	10.5
Dividend payments	3.7	7.9
Net book value at 31 December of the year under review	**72.0**	**71.2**

Investments in material associated companies

FUNIS GmbH & Co. KG, Hannover, a wholly owned subsidiary of Hannover Rück SE, holds 20% of the common shares in Monument Insurance Group Limited, Hamilton, Bermuda (MIGL). The participation is identical to the share of voting rights held and – with a seat on the Board of Directors – establishes a significant influence over MIGL. In addition, a subsidiary of MIGL has issued non-voting, non-callable preference shares in which FUNIS – after the issuance of further preference shares to an investor – held an interest of 15.2% (previous year: 24.4%) directly and indirectly through MIGL as at the end of the financial year. The interest amounts to 13.7% after elimination of the internally held preference shares.

MIGL is a life insurance group that specialises in acquiring and operating life insurance portfolios and companies in Europe, primarily those in run-off. Measurement at equity is based on the consolidated financial statement drawn up by the company as at 30 September in accordance with UK GAAP, which is reconciled to IFRS and restated if significant transactions or other events occur.

MIGL – condensed balance sheet

in EUR million	2023	2022 [1]
Current assets	1,268.1	1,389.1
Non-current assets	13,508.8	10,972.7
Current liabilities	202.1	270.3
Non-current liabilities	13,957.4	11,401.2
Equity at 30 September	617.4	690.3
Updated equity at 31 December	589.7	449.1
thereof non-controlling interests	15.0	55.0

[1] Restated pursuant to IAS 8

MIGL – reconciliation to book values

in EUR million	2023	2022 [1]
Updated equity at 1 January	449.1	794.1
Capital increase	233.3	–
Net income	-34.0	-358.4
Income and expense recognised directly in equity	–	0.1
Changes in ownership interest with no change of control status	-8.7	–
Changes in the consolidated group	–	45.1
Dividends	50.0	31.8
Updated equity at 31 December	**589.7**	**449.1**
thereof non-controlling interests	15.0	55.0
Group interest in capital	14.2%	23.0%
Group share of equity	81.9	90.5
Goodwill	–	–
Book value of Group share	**81.9**	**90.5**

[1] Restated pursuant to IAS 8

MIGL - condensed statement of comprehensive income

in EUR million	1.1.-31.12.2023	1.1.-31.12.2022 [1]
Contributions	4,434.9	1,719.2
Net income from continuing operations	-34.0	-358.4
Net income from discontinued operations	–	–
Net income	-34.0	-358.4
Total income and expense recognised directly in equity	–	0.1
Total recognised income and expense	-34.0	-358.3
thereof non-controlling interests	-40.0	9.8
Group share of net income	0.9	-73.6
Dividend receipts	7.8	7.7

[1] Restated pursuant to IAS 8

Information on the percentage share held by the Hannover Re Group in the capital of associated companies and joint ventures is provided in the list of shareholdings in section 4.2 “Consolidated companies and complete list of shareholdings”.

No discontinued operations existed in the year under review among the companies measured at equity. Insofar as there are commitments from contingent liabilities of associated companies and joint ventures, the Hannover Re Group shares in such commitments in proportion to its respective shareholding. Public price listings are not available for companies valued at equity. The net book value of associated companies and joint ventures includes goodwill in the amount of EUR 11.8 million (EUR 12.2 million). For further details please see section 4 “Consolidation”.

Real estate

Real estate is divided into real estate for own use and investment property. Own-use real estate is recognised under other assets.

The investment property in the portfolio which is used to generate income is shown under the investments. Income and expenses from rental agreements are included in the investment income.

Real estate is valued at cost of acquisition less depreciation with useful lives of at most 50 years as well as impairments in the event of permanent impairment.

Development of investment property

in EUR million	2023	2022
Gross book value at 31 December of the previous year	2,639.9	2,083.0
Currency translation at 1 January	-64.0	49.9
Gross book value after currency translation	**2,575.9**	**2,132.9**
Additions	413.0	527.5
Disposals	3.6	6.3
Currency translation at 31 December	-6.4	-14.3
Gross book value at 31 December of the year under review	**2,978.9**	**2,639.9**
Cumulative depreciation at 31 December of the previous year	320.6	264.3
Currency translation at 1 January	-7.8	9.9
Cumulative depreciation after currency translation	**312.7**	**274.2**
Disposals	1.1	0.9
Depreciation	56.3	48.5
Impairments	79.1	18.2
Appreciation	2.4	19.1
Currency translation at 31 December	-2.2	-0.4
Cumulative depreciation at 31 December of the year under review	**442.4**	**320.6**
Net book value at 31 December of the previous year	**2,319.3**	**1,818.8**
Net book value at 1 January of the year under review	**2,263.2**	**1,858.7**
Net book value at 31 December of the year under review	**2,536.5**	**2,319.3**

With regard to the right-of-use assets included as part of the accounting of leases, please see section 9.8 “Leases”.

The fair value of investment property excluding capitalised right-of-use assets amounted to EUR 2,995.0 million (EUR 2,833.3 million) as at the balance sheet date.

In terms of diversification across various real estate sectors, the focus is on office buildings (61%), complemented by logistics properties (21%) and retail (14%). In geographical terms, exposures are spread across the United States (38%), Europe (excluding Germany; 20%) as well as Germany (21%) and Asia (21%).

Changes in this item are attributable to investment activities at the relevant real estate companies belonging to the Hannover Re Group.

The real estate in the investment portfolio is normally subject to internal and external valuation by an appraiser as at the balance sheet date. The two analyses do not differ from one another in the methodology used, which means that the findings are comparable at all times and on a continuous basis. Generally speaking, the fair value of the real estate is determined using the discounted cash flow (DCF) method, with rental income capitalised in consideration of the associated management costs. The valuation result is also influenced by increases and reductions based on specific property circumstances (upkeep, vacancies, rent divergences from the market level, etc.). The evaluation of international real estate also draws primarily on the discounted cash flow method. The main feature of this method is the present value estimation of projected annual free cash flows.

Real estate which is held for sale as defined by IFRS 5 is recognised separately in the consolidated balance sheet if appropriate facts and circumstances apply. Intentions to sell are substantiated by individual real estate market conditions and specific property circumstances, taking into consideration current and future opportunity / risk profiles. In the year under review no properties were reclassified to assets held for sale.

In addition, we held indirect real estate / infrastructure investments measured at fair values in an amount of EUR 1,043.8 million (EUR 945.5 million) in the year under review, which are recognised in the item “Financial investments – at fair value through profit or loss”.

Other invested assets

The other invested assets consisted largely of participating interests measured at fair value in an amount of EUR 963.0 million (EUR 813.5 million), the amortised cost of which amounted to EUR 613.9 million (EUR 538.1 million). The differences between the carrying amounts and the amortised costs were recognised as unrealised gains of EUR 368.9 million (EUR 286.5 million) and unrealised losses of EUR 19.8 million (EUR 11.1 million) under cumulative other comprehensive income.

Short-term investments

This item comprises investments with a maturity of up to one year at the time of investment. This includes overnight and time deposits as well as shares in investment funds that invest in such securities.

Fair value hierarchy

For the purposes of the disclosure requirements pursuant to IFRS 13 "Fair Value Measurement", financial assets and liabilities are to be assigned to a three-level fair value hierarchy.

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.

The operational units responsible for coordinating and documenting measurement are organisationally separate from the operational units that enter into investment risks. All relevant valuation processes and valuation methods are documented. Decisions on fundamental valuation issues are taken by a valuation committee that meets monthly.

In the financial year just ended, as in the previous year, no investments were allocable to another level of the fair value hierarchy.

The following table shows the breakdown of financial assets and liabilities recognised at fair value into the three-level fair value hierarchy.

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

	2023			
in EUR million	Level 1	Level 2	Level 3	Total
Financial investments – at fair value through OCI				
Debt instruments	–	49,935.0	684.1	50,619.1
	–	**49,935.0**	**684.1**	**50,619.1**
Financial investments – at fair value through profit or loss				
Debt instruments	–	434.1	64.2	498.3
Derivative instruments	–	107.8	154.7	262.5
Investment funds	296.3	192.2	1,744.4	2,233.0
Short-term investments	960.4	–	–	960.4
	1,256.7	**734.1**	**1,963.3**	**3,954.1**
Other invested assets				
	–	**–**	**963.0**	**963.0**
Financial liabilities (at fair value)				
Negative market values from derivative instruments	–	67.9	8.9	76.8
	–	**67.9**	**8.9**	**76.8**

	2022 [1]			
in EUR million	Level 1	Level 2	Level 3	Total
Financial investments – at fair value through OCI				
Debt instruments	–	46,356.7	585.2	46,941.9
	–	**46,356.7**	**585.2**	**46,941.9**
Financial investments – at fair value through profit or loss				
Debt instruments	–	352.2	81.4	433.6
Derivative instruments	–	241.9	215.4	457.3
Investment funds	48.5	137.5	1,530.3	1,716.2
Short-term investments	540.3	–	–	540.3
	588.8	**731.6**	**1,827.0**	**3,147.4**
Other invested assets				
	–	**–**	**813.5**	**813.5**
Financial liabilities (at fair value)				
Negative market values from derivative instruments	–	61.4	14.4	75.9
	–	**61.4**	**14.4**	**75.9**

[1] Restated pursuant to IAS 8

The following table provides a reconciliation of the fair values of financial assets and liabilities included in level 3 at the beginning of the financial year with the fair values as at 31 December of the financial year.

Movements in level 3 financial assets and liabilities

	2023					
	Financial investments – at fair value through OCI	Financial investments – at fair value through profit or loss			Other invested assets	Financial liabilities (at fair value)
in EUR million	Debt instruments	Debt instruments	Derivative instruments	Investment funds		Negative fair values from derivative instruments
Net book value at 31 December of the previous year	**585.2**	**81.4**	**215.4**	**1,530.3**	**813.5**	**14.4**
Currency translation at 1 January	-17.3	-2.7	-7.3	-30.1	-0.4	-0.5
Net book value after currency translation	**567.9**	**78.7**	**208.1**	**1,500.1**	**813.1**	**13.9**
Income and expenses recognised in the statement of income	4.4	0.3	55.6	-30.4	–	1.1
Income and expenses recognised directly in shareholders' equity	6.4	–	–	–	78.7	–
Purchases	166.7	1.5	–	396.0	80.0	–
Sales	38.6	16.6	120.6	117.2	0.7	7.0
Settlements	21.8	–	–	–	–	–
Transfers from level 3	–	–	–	–	–	–
Transfers to level 3	–	–	–	–	–	–
Currency translation at 31 December	-0.9	0.3	11.6	-4.0	-8.1	0.9
Net book value at 31 December of the year under review	**684.1**	**64.2**	**154.7**	**1,744.4**	**963.0**	**8.9**

	2022 [1]					
	Financial investments – at fair value through OCI	Financial investments – at fair value through profit or loss			Other invested assets	Financial liabilities (at fair value)
in EUR million	Debt instruments	Debt instruments	Derivative instruments	Investment funds		Negative fair values from derivative instruments
Net book value at 31 December of the previous year	**604.3**	**288.5**	**161.0**	**3,042.2**	**336.4**	**22.2**
Currency translation at 1 January	32.6	3.1	10.1	108.7	0.5	1.4
Net book value after currency translation	**636.9**	**291.6**	**171.1**	**3,150.8**	**336.9**	**23.6**
Income and expenses recognised in the statement of income	1.8	-1.9	37.8	-62.6	5.5	-0.3
Income and expenses recognised directly in shareholders' equity	-87.1	–	–	–	145.8	–
Purchases	95.3	6.6	59.0	748.8	1,193.0	–
Sales	15.3	214.2	39.2	370.2	857.7	–
Settlements	44.8	0.7	–	–	–	6.6
Transfers from level 3	–	–	–	–	–	–
Transfers to level 3	–	–	–	–	–	–
Change in consolidation	-2.4	–	–	-1,945.5	-10.0	–
Currency translation at 31 December of the year under review	0.8	–	-13.4	9.0	–	-2.4
Net book value at 31 December for the year under review	**585.2**	**81.4**	**215.4**	**1,530.3**	**813.5**	**14.4**

[1] Restated pursuant to IAS 8

The breakdown of income and expenses recognised in the statement of income in the financial year in connection with financial assets and liabilities assigned to level 3 is as follows:

Income and expenses from level 3 financial assets and liabilities

	2023					
	Financial investments – at fair value through OCI	Financial investments – at fair value through profit or loss			Other invested assets	Financial liabilities (at fair value)
in EUR million	Debt instruments	Debt instruments	Derivative instruments	Investment funds		Negative fair values from derivative instruments
Total in the financial year						
Ordinary investment income	3.1	–	–	–	–	–
Realised gains and losses on investments	1.3	–	–	–	–	–
Change in fair value of financial instruments	–	0.3	55.6	-30.4	–	-1.1
Thereof attributable to financial instruments included in the portfolio at 31 December						
Ordinary investment income	0.1	–	–	–	–	–
Change in fair value of financial instruments	–	0.3	16.4	-29.9	–	-1.1

	2022 [1]					
	Financial investments – at fair value through OCI	Financial investments – at fair value through profit or loss			Other invested assets	Financial liabilities (at fair value)
in EUR million	Debt instruments	Debt instruments	Derivative instruments	Investment funds		Negative fair values from derivative instruments
Total in the financial year						
Ordinary investment income	1.8	-1.0	–	–	–	–
Realised gains and losses on investments	–	–	–	–	–	–
Change in fair value of financial instruments	–	-0.9	37.8	-62.6	5.5	0.3
Thereof attributable to financial instruments included in the portfolio at 31 December						
Ordinary investment income	0.4	–	–	–	–	–
Change in fair value of financial instruments	–	-0.9	37.8	-22.3	5.5	0.3

[1] Restated pursuant to IAS 8

If models are used to measure financial assets and liabilities included in level 3 under which the adoption of alternative inputs leads to a material change in fair value, IFRS 13 requires disclosure of the effects of these alternative assumptions. Of the financial assets included in level 3 with fair values of altogether EUR 3,610.4 million (EUR 3,225.7 million) as at the balance sheet date, Hannover Re measures financial assets with a volume of EUR 1,744.4 million (EUR 1,530.3 million) using the net asset value method. These items consist principally of shares in private equity and real estate funds. Assuming that the present values of the assets and liabilities contained in the funds would be 10% lower than used for measurement as at the balance sheet date, the fair values for these items would amount to EUR 1,570.0 million. The remaining financial assets included in level 3 with a volume of EUR 1,866.0 million (EUR 1,695.4 million) relate to financial instruments, the valuation of which is based inter alia on technical parameters. Derivative financial instruments in connection with the reinsurance business were recognised under the financial liabilities included in level 3 in the year under review. Their performance is dependent upon lapse rates within an underlying primary insurance portfolio. The application of alternative inputs and assumptions has no material effect on the consolidated financial statement.

6.2. Goodwill

In accordance with IFRS 3 "Business Combinations" amortisation is not taken on goodwill. Goodwill was subject to an impairment test.

Development of goodwill

in EUR million	2023	2022
Net book value at 31 December of the previous year	77.3	83.9
Currency translation at 1 January	0.6	-2.3
Net book value after currency translation	**78.0**	**81.7**
Value adjustments	–	4.5
Currency translation at 31 December	–	0.2
Net book value at 31 December of the year under review	**78.0**	**77.3**

This item principally includes the goodwill from the acquisitions of E+S Rückversicherung AG (EUR 36.1 million, previous year: EUR 36.1 million)), Integra Insurance Solutions Limited (EUR 11.0 million, previous year: EUR 10.8 million) and Argenta Holdings Limited (EUR 29.1 million, previous year: EUR 28.5 million).

For the purposes of the impairment test, the goodwill was allocated to the cash-generating units (CGUs) that represent the lowest level on which goodwill is monitored for internal management purposes. In the instances of goodwill recognised as at the balance sheet date, the CGUs are the respective legal entities. The recoverable amount is established on the basis of the value in use, which is calculated using the discounted cash flow method. In this context, the detailed planning phase draws on the planning calculations of the CGUs / companies covering the next five years. These planning calculations represent the outcome of a detailed planning process in which all responsible members of management are involved and where allowance is made for the latest market developments affecting the relevant entity (in relation to the sector and the economy as a whole). The subsequent perpetuity phase is guided by the profit margins and revenue growth rates that management believes can be sustainably generated. The capitalisation rate is based on the Capital Asset Pricing Model (CAPM) as well as growth rates that are considered realistic in light of the specific market environment. The risk-free basic interest rate is determined, where possible, using corresponding yield curve data from the respective national banks. If this data cannot be obtained or can only be obtained with a disproportionately high effort, reference is made to the yields of the respective 30-year government bonds. Both the yield curves and the government bonds reflect the current interest rate trend on financial markets. The selection of the market risk premium is guided by the ranges currently recommended by the Institute of Public Auditors in Germany (IDW). The beta factor is calculated for Hannover Rück SE on the basis of publicly accessible capital market data. The foreign exchange rates used for currency translation correspond to the situation on the balance sheet date.

The following capitalisation rates and growth rates were recognised for the individual cash-generating units:

Capitalisation rates

	Capitalisation rate		Growth rate	
	2023	2022	2023	2022
Argenta Holdings Limited	10.11%	9.28%	0.00%	1.00%
E+S Rückversicherung AG	8.26%	7.56%	0.00%	0.00%
Integra Insurance Solutions Limited	10.14%	9.24%	0.00%	1.00%

The capitalisation rates as well as material / value-influencing items of the respective planning calculations (inter alia reinsurance revenue, premium volumes, investment income or loss ratios) were varied as part of sensitivity analyses. In this context, individual parameters were changed within appropriate bands that can be expected in light of the current market situations and developments. It was established that where changes were made to parameters in areas that could reasonably occur, the values in use were above the corresponding book values. We would also refer to our basic remarks in section 3.1 "Summary of major accounting policies".

6.3. Other assets

Other assets

in EUR million	2023	2022 [1]
Other intangible assets	134.7	133.7
Insurance for pension commitments	107.5	103.2
Own-use real estate	111.0	122.3
Tax refund claims	159.4	162.8
Fixtures, fittings and equipment	36.7	39.7
Receivables from advance payments and services	135.9	92.5
Sundry	1,366.7	1,123.9
Total	**2,052.0**	**1,778.2**

[1] Restated pursuant to IAS 8

With regard to the right-of-use assets from lease contracts included in the items "Own-use real estate", "Fixtures, fittings and equipment" and "Sundry", please see section 9.8 "Leases".

The sundry assets consist primarily of accounts receivable of EUR 963.2 million (EUR 579.2 million) that were not allocated to underwriting items.

Insurance for pension commitments

In the past Hannover Rück SE took out insurance covers for pension commitments. The commitments involve, firstly, deferred annuities with regular premium payment under a group insurance policy and, secondly, the funding of direct commitments from deferred compensation for lump-sum payments in the event of death or on reaching retirement age. The insurance covers were carried as a separate asset at fair value in an amount of EUR 107.5 million (EUR 103.2 million).

Fixtures, fittings and equipment

Fixtures, fittings and equipment

in EUR million	2023	2022
Gross book value at 31 December of the previous year	174.0	157.4
Currency translation at 1 January	-2.5	1.8
Gross book value after currency translation	**171.5**	**159.2**
Additions	11.2	18.2
Disposals	3.5	2.7
Currency translation at 31 December	0.1	-0.6
Gross book value at 31 December of the year under review	**179.3**	**174.0**
Cumulative depreciation at 31 December of the previous year	134.3	121.8
Currency translation at 1 January	-2.1	1.7
Cumulative depreciation after currency translation	**132.2**	**123.5**
Disposals	2.4	2.6
Depreciation	12.8	13.7
Currency translation at 31 December	–	-0.2
Cumulative depreciation at 31 December of the year under review	**142.6**	**134.3**
Net book value at 31 December of the previous year	**39.7**	**35.5**
Net book value at 31 December of the year under review	**36.7**	**39.7**

With regard to the measurement of fixtures, fittings and equipment, the reader is referred to our explanatory notes on the other assets in section 3.1 "Summary of major accounting policies".

With regard to the leased assets contained in this table we would refer to section 9.8 "Leases".

Other intangible assets

Development of other intangible assets

in EUR million	2023	2022 [1]
Gross book value at 31 December of the previous year	374.0	360.0
Currency translation at 1 January	0.9	-5.4
Gross book value after currency translation	**374.9**	**354.6**
Additions	22.4	21.4
Disposals	2.7	2.0
Currency translation at 31 December	-0.1	–
Gross book value at 31 December of the year under review	**394.5**	**374.0**
Cumulative depreciation at 31 December of the previous year	240.3	221.5
Currency translation at 1 January	-0.6	-0.9
Cumulative depreciation after currency translation	**239.7**	**220.6**
Disposals	1.9	1.8
Depreciation	21.8	21.6
Currency translation at 31 December	0.2	-0.1
Cumulative depreciation at 31 December of the year under review	**259.8**	**240.3**
Net book value at 31 December of the previous year	**133.7**	**138.5**
Net book value at 31 December of the year under review	**134.7**	**133.7**

[1] Restated pursuant to IAS 8

This item includes EUR 45.6 million (EUR 35.4 million) for purchased software as at the balance sheet date, on which depreciation is taken over useful lives of three to ten years. Of the additions, an amount of EUR 13.5 million (EUR 4.8 million) is attributable to purchased software. Among other things, the amortised cost of the intangible assets identified in connection with the acquisition of Argenta Holdings Limited in an amount of EUR 75.7 million (EUR 75.5 million) is also recognised under other intangible assets.

Credit risks may result from other financial assets that were not overdue or adjusted as at the balance sheet date. In this regard, the reader is referred in general to our comments on the credit risk within the risk report.

6.4. Technical assets and liabilities

The reinsurance recoverables on the liability for incurred claims and the liability for remaining coverage are based on the contractual arrangements of the underlying reinsurance treaties. We would additionally refer to the explanatory remarks in the risk report regarding the type and scope of risks arising out of insurance contracts.

In order to show the net technical liabilities remaining in the retention, the following table presents a summary comparison of the gross liabilities with the corresponding reinsurance recoverables, which are shown as assets in the balance sheet.

Technical liabilities

	2023			2022 [1]		
in EUR million	Issued	Retroceded	Net	Issued	Retroceded	Net
Liability for incurred claims (LIC)	46,214.1	2,231.4	43,982.7	42,925.5	2,401.6	40,523.9
Liability for remaining coverage (LRC)	-1,974.7	-705.5	-1,269.2	-1,156.5	188.0	-1,344.5
Total	**44,239.4**	**1,525.9**	**42,713.5**	**41,769.0**	**2,589.6**	**39,179.4**

[1] Restated pursuant to IAS 8

The liability for incurred claims is in principle calculated on the basis of the information supplied by ceding companies. Additional IBNR reserves are established for losses that have already been incurred but not yet reported. The movement in the liability for remaining coverage is shown in the following tables. The presentation differentiates in each case between reinsurance contracts issued and held.

Movement in carrying amount of liabilities for remaining coverage and for incurred claims – reinsurance contracts issued

	2023			
in EUR million	LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**2,204.4**	**45.9**	**-802.2**	**1,448.1**
Opening balance – liabilities	**-1,691.2**	**534.8**	**42,925.4**	**41,769.0**
Opening balance – net	**-3,895.6**	**488.9**	**43,727.6**	**40,320.9**
Contracts under the modified retrospective approach	-2,337.9	–	–	-2,337.9
Contracts under the fair value approach	-5,109.3	–	–	-5,109.3
Other contracts	-17,009.3	–	–	-17,009.3
Reinsurance revenue	**-24,456.5**	**–**	**–**	**-24,456.5**
Incurred claims and other reinsurance service expenses	4.5	-281.5	20,633.1	20,356.1
Amortisation of insurance acquisition cash flows	545.7	–	–	545.7
Losses and reversal of losses on onerous contracts	–	306.6	–	306.6
Adjustments to liabilities for incurred claims	–	–	-406.3	-406.3
Reinsurance service expenses	**550.1**	**25.2**	**20,226.8**	**20,802.1**
Investment component	**-5,854.1**	**–**	**5,854.1**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	705.6	12.1	1,417.3	2,135.0
Currency gains/losses	16.0	-18.3	-952.2	-954.4
Reinsurance finance result	**721.6**	**-6.2**	**465.1**	**1,180.6**
Premiums received	29,620.2	–	–	29,620.2
Claims and other reinsurance service expenses paid, including investment components	–	–	-23,687.2	-23,687.2
Insurance acquisition cash flows paid	-560.5	–	–	-560.5
Cash flows	**29,059.7**	**–**	**-23,687.2**	**5,372.5**
Closing balance – assets	**1,394.4**	**-2.3**	**-372.3**	**1,019.8**
Closing balance – liabilities	**-2,480.3**	**505.6**	**46,214.1**	**44,239.4**
Closing balance – net	**-3,874.8**	**507.9**	**46,586.5**	**43,219.6**

in EUR million	2022 LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**3,142.4**	**-4.0**	**-1,588.2**	**1,550.2**
Opening balance – liabilities	**3,616.6**	**266.1**	**38,212.9**	**42,095.6**
Opening balance – net	**474.3**	**270.1**	**39,801.1**	**40,545.4**
Contracts under the modified retrospective approach	-2,588.3	–	–	-2,588.3
Contracts under the fair value approach	-6,384.1	–	–	-6,384.1
Other contracts	-15,044.3	–	–	-15,044.3
Reinsurance revenue	**-24,016.7**	**–**	**–**	**-24,016.7**
Incurred claims and other reinsurance service expenses	-7.8	-635.1	21,512.0	20,869.1
Amortisation of insurance acquisition cash flows	487.3	–	–	487.3
Losses and reversal of losses on onerous contracts	–	862.4	–	862.4
Adjustments to liabilities for incurred claims	–	–	79.0	79.0
Reinsurance service expenses	**479.5**	**227.3**	**21,591.0**	**22,297.7**
Investment component	**-6,156.6**	**–**	**6,156.6**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-616.9	3.9	-3,252.0	-3,865.0
Currency gains/losses	203.8	-12.4	643.3	834.8
Reinsurance finance result	**-413.1**	**-8.5**	**-2,608.6**	**-3,030.2**
Premiums received	26,274.3	–	–	26,274.3
Claims and other reinsurance service expenses paid, including investment components	–	–	-21,212.4	-21,212.4
Insurance acquisition cash flows paid	-537.3	–	–	-537.3
Cash flows	**25,737.1**	**–**	**-21,212.4**	**4,524.7**
Closing balance – assets	**2,204.4**	**45.9**	**-802.2**	**1,448.1**
Closing balance – liabilities	**-1,691.2**	**534.8**	**42,925.4**	**41,769.0**
Closing balance – net	**-3,895.6**	**489.0**	**43,727.6**	**40,320.9**

Movement in carrying amount by measurement components – reinsurance contracts issued

	2023	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**2,573.4**	**-123.6**
Opening balance – liabilities	**32,207.7**	**3,784.6**
Opening balance – net	**29,634.3**	**3,908.1**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-310.7
Experience adjustments	355.0	–
Reinsurance service result – changes relate to current service	**355.0**	**-310.7**
Contracts initially recognised in the year	-3,985.6	350.3
Changes in estimates that adjust the CSM	-1,029.2	-44.3
Changes in estimates that result in losses and reversal of losses on onerous contracts	78.0	173.9
Reinsurance service result – changes relate to future service	**-4,936.9**	**479.8**
Reinsurance service result – changes that relate to past service	**-101.2**	**-305.0**
Reinsurance finance result before currency gains/losses plus changes through OCI	1,616.6	258.0
Currency gains/losses	-698.9	-94.6
Reinsurance finance result	**917.7**	**163.4**
Premiums received	29,620.2	–
Claims and other reinsurance service expenses paid, including investment components	-23,687.2	–
Insurance acquisition cash flows paid	-560.5	–
Cash flows	**5,372.5**	**–**
Closing balance – assets	**2,322.9**	**-113.4**
Closing balance – liabilities	**33,564.3**	**3,822.2**
Closing balance – net	**31,241.3**	**3,935.6**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-355.9	**-424.8**	**-221.1**	**1,448.1**
1,492.4	**2,513.0**	**1,771.3**	**41,769.0**
1,848.3	**2,937.8**	**1,992.4**	**40,320.9**
-255.7	-581.6	-2,766.2	-3,603.5
–	–	–	-310.7
–	–	–	355.0
-255.7	**-581.6**	**-2,766.2**	**-3,559.2**
–	–	3,690.1	54.7
761.2	517.6	-200.8	4.5
–	–	–	251.9
761.2	**517.6**	**3,489.4**	**311.1**
–	**–**	**–**	**-406.3**
62.5	54.9	142.9	2,135.0
-10.4	-88.1	-62.3	-954.4
52.1	**-33.2**	**80.6**	**1,180.6**
–	–	–	29,620.2
–	–	–	-23,687.2
–	–	–	-560.5
–	**–**	**–**	**5,372.5**
-320.5	**-385.3**	**-483.9**	**1,019.8**
2,085.4	**2,455.3**	**2,312.3**	**44,239.4**
2,405.9	2,840.6	2,796.2	43,219.6

in EUR million	2022 EPV of future cash flows	Risk adjustment for non-financial risk
Opening balance – assets	**5,103.2**	**-758.2**
Opening balance – liabilities	**34,902.4**	**3,593.0**
Opening balance – net	**29,799.2**	**4,351.2**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-387.7
Experience adjustments	929.4	–
Reinsurance service result – changes relate to current service	**929.4**	**-387.7**
Contracts initially recognised in the year	-3,196.5	362.2
Changes in estimates that adjust the CSM	-980.0	660.3
Changes in estimates that result in losses and reversal of losses on onerous contracts	825.8	-203.1
Reinsurance service result – changes relate to future service	**-3,350.7**	**819.5**
Reinsurance service result – changes that relate to past service	**131.2**	**-52.2**
Reinsurance finance result before currency gains/losses plus changes through OCI	-3,118.4	-875.9
Currency gains/losses	718.8	53.3
Reinsurance finance result	**-2,399.6**	**-822.6**
Premiums received	26,274.3	–
Claims and other reinsurance service expenses paid, including investment components	-21,212.4	–
Insurance acquisition cash flows paid	-537.3	–
Cash flows	**4,524.7**	**–**
Closing balance – assets	**2,573.4**	**-123.6**
Closing balance – liabilities	**32,207.7**	**3,784.6**
Closing balance – net	**29,634.3**	**3,908.1**

	2022		
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-1,264.4	**-1,177.0**	**-353.4**	**1,550.2**
651.1	**1,997.0**	**952.0**	**42,095.6**
1,915.6	**3,174.0**	**1,305.4**	**40,545.4**
-402.9	-600.1	-2,191.4	-3,194.4
–	–	–	-387.7
–	–	–	929.4
-402.9	**-600.1**	**-2,191.4**	**-2,652.8**
–	–	3,074.3	239.8
329.8	230.0	-248.0	-7.8
–	–	–	622.8
329.8	**230.0**	**2,826.3**	**854.8**
–	**–**	**–**	**79.0**
63.5	35.7	30.1	-3,865.0
-57.6	98.1	22.0	834.8
5.9	**133.9**	**52.1**	**-3,030.2**
–	–	–	26,274.3
–	–	–	-21,212.4
–	–	–	-537.3
–	**–**	**–**	**4,524.7**
-355.9	**-424.8**	**-221.1**	**1,448.1**
1,492.4	**2,513.0**	**1,771.3**	**41,769.0**
1,848.3	**2,937.8**	**1,992.4**	**40,320.9**

Movement in carrying amount of liabilities for remaining coverage and for incurred claims – reinsurance contracts held

	2023			
in EUR million	Reinsurance recoverables on LRC without loss recovery component	Loss recovery component	Reinsurance recov- erables on LIC	Total
Opening balance – assets	**166.5**	**21.5**	**2,401.5**	**2,589.6**
Opening balance – liabilities	**1,548.5**	**0.1**	**-991.8**	**556.7**
Opening balance – net	**-1,381.9**	**21.4**	**3,393.4**	**2,032.8**
Reinsurance revenue (ceded)	-3,367.0	–	–	-3,367.0
Incurred claims and other reinsurance service expenses	-1.4	-0.7	1,441.3	1,439.2
Amortisation of insurance acquisition cash flows	4.1	–	–	4.1
Losses and reversal of losses on onerous contracts	–	6.8	–	6.8
Adjustments to liabilities for incurred claims	–	–	-79.2	-79.2
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-3,364.3**	**6.1**	**1,362.1**	**-1,996.1**
thereof changes in non-performance risk of reinsurers	-57.3	–	-3.3	-60.6
Investment component	**-432.3**	**–**	**432.3**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	21.0	0.7	105.2	127.0
Currency gains/losses	28.8	-1.3	-62.8	-35.3
Reinsurance finance result	**49.8**	**-0.5**	**42.5**	**91.7**
Premiums paid	2,678.9	–	–	2,678.9
Claims and other reinsurance service expenses received, including investment components	–	–	-1,984.3	-1,984.3
Insurance acquisition cash flows	4.0	–	–	4.0
Cash flows	**2,682.9**	**–**	**-1,984.3**	**698.6**
Closing balance – assets	**-711.0**	**5.5**	**2,231.4**	**1,525.9**
Closing balance – liabilities	**1,734.8**	**-21.4**	**-1,014.5**	**698.9**
Closing balance – net	**-2,445.9**	**26.9**	**3,245.9**	**827.0**

in EUR million	2022			
	Reinsurance recoverables on LRC without loss recovery component	Loss recovery component	Reinsurance recoverables on LIC	Total
Opening balance – assets	**269.1**	**–**	**2,200.1**	**2,469.2**
Opening balance – liabilities	**1,674.4**	**–**	**-1,019.6**	**654.8**
Opening balance – net	**-1,405.3**	**–**	**3,219.6**	**1,814.4**
Reinsurance revenue (ceded)	-2,344.5	–	–	-2,344.5
Incurred claims and other reinsurance service expenses	-0.1	9.0	1,863.5	1,872.3
Amortisation of insurance acquisition cash flows	-1.9	–	–	-1.9
Losses and reversal of losses on onerous contracts	–	13.4	–	13.4
Adjustments to liabilities for incurred claims	–	–	78.1	78.1
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-2,346.6**	**22.3**	**1,941.6**	**-382.6**
thereof changes in non-performance risk of reinsurers	-0.1	–	–	-0.1
Investment component	**-435.0**	**–**	**435.0**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	130.8	–	-148.4	-17.6
Currency gains/losses	-18.5	-0.9	85.5	66.0
Reinsurance finance result	**112.3**	**-0.9**	**-62.9**	**48.5**
Premiums paid	2,690.1	–	–	2,690.1
Claims and other reinsurance service expenses received, including investment components	–	–	-2,140.1	-2,140.1
Insurance acquisition cash flows	2.5	–	–	2.5
Cash flows	**2,692.7**	**–**	**-2,140.1**	**552.6**
Closing balance – assets	**166.5**	**21.5**	**2,401.5**	**2,589.6**
Closing balance – liabilities	**1,548.5**	**0.1**	**-991.8**	**556.7**
Closing balance – net	**-1,381.9**	**21.4**	**3,393.4**	**2,032.8**

Movement in carrying amount by measurement components – reinsurance contracts held

	2023	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**2,475.8**	**64.2**
Opening balance – liabilities	**855.2**	**-126.9**
Opening balance – net	**1,620.6**	**191.1**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-20.8
Experience adjustments	-918.1	–
Reinsurance service result – changes relate to current service	**-918.1**	**-20.8**
Contracts initially recognised in the year	-1,030.0	66.3
Changes in recoveries of losses on onerous underlying contracts	0.9	–
Changes in estimates that adjust the CSM	-87.9	18.9
Changes in estimates that result in losses and reversal of losses on onerous contracts	7.5	-0.7
Reinsurance service result – changes relate to future service	**-1,109.6**	**84.6**
Reinsurance service result – changes that relate to past service	**-25.4**	**-53.8**
Reinsurance service result – Changes in non-performance risk of reinsurers	**-60.6**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	100.2	9.1
Currency gains/losses	-29.2	-3.2
Reinsurance finance result	**71.0**	**5.9**
Premiums paid	2,678.9	–
Claims and other reinsurance service expenses received, including investment components	-1,984.3	–
Insurance acquisition cash flows	4.0	–
Cash flows	**698.6**	**–**
Closing balance – assets	**1,043.3**	**140.8**
Closing balance – liabilities	**766.8**	**-66.2**
Closing balance – net	**276.5**	**207.0**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-3.7	**17.5**	**35.7**	**2,589.6**
-162.9	**-55.0**	**46.3**	**556.7**
159.2	**72.5**	**-10.6**	**2,032.8**
-204.3	2.2	-720.6	-922.8
–	–	–	-20.8
–	–	–	-918.1
-204.3	**2.2**	**-720.6**	**-1,861.7**
–	–	963.6	–
–	–	-0.9	–
95.4	-58.5	30.7	-1.4
–	–	–	6.8
95.4	**-58.5**	**993.5**	**5.4**
–	**–**	**–**	**-79.2**
–	**–**	**–**	**-60.6**
4.8	1.4	11.5	127.0
3.5	-0.3	-6.1	-35.3
8.3	**1.0**	**5.4**	**91.7**
–	–	–	2,678.9
–	–	–	-1,984.3
–	–	–	4.0
–	**–**	**–**	**698.6**
52.9	**46.8**	**242.1**	**1,525.9**
-5.7	**29.5**	**-25.6**	**698.9**
58.7	**17.2**	**267.7**	**827.0**

	2022	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**2,389.8**	**65.3**
Opening balance – liabilities	**1,041.5**	**-149.9**
Opening balance – net	**1,348.2**	**215.3**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-19.0
Experience adjustments	230.7	–
Reinsurance service result – changes relate to current service	**230.7**	**-19.0**
Contracts initially recognised in the year	-733.9	30.4
Changes in recoveries of losses on onerous underlying contracts	-0.2	–
Changes in estimates that adjust the CSM	19.8	21.1
Changes in estimates that result in losses and reversal of losses on onerous contracts	14.1	-0.7
Reinsurance service result – changes relate to future service	**-700.2**	**50.8**
Reinsurance service result – changes that relate to past service	**102.7**	**-24.6**
Reinsurance service result – Changes in non-performance risk of reinsurers	**-0.1**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	6.3	-30.3
Currency gains/losses	80.3	-1.1
Reinsurance finance result	**86.6**	**-31.4**
Premiums paid	2,690.1	–
Claims and other reinsurance service expenses received, including investment components	-2,140.1	–
Insurance acquisition cash flows	2.5	–
Cash flows	**552.6**	**–**
Closing balance – assets	**2,475.8**	**64.2**
Closing balance – liabilities	**855.2**	**-126.9**
Closing balance – net	**1,620.6**	**191.1**

2022			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
1.0	**17.9**	**-4.7**	**2,469.2**
-185.6	**-39.6**	**-11.6**	**654.8**
186.5	**57.4**	**6.9**	**1,814.4**
0.8	5.3	-691.7	-685.5
–	–	–	-19.0
–	–	–	230.7
0.8	**5.3**	**-691.7**	**-473.9**
–	–	703.6	–
–	–	0.3	-0.1
-27.9	8.3	-21.5	-0.1
–	–	–	13.4
-27.9	**8.3**	**682.4**	**13.2**
–	**–**	**–**	**78.1**
–	**–**	**–**	**-0.1**
4.6	0.6	1.2	-17.6
-4.8	0.8	-9.4	66.0
-0.2	**1.4**	**-8.1**	**48.5**
–	–	–	2,690.1
–	–	–	-2,140.1
–	–	–	2.5
–	**–**	**–**	**552.6**
-3.7	**17.5**	**35.7**	**2,589.6**
-162.9	**-55.0**	**46.3**	**556.7**
159.2	72.5	-10.6	2,032.8

Contracts initially recognised – reinsurance contracts issued

in EUR million	2023	
	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	16,960.2	337.5
Insurance acquisition cash flows	808.0	6.2
Expected present value of cash inflows	-21,805.2	-292.5
Risk adjustment for non-financial risk	346.8	3.5
Contractual service margin	3,690.1	–
Loss component	–	54.7

[1] Profitable contract includes the buckets profitable and remaining

in EUR million	2022	
	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	14,878.1	3,124.0
Insurance acquisition cash flows	702.3	84.6
Expected present value of cash inflows	-18,975.6	-3,009.8
Risk adjustment	321.0	41.2
Contractual service margin	3,074.3	–
Loss component	–	239.9

[1] Profitable contract includes the buckets profitable and remaining

Contracts initially recognised – reinsurance contracts held

in EUR million	2023	
	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	1,688.3	1.3
Insurance acquisition cash flows	–	–
Expected present value of cash outflows	-2,718.2	-0.4
Risk adjustment	66.3	–
Contractual service margin	963.6	-0.9
Loss recovery amount	–	–

in EUR million	2022	
	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	1,907.1	0.2
Insurance acquisition cash flows	1.6	–
Expected present value of cash outflows	-2,642.7	-0.4
Risk adjustment for non-financial risk	30.4	–
Contractual service margin	703.6	0.3
Loss recovery amount	–	–

No significant portfolios were acquired in the reporting period. Separate disclosure of the measurement components would be required for such portfolios on initial recognition.

Maturities of the technical cash flows

IFRS 17 "Insurance Contracts" requires information which helps to clarify the amount and timing of cash flows expected from reinsurance contracts. In the following tables we have shown these cash flows broken down by the expected remaining times to maturity. As part of the maturity analysis, we have differentiated between the cash flows of reinsurance contracts issued and those of reinsurance contracts held. For further explanation of the recognition and measurement of the liabilities, please see section 3.1 "Summary of major accounting policies".

Maturities of the remaining contractual undiscounted net cash flows

	2023		2022	
	Remaining contractual undiscounted net cash flows		Remaining contractual undiscounted net cash flows	
in EUR million	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	6,355.5	-302.9	4,764.3	331.7
Due after one through two years	8,610.7	240.3	8,576.2	500.6
Due after two through three years	5,654.4	199.5	5,687.1	316.2
Due after three through four years	3,934.4	137.0	3,919.5	247.1
Due after four through five years	2,893.4	94.4	2,840.4	160.6
Due after five through ten years	5,913.4	146.6	5,961.3	298.0
Due after ten through twenty years	1,803.3	-114.2	1,992.2	37.4
Due after twenty years	1,944.0	-181.7	2,251.4	-136.7
	37,109.0	**218.9**	**35,992.2**	**1,755.0**
Discounting	-5,867.6	57.6	-6,357.9	-134.3
Total	**31,241.3**	**276.5**	**29,634.3**	**1,620.6**

The average maturity of the liability for incurred claims was 4.5 years (4.4 years), or similarly 4.5 years (4.4 years) after allowance for the corresponding reinsurance recoverables. The liability for remaining coverage had an average maturity of 19.4 years (20.5 years) – or 19.6 years (20.7 years) on a net basis.

The average maturity of the liabilities is determined using actuarial projections of the expected future payments. A payment pattern is calculated for each homogenous category of our portfolio – making allowance for the business sector, geographical considerations, contract type and type of reinsurance – and applied to the outstanding liabilities for each underwriting year and run-off status.

Maturities of the contractual service margin

The following table shows the future development of the CSM from our reinsurance contracts held and issued. For further explanation of the recognition and measurement of the liabilities, please see section 3.1 "Summary of major accounting policies".

Maturities of the contractual service margin

	2023		2022	
	Contractual service margin		Contractual service margin	
in EUR million	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	2,197.9	101.4	1,544.1	48.2
Due after one through two years	792.0	13.6	640.3	26.2
Due after two through three years	477.8	15.5	462.5	17.2
Due after three through four years	420.0	16.1	387.1	-2.3
Due after four through five years	400.2	16.5	355.2	13.2
Due after five through ten years	1,734.5	84.6	1,490.2	59.8
Due after ten through twenty years	2,170.9	146.8	1,837.9	77.0
Due after twenty years	3,227.8	66.2	3,057.1	77.3
	11,421.3	**460.8**	**9,774.5**	**316.7**
Discounting	-3,378.6	-117.2	-2,996.0	-95.5
Total	**8,042.7**	**343.5**	**6,778.5**	**221.2**

6.5. Provisions for pensions and other post-employment benefit obligations

Pension commitments are given in accordance with the relevant version of the pension plan as amended. The 1968 pension plan provides for retirement, disability, widows' and orphans' benefits. The pension entitlement is dependent on length of service; entitlements under the statutory pension insurance scheme are taken into account. The pension plan was closed to new participants with effect from 31 January 1981.

On 1 April 1993 (1 June 1993 in the case of senior executives) the 1993 pension plan came into effect. This pension plan provides for retirement, disability and surviving dependants' benefits. The scheme is based upon annual determination of the pension contributions, which are calculated according to the pensionable employment income and the company's performance. The pension plan was closed to new participants with effect from 31 March 1999.

Insurance coverage has been taken out for both the aforementioned pension plans.

From 1997 onwards it has been possible to obtain pension commitments through deferred compensation. The employee-funded commitments included in the provisions for accrued pension rights are protected by an insurance contract with HDI Lebensversicherung AG, Cologne.

As at 1 July 2000 the 2000 pension plan came into force for the entire Group. Under this plan, new employees included in the group of beneficiaries are granted an indirect commitment from HDI Unterstützungskasse e. V. This pension plan provides for retirement, disability and surviving dependants' benefits. The provident fund takes out insurance coverage with HDI Lebensversicherung AG that maps the entire spectrum of benefits (matching coverage). These pension commitments are considered to be contribution-based pension benefits under German employment law, and for economic purposes the pension scheme is classified as a defined benefit plan. The relevant assets of the provident fund are recognised as plan assets.

Employees also have the option to accumulate additional, insurance-type retirement provision by way of deferred compensation. Pension provisions are not recognised in this regard.

In addition to these pension plans, senior executives and members of the Executive Board, in particular, enjoy individual commitments as well as commitments given under the benefits plan of the Bochumer Verband.

The commitments to employees in Germany predominantly comprise benefit obligations financed by the Group companies. The provisions for pensions in Germany and abroad were calculated on the basis of uniform standards according to prevailing economic circumstances.

Provisions for pensions are established in accordance with actuarial principles and are based upon the commitments made by the Hannover Re Group for retirement, disability and widows' benefits. The Heubeck "2018 G standard tables", enhanced as in the previous year according to the observable risk experience in the portfolio. were used as the biometric actuarial basis for pension commitments in Germany. The amount of the commitments is determined according to length of service and salary level.

The defined benefit plans expose Hannover Re to the following actuarial risks:

- longevity
- interest rate
- disablement
- pension progression
- rate of compensation increase

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

Disablement entails the risk that the assumed number of retirements from the subportfolio of eligible beneficiaries on grounds of disability does not correspond to the actual experience and for this reason increased benefit obligations have to be met.

The pension progression entails the risk that the anticipated development of the consumer price index factored into the trend assumptions was too low and that increased benefit obligations arise on account of pension indexation required by law.

The rate of compensation increase entails the risk that the increases in pensionable salaries factored into the trend assumptions on a parallel basis do not adequately reflect the actual developments. In addition, in the case of plans under which the determinative income components above and below the income threshold for contributions to the statutory pension insurance scheme are differently weighted for the purpose of calculating the benefit, there is a risk of a diverging trend in the future with respect to salary and income threshold.

Measures to reduce these risks consist of pension insurance taken out for virtually all pension commitments (for new additions defined contribution plans with matching insurance coverage) as well as enhanced biometric actuarial bases. The assumptions for the pension progression and for the expected rate of compensation increase and career trend are regularly reviewed and if necessary adjusted with an eye to current expectations for the inflation trend. No unusual risks or risk concentrations can be identified.

The calculation of the provisions for pensions is based upon the following assumptions:

Measurement assumptions

in %	2023	2022
Discount rate for defined benefit obligation	3.25	3.48
Rate of compensation increase	3.47	3.47
Pension indexation	2.36	2.37

The movements in the net pension liability for the Group's various defined benefit plans were as follows:

Movements in net liability from defined benefit pension plans

in EUR million	2023	2022	2023	2022	2023	2022
	Defined benefit obligation		Fair value of plan assets		Effect of minimum funding requirement on asset ceiling	
Position at 1 January of the financial year	202.4	270.0	56.8	61.7	3.9	–
Recognised in profit or loss						
Current service costs	5.2	6.8	–	–	–	–
Past service cost, plan curtailments and settlements	-0.1	0.1	–	–	–	–
Net interest component	7.1	2.5	2.2	0.8	0.1	–
	12.2	**9.4**	**2.2**	**0.8**	**0.1**	**–**
Recognised in cumulative other comprehensive income						
Actuarial gain (-)/loss (+) from change in biometric assumptions	–	–	–	–	–	–
Actuarial gain (-)/loss (+) from change in financial assumptions	7.1	-72.1	–	–	–	–
Experience gains (-) / losses (+)	3.9	1.9	–	–	–	–
Return on plan assets, excluding amounts included in interest income	–	–	-3.5	-9.7	–	–
Change in asset ceiling	–	–	–	–	-0.7	3.9
Exchange differences	–	-0.6	0.1	-0.8	–	–
	11.0	**-70.8**	**-3.4**	**-10.5**	**-0.7**	**3.9**
Other changes						
Employer contributions	–	–	5.9	5.9	–	–
Benefit payments	-5.4	-6.1	-1.3	-1.0	–	–
Additions and disposals	0.3	–	–	–	–	–
Effects of plan settlements	-1.5	–	–	–	–	–
	-6.5	**-6.1**	**4.5**	**4.9**	**–**	**–**
Position at 31 December of the financial year	**219.1**	**202.4**	**60.1**	**56.8**	**3.3**	**3.9**

The plan assets contain assets held by a long-term employee benefit fund and qualifying insurance policies as defined by IAS 19. The plan assets are attributable in an amount of EUR 4.8 million (EUR 17.0 million) to assets with quoted market prices.

The reconciliation of the projected benefit obligations with the recognised provisions for pensions is as follows:

Provisions for pensions

in EUR million	2023	2022
Projected benefit obligations at 31 December of the financial year	219.1	202.4
Fair value of plan assets at 31 December of the financial year	60.1	56.8
Effect of minimum funding requirement on asset ceiling	3.3	3.9
Recognised pension obligations at 31 December of the financial year	**162.4**	**149.5**
thereof: capitalised assets	1.9	4.2
Provisions for pensions	164.3	153.8

Of the total provisions for pensions, an amount of EUR 161.8 million (EUR 151.2 million) is attributable to employer-funded obligations and EUR 2.6 million (EUR 2.5 million) to employee-funded obligations.

In the current financial year Hannover Re anticipates contribution payments of EUR 5.8 million under the plans set out above. The weighted average duration of the defined benefit obligation is 15.1 (15.2) years.

Sensitivity analysis

An increase or decrease in the key actuarial assumptions would have the following effect on the present value of the defined benefit obligation as at the balance sheet date:

Effect on the defined benefit obligations

in EUR million		Parameter increase	Parameter decrease
Discount rate	(+/- 0,5 %)	-15.1	16.9
Rate of compensation increase	(+/- 0,25 %)	1.2	-1.2
Pension indexation	(+/- 0,25 %)	6.0	-5.8

Furthermore, a change is possible with respect to the assumed mortality rates and lifespans. The underlying mortality tables were adjusted by reducing the mortalities by 10% in order to determine the longevity risk. Extending the lifespans in this way would have produced a EUR 7.2 million (EUR 6.6 million) higher pension commitment at the end of the financial year.

Defined contribution plans

In addition to the defined benefit plans, some Group companies have defined contribution plans that are based on length of service and the employee's income or level of contributions. The expense recognised for these obligations in the financial year in accordance with IAS 19 "Employee Benefits" was EUR 28.5 million (EUR 25.3 million). Of the expense for defined contribution plans, an amount of EUR 14.3 million (EUR 12.4 million) relates to state pension schemes, thereof EUR 11.3 million (EUR 10.2 million) to contributions to the statutory pension insurance scheme in Germany.

6.6. Other liabilities

Other liabilities

in EUR million	2023	2022 [1]
Liabilities from derivatives	76.8	75.9
Interest	46.5	47.9
Deferred income and prepayments received	58.0	43.9
Sundry non-technical provisions	219.9	189.7
Sundry liabilities	2,765.4	2,303.7
Total	**3,166.5**	**2,661.1**

[1] Restated pursuant to IAS 8

With regard to the liabilities from derivatives in an amount of EUR 76.8 million (EUR 75.9 million), please see our explanatory remarks on derivative financial instruments in section 9.1 "Derivative financial instruments and financial guarantees ".

We enter into term repurchase agreements (repos) as a supplementary liquidity management tool. The asset portfolios exchanged in this context are fully collateralised. As at the balance sheet date the liabilities from repos recognised in the sundry liabilities amounted to EUR 365.8 million (EUR 250.1 million). In addition, cash collateral received in connection with the market performance of derivatives was recognised in the sundry liabilities in an amount of EUR 83.8 million (EUR 92.1 million). The sundry liabilities further include accounts payable of EUR 1,605.3 million (EUR 1,411.7 million) that were not allocated to underwriting items.

Development of sundry non-technical provisions

in EUR million	Balance at 31 December 2022	Currency translation at 1 January	Balance at 1 January of the year under review
Provisions for			
Audits and costs of publishing the annual financial statements	12.6	-0.1	12.5
Consultancy fees	2.3	-0.1	2.2
Suppliers' invoices	9.9	-0.2	9.8
Partial retirement arrangements and early retirement obligations	2.9	–	2.9
Holiday entitlements and overtime	14.3	-0.2	14.1
Anniversary bonuses	5.8	-0.1	5.8
Management and staff bonuses	90.7	-1.6	89.1
Other	51.1	-0.5	50.6
Total	**189.7**	**-2.8**	**186.9**

The maturities of the sundry non-technical provisions as at the balance sheet date are shown in the following table.

Maturities of the sundry non-technical provisions

in EUR million	2023	2022
Due in one year	129.3	138.3
Due after one through five years	84.5	43.5
Due after five years	5.7	7.9
No maturity	0.4	–
Total	**219.9**	**189.7**

Additions	Utilisation	Release	Currency translation at 31 December	Balance at 31 December 2023
8.6	9.0	0.8	–	11.2
1.5	1.3	0.2	–	2.1
7.4	2.3	1.2	–	13.6
-1.6	-2.4	–	–	3.7
8.4	7.9	–	–	14.6
0.6	0.6	–	–	5.8
65.9	43.4	1.3	0.1	110.4
12.7	4.4	0.4	–	58.5
103.4	**66.5**	**3.9**	**0.1**	**219.9**

6.7. Financing liabilities

On 14 November 2022 Hannover Rück SE placed subordinated debt in an amount of EUR 750.0 million on the European capital market. The bond has a total maturity of around 21 years and a first scheduled call option on 26 February 2033. It carries a fixed coupon of 5.875% p.a. in the first roughly eleven years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +375 basis points.

On 22 March 2021 Hannover Rück SE placed subordinated debt in the amount of EUR 750.0 million on the European capital market. The bond has a total maturity of around 21 years and a first scheduled call option on 30 December 2031. It carries a fixed coupon of 1.375% p. a. in the first roughly eleven years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +233 basis points.

On 8 July 2020 Hannover Rück SE placed subordinated debt in the amount of EUR 500.0 million on the European capital market. The bond has a total maturity of around 20 years with a first scheduled call option on 8 July 2030. It carries a fixed coupon of 1.75% p. a. in the first roughly ten years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +300 basis points.

On 9 October 2019 Hannover Rück SE placed subordinated debt in the amount of EUR 750 million on the European capital market. The bond has a total maturity of 20 years with a first scheduled call option on 9 July 2029. It carries a fixed coupon of 1.125% p. a. in the first ten years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +238 basis points.

On 18 April 2018 Hannover Rück SE placed a senior bond with a volume of EUR 750.0 million on the European capital market. The bond has a maturity date of 18 April 2028 and may be redeemed at any time from 18 January 2028 onwards, although not later than 18 April 2028. It carries a fixed coupon of 1.125% p. a.

On 15 September 2014 Hannover Rück SE placed a EUR 500.0 million subordinated bond on the European capital market. The issue has a perpetual maturity with a first scheduled call option on 26 June 2025 and may be redeemed at each coupon date thereafter. It carries a fixed coupon of 3.375% p. a. until 26 June 2025, after which the interest rate basis changes to 3-month EURIBOR +325 basis points.

The EUR 500.0 million subordinated bond issued by Hannover Finance (Luxembourg) S. A. in 2012 was called and redeemed in the year under review at the first scheduled call date of 30 June 2023.

Altogether, six (seven) bonds were recognised as at the balance sheet date with an amortised cost of EUR 3,976.8 million (EUR 4,472.0 million).

Long-term debt and notes payable

in EUR million	Coupon	Maturity	Currency	2023			
				Amortised cost	Fair value measurement	Accrued interest	Fair value
Notes payable							
Hannover Rück SE, 2022	5.875	2043	EUR	746.0	89.7	15.4	851.1
Hannover Rück SE, 2021	1.375	2042	EUR	744.5	-139.9	5.2	609.9
Hannover Rück SE, 2020	1.750	2040	EUR	496.4	-66.7	2.0	431.8
Hannover Rück SE, 2019	1.125	2039	EUR	744.0	-107.3	1.9	638.7
Hannover Rück SE, 2018	1.125	2028	EUR	747.0	-33.0	5.9	720.0
Hannover Rück SE, 2014	3.375	n/a	EUR	498.9	-8.6	8.7	498.9
Hannover Finance (Luxembourg) S.A., 2012	5.000	2043	EUR	–	–	–	–
				3,976.8	**-265.8**	**39.1**	**3,750.4**
Long-term debt				797.7	-7.2	3.0	793.5
Total				**4,774.5**	**-273.0**	**42.1**	**4,543.9**

in EUR million	Coupon	Maturity	Currency	2022			
				Amortised cost	Fair value measurement	Accrued interest	Fair value
Notes payable							
Hannover Rück SE, 2022	5.875	2043	EUR	745.7	15.7	5.8	767.1
Hannover Rück SE, 2021	1.375	2042	EUR	743.9	-209.9	5.2	539.2
Hannover Rück SE, 2020	1.750	2040	EUR	495.9	-109.8	2.0	388.2
Hannover Rück SE, 2019	1.125	2039	EUR	743.0	-171.1	1.9	573.9
Hannover Rück SE, 2018	1.125	2028	EUR	745.7	-92.1	5.9	659.6
Hannover Rück SE, 2014	3.375	n/a	EUR	498.2	-20.7	8.7	486.1
Hannover Finance (Luxembourg) S.A., 2012	5.000	2043	EUR	499.6	0.7	12.6	512.9
				4,472.0	**-587.3**	**42.2**	**3,927.0**
Long-term debt				926.6	-22.8	2.4	906.2
Total				**5,398.7**	**-610.1**	**44.6**	**4,833.1**

The aggregated fair value of the extended subordinated loans is based on quoted, active market prices. If such price information was not available, fair value was determined on the basis of the recognised effective interest rate method or estimated using other financial assets with similar rating, duration and return characteristics. Under the effective interest rate method, the current market interest rate levels in the relevant fixed interest periods are always taken as a basis.

Net gains and losses from long-term debt and notes payable

in EUR million	2023	2022	2023	2022	2023	2022
	Ordinary income/expenses		Amortisation		Net result	
Long-term debt	-38.0	-19.3	-0.9	-0.7	-38.9	-20.0
Notes payable	-97.0	-83.6	-3.6	-3.6	-100.6	-87.2
Total	**-135.0**	**-102.9**	**-4.5**	**-4.3**	**-139.5**	**-107.2**

The ordinary expenses principally include interest expenses of nominally EUR 97.0 million (EUR 83.6 million) resulting from the issued subordinated and senior bonds.

Maturities of financial liabilities

	2023					
in EUR million	Due within up to 1 year	One to five years	Five to ten years	Ten to twenty years	More than twenty years	No maturity
Other financial liabilities [1]	634.9	34.4	28.9	1.2	–	15.0
Long-term debt	273.9	424.5	99.3	–	–	–
Notes payable	–	747.0	–	2,731.0	–	498.9
Lease liabilities	7.8	27.0	29.0	–	37.1	–
Total	**916.6**	**1,232.9**	**157.2**	**2,732.2**	**37.1**	**513.8**

[1] Excluding sundry non-technical provisions, for which the maturities are broken down separately, and other various liabilities

	2022 [2]					
in EUR million	Due within up to 1 year	One to five years	Five to ten years	Ten to twenty years	More than twenty years	No maturity
Other financial liabilities [1]	527.7	36.6	38.8	–	–	21.4
Long-term debt	261.6	411.2	225.7	26.9	–	1.4
Notes payable	–	–	745.7	1,738.6	1,489.6	498.2
Lease liabilities	8.2	35.9	28.8	0.6	38.1	–
Total	**797.5**	**483.7**	**1,039.0**	**1,766.1**	**1,527.7**	**520.9**

[1] Excluding sundry non-technical provisions, for which the maturities are broken down separately, and other various liabilities
[2] Restated pursuant to IAS 8

The following table shows the movements in long-term debt, notes payable and other long-term liabilities with respect to cash and non-cash changes.

Reconciliation of financing liabilities

	Balance at 31 December 2022	Cash flow	Change in consolidation	Non-cash items		Balance at 31 December 2023
in EUR million				Exchange rate difference	Other changes	
Long-term debt	926.6	-112.2	–	-17.6	0.9	797.7
Notes payable	4,472.0	-500.0	–	–	4.8	3,976.9
Lease liabilities	111.7	-14.2	–	-2.0	5.4	100.8
Total	**5,510.4**	**-626.4**	**–**	**-19.6**	**11.2**	**4,875.4**

	Balance at 31 December 2021	Cash flow	Change in consolidation	Non-cash items		Balance at 31 December 2022
in EUR million			Excel	Exchange rate difference	Other changes	
Long-term debt	535.4	125.2	240.6	24.8	0.7	926.6
Notes payable	3,722.3	745.8	–	–	4.0	4,472.0
Lease liabilities	112.6	-14.4	–	1.4	12.2	111.7
Total	**4,370.3**	**856.5**	**240.6**	**26.2**	**16.9**	**5,510.4**

6.8. Shareholders' equity and treasury shares

Shareholders' equity is shown as a separate component of the financial statement 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 shareholders' equity comprises not only the net income deriving from the statement of income but also the changes in the value of asset and liability items not recognised in the statement of income.

The common shares (share capital of Hannover Rück SE) amount to EUR 120,597,134.00. They are divided into 120,597,134 voting and dividend-bearing registered ordinary shares in the form of no-par-value shares. The shares are paid in full. Each share carries an equal voting right and an equal dividend entitlement.

Conditional capital of up to EUR 24.1 million (EUR 24.1 million) is available. It can be used to grant shares to holders of bonds and / or profit-sharing rights with conversion rights and warrants and has a time limit of 4 May 2026. In addition, authorised capital is available in an amount of up to EUR 24.1 million (EUR 24.1 million), which similarly has a time limit of 4 May 2026. The subscription right of shareholders may be excluded with the consent of the Supervisory Board under certain conditions. The Executive Board is authorised, with the consent of the Supervisory Board, to use an amount of up to EUR 1.0 million (EUR 1.0 million) of the existing authorised capital to issue employee shares.

The Executive Board is further authorised, with the consent of the Supervisory Board, to acquire treasury shares – including through the use of derivatives – up to an amount of 10% of the share capital. The authorisation has a time limit of 5 May 2025.

The Annual General Meeting of Hannover Rück SE resolved on 3 May 2023 that a gross dividend of EUR 6.00 per share should be paid for the 2022 financial year, corresponding to a total distribution of EUR 723.6 million (EUR 693.4 million). The distribution is comprised of a dividend of EUR 5.00 and a special dividend of EUR 1.00 per share.

The decrease in the other reserves arising out of currency translation, which is recognised in equity, was attributable in a net amount of EUR 88.3 million (increase of EUR 22.8 million in the previous year) to the translation of long-term debt or loans with no maturity date extended to Group companies and branches abroad.

IAS 1 requires disclosures on the objectives, policies and processes for managing capital. A major strategic objective of Hannover Re is sustainable protection of our capital. We have issued debt as an equity substitute to keep the cost of capital low. Hannover Re uses intrinsic value creation (IVC) as a central tool of value-based management. As part of this methodology, we are guided by the principles of economical allocation of equity and efficient use of debt as an equity substitute in order to achieve an attractive weighted cost of capital. The concept and the objectives and principles according to which we manage our capital are described in greater detail in our comments on value-based management in the management report (subsection "Management system"). The further disclosures on capital management arising out of IAS 1.134 – 136 are provided in the "Financial position and net assets" subsection of the management report, to which the reader is referred. This includes both a presentation of our capital management policies and processes and a summary of the diverse external capital requirements to which we are subject (cf. subsections "Analysis of the capital structure", "Group shareholders' equity" and "Financing and Group debt"). The Solvency II regulatory framework, in particular, gives rise to capital requirements and consequences for capital management, which we discuss more closely in the risk report.

Treasury shares

IAS 1 requires separate disclosure of treasury shares in shareholders' equity. As part of this year's employee share option plan Hannover Rück SE acquired altogether 18,714 (26,927) treasury shares during the second quarter of 2023 on the legal basis of § 71 Para. 1 No. 2 Stock Corporation Act (AktG) and delivered them to eligible employees at preferential conditions. These shares are blocked until 31 May 2027. This transaction resulted in an expense of EUR 0.7 million (EUR 1.6 million), which was recognised under personnel expenditure, as well as a negligible change in retained earnings recognised in equity. The company was no longer in possession of treasury shares as at the balance sheet date.

6.9. Non-controlling interests

Non-controlling interests in the shareholders' equity of subsidiaries are reported separately within Group shareholders' equity in accordance with IAS 1 "Presentation of Financial Statements". They amounted to EUR 892.7 million (EUR 897.2 million) as at the balance sheet date.

Non-controlling interests in partnerships are reported in accordance with IAS 32 "Financial Instruments: Presentation" under long-term liabilities. The non-controlling interest in profit or loss, which forms part of net income and is shown separately after net income as a "thereof" note, amounted to EUR 2.8 million (EUR 117.5 million) in the year under review.

Subsidiaries with material non-controlling interests

	2023	2022 [1]
in EUR million	E+S Rückversicherung AG, Hannover, Germany	
Participation of non-controlling interests	35.21%	35.21%
Voting rights of non-controlling interests	35.21%	35.21%
Net income	6.2	293.8
thereof attributable to non-controlling interests	2.2	103.4
Income / expense recognised directly in equity	37.7	-160.7
Total recognised income and expense	43.9	133.1
Shareholder's equity	2,309.9	2,391.0
thereof attributable to non-controlling interests	813.3	841.8
Dividends paid	125.0	80.0
thereof attributable to non-controlling interests	44.0	28.2
Assets	9,654.7	9,220.1
Liabilities	7,344.8	6,829.1
Cash flow from operating activities	570.5	494.2
Cash flow from investing activities	-432.4	-451.5
Cash flow from financing activities	-136.7	-36.6

[1] Restated pursuant to IAS 8

7. Notes on the individual items of the statement of income

7.1. Reinsurance revenue

The following tables show the breakdown of the gross reinsurance revenue into geographical origin and categories.

Reinsurance revenue (gross) by region

in EUR million	2023	2022
Regional origin		
Germany	1,433.2	1,493.3
United Kingdom	3,794.5	3,807.7
France	806.4	726.2
Other	1,957.9	1,822.2
Europe	**7,992.1**	**7,849.4**
USA	9,016.0	8,603.8
Other	1,301.8	1,196.1
North America	**10,317.8**	**9,799.8**
Asia	3,180.3	3,601.1
Australia	1,389.9	1,282.9
Australasia	**4,570.3**	**4,884.0**
Africa	465.5	528.7
Other	1,110.9	954.8
Total	**24,456.5**	**24,016.7**

Components of the reinsurance revenue (gross)

in EUR million	2023	2022
Components		
Expected incurred claims and other insurance expenses	18,929.0	19,141.1
CSM recognised for services provided	3,603.5	3,194.4
Release of risk adjustment for non-financial risk	796.1	523.9
Experience adjustments for past or current services	582.2	670.0
Recovery of insurance acquisition cash flows	545.7	487.3
Total	**24,456.5**	**24,016.7**

7.2. Investment result

Investment result

in EUR million	2023	2022 [1]
Income from real estate	226.4	228.8
Dividends	5.2	3.7
Interest income	1,456.9	1,195.1
Other investment income	293.0	533.5
Ordinary investment income	**1,981.5**	**1,961.1**
Expected credit losses	-22.8	-119.9
Impairments/Depreciation on real estate	135.4	66.8
Appreciation of investments	2.4	19.1
Change in fair value of financial instruments	76.0	-14.2
Profit/loss from investments in associated companies and joint ventures	16.3	-63.2
Realised gains on investments	30.3	114.3
Realised losses on investments	184.1	699.5
Other investment expenses	175.9	165.5
Investment result	**1,588.2**	**965.3**

[1] Restated pursuant to IAS 8

We booked a net charge of EUR 22.8 million (EUR 119.9 million) from the change in provisions for expected credit losses (ECL). This can be attributed largely to a few issuers of fixed-income securities from the Chinese real estate sector still remaining in our portfolio. We carried fixed-income instruments with a total fair value of EUR 122.9 million in Stage 3 of our risk provisioning model as at the balance sheet date. Impairments for investments not covered by the stage model for expected credit losses were incurred on directly held real estate investments in an amount of EUR 79.1 million (EUR 18.2 million). We took into consideration increased pressure on market values here by recognising in the balance sheet reductions in the value of a number of directly held properties, especially in the US office real estate market.

The portfolio did not contain any overdue, unadjusted investments as at the balance sheet date.

Interest income on investments

in EUR million	2023	2022 [1]
Financial investments – at fair value through OCI	1,308.1	1,113.7
Financial investments – at fair value through profit or loss	148.8	79.6
Other	–	1.8
Total	**1,456.9**	**1,195.1**

[1] Restated pursuant to IAS 8

The net gains and losses on investments held to maturity, loans and receivables and the available-for-sale portfolio shown in the following table are composed of interest income, realised gains and losses as well as impairments and appreciation. In the case of the fixed-income securities at fair value through profit or loss designated in this category and the other financial assets, which include the technical derivatives, income and expenses from changes in fair value are also recognised.

Making allowance for the other investment expenses of EUR 175.9 million (EUR 165.5 million), net income from investments of altogether EUR 1,588.2 million (EUR 965.4 million) was recognised in the year under review.

Net gains and losses on investments

in EUR million	2023				
	Ordinary investment income [1]	Expected credit losses, impairment, depreciation and appreciation of investments	Change in fair value of financial instruments	Realised gains and losses on investments	Net income from investments [2]
Financial investments – at fair value through OCI	1,588.9	-22.8	–	-154.0	1,412.1
Financial investments – at fair value through profit or loss	190.5	–	87.0	–	277.4
Investment property	195.2	-133.0	–	–	62.3
Investments in associated companies and joint ventures	16.3	–	–	–	16.3
Other invested assets	5.2	–	–	–	5.1
Other	1.7	–	-11.0	0.2	-9.1
Total	**1,997.8**	**-155.8**	**76.0**	**-153.9**	**1,764.2**

[1] Including income from associated companies and joint ventures, for reconciliation with the consolidated statement of income
[2] Excluding other investment expenses

in EUR million	2022 [1]				
	Ordinary investment income [2]	Expected credit losses, impairment, depreciation and appreciation of investments	Change in fair value of financial instruments	Realised gains and losses on investments	Net income from investments [3]
Financial investments – at fair value through OCI	1,475.1	-119.9	–	-594.3	760.8
Financial investments – at fair value through profit or loss	331.2	–	-4.2	-0.3	326.7
Investment property	165.8	-47.7	–	9.4	127.5
Investments in associated companies and joint ventures	-62.8	–	–	–	-62.8
Other invested assets	-14.0	–	5.5	–	-8.5
Other	2.7	–	-15.5	–	-12.9
Total	**1,897.9**	**-167.6**	**-14.2**	**-585.3**	**1,130.8**

[1] Restated pursuant to IAS 8
[2] Including income from associated companies, for reconciliation with the consolidated statement of income
[3] Excluding other investment expenses

7.3. Insurance finance income and expenses

In the following table we compare the reinsurance finance result with the investment return. Both earnings components include income and expenses from currency translation and the amounts recognised directly in OCI. The reinsurance finance result is comprised primarily of the effects from interest accretion and changes in the discounting assumptions and other financial measurement assumptions relating to our technical provisions.

Insurance finance income and expenses

in EUR million	2023	2022
Investment income	2,250.2	2,371.0
Investment expenses	-661.9	-1,405.7
Investment result	**1,588.2**	**965.3**
Currency gains/losses on investments	-450.5	549.4
Amounts recognised in OCI	1,733.9	-6,210.0
Total investment return	**2,871.7**	**-4,695.3**
Finance income or expenses from reinsurance contracts (gross)		
Interest accreted	-957.3	-666.2
Changes in interest rates and other financial assumptions	-1,249.6	4,447.6
Currency gains/losses	541.2	-563.9
Total finance income or expenses from reinsurance contract (gross)	**-1,665.7**	**3,217.4**
thereof recognised in profit or loss	-360.9	-1,160.0
thereof recognised in other comprehensive income	-1,304.8	4,377.5
Finance income or expenses from reinsurance contracts (retroceded)		
Interest accreted	45.3	26.4
Changes in interest rates and other financial assumptions	84.7	-45.0
Currency gains/losses	-45.5	83.5
Total finance income or expenses from reinsurance contracts (retroceded)	**84.5**	**64.9**
thereof recognised in profit or loss	-23.7	96.5
thereof recognised in other comprehensive income	108.2	-31.6
Total Reinsurance finance income and expenses	**-1,581.2**	**3,282.4**
thereof recognised in profit or loss	-384.6	-1,063.5
thereof recognised in other comprehensive income	-1,196.6	4,345.9
Insurance finance income and expenses before currency gains or losses		
Currency gains/losses from reinsurance finance result (net)	495.7	-480.4
Total Insurance finance income and expenses before currency gains or losses	**-2,076.9**	**3,762.8**
thereof recognised in profit or loss	-880.3	-583.1
thereof recognised in other comprehensive income	-1,196.6	4,345.9

7.4. Other income and expenses

Other income

in EUR million	2023	2022 [1]
Other income		
Income from services	149.8	131.7
Other interest income	38.6	80.6
Deconsolidation	–	188.0
Income from releases of other provisions	3.4	4.2
Sundry income	41.3	19.8
	233.1	**424.3**
Other expenses		
Expenses for services	88.7	76.7
Other interest expenses	40.4	9.4
Expenses for the company as a whole	459.9	420.9
Sundry expenses	125.8	137.9
	714.8	**644.8**
Total	**-481.7**	**-220.5**

[1] Restated pursuant to IAS 8

The decrease in the other income is due in an amount of EUR 188.0 million to deconsolidation in the previous year of formerly fully consolidated entities and in an amount of EUR 40.3 million to a termination fee that was booked in the previous year. The other expenses include, among other things, amortisation expenses that led to a charge to the result before tax of EUR 3.0 million (EUR 7.7 million). Of this, an amount of EUR 4.5 million was attributable in the previous year to value adjustments for the goodwill of a South African subsidiary.

The other income includes revenues from contracts with customers set out below in accordance with IFRS 15. With regard to the fundamental approach adopted for application of IFRS 15 we would refer to the remarks in section 3.1 "Summary of major accounting policies".

Revenue categories

in EUR million	2023	2022
Revenue realised at a point in time		
Brokerage commissions, performance fees and similar forms of remuneration	61.0	43.8
Other insurance-related services	6.4	7.4
Revenue realised over time		
Other insurance-related services	82.1	79.8
Total	**149.5**	**131.0**

The brokerage commissions, performance fees and similar forms of remuneration in an amount of EUR 61.0 million (EUR 43.8 million) were realised at a point in time. Of this amount, EUR 60.3 million (EUR 43.0 million) is attributable to brokerage commissions earned by Group-internal insurance companies and insurance intermediaries.

Further revenues of EUR 0.7 million (EUR 0.8 million) were generated in this revenue category.

An amount of EUR 82.1 million (EUR 79.8 million) was realised over time in the current financial year in connection with other insurance-related services. This involves revenues from administrative services amounting to EUR 29.6 million (EUR 30.3 million) that were generated on the Lloyd's markets in the United Kingdom and in the Asia-Pacific region. The transaction prices are essentially calculated according to the underlying general fee scales as well as a percentage share of the gross premium. The revenues from the administrative services described here are largely earned over a period of three to four years and realised pro rata temporis in accordance with the contractual term.

In addition, other revenues known as "binder fees" were earned from administrative activities on the South African market in an amount of EUR 14.2 million (EUR 17.4 million). The transaction price is calculated from a percentage rate in relation to the gross premium of the underlying insurance contracts. Binding fees are earned over a period of time.

On the German market revenues of EUR 15.4 million (EUR 11.9 million) were generated. These relate in large part to transfers of use for IT. The underlying transaction prices are derived from the contractually agreed contract prices and are realised pro rata temporis as the customer makes use of the IT.

On the North American market revenues of EUR 7.4 million (EUR 3.9 million) were earned from the assumption of administrative tasks. The performance obligation is considered to have been fulfilled when the company has rendered the contractually agreed services. Further revenues as defined by IFRS 15 were generated from the transfer of use of application software used for the underwriting of insurance risks. These amounted to EUR 5.0 million (EUR 7.5 million) in the year under review and are deemed to be earned over a period of time when the customer makes use of the software. In both cases the transaction price is derived from the contractually agreed contract prices.

An amount of EUR 7.8 million (EUR 5.9 million) was earned on the UK and Swedish markets from the performance of management services. The performance obligation is considered to have been fulfilled when the administrative activities specified in the contract were carried out. The transaction prices in this regard are measured essentially by the underlying general fee scales.

Further revenues of EUR 2.7 million (EUR 2.9 million) were generated in this revenue category.

In addition, revenues of EUR 6.4 million (EUR 7.4 million) were realised at a point in time in the year under review from other insurance-related services.

In this context revenues of EUR 5.9 million (EUR 6.9 million) were realised on the South African market which are connected with commission-based business but cannot be characterised as commissions. The transaction price is arrived at as a percentage of the underlying gross premium share. The performance obligation is deemed to be fulfilled at a point in time upon issuance of the insurance certificate for the end customer.

An amount of EUR 0.5 million (EUR 0.5 million) was also earned on the North American market from the performance of administrative activities. The transaction price corresponds to the agreed contract price. The performance obligation is deemed to be satisfied when the administrative activities specified in the contract were carried out.

7.5. Taxes on income

Actual taxes on income at the domestic companies, comparable actual taxes on income at foreign subsidiaries as well as deferred taxes in accordance with IAS 12 “Income Taxes” are recognised under this item.

The reader is referred to the remarks in section 3.1 “Summary of major accounting policies” regarding the basic approach to the recognition and measurement of deferred taxes.

An unchanged tax rate of 32.63% was used to calculate the deferred taxes of the major domestic companies. It is arrived at from the corporate income tax rate of 15.0%, the German solidarity surcharge of 5.5% and a trade earnings tax rate of 16.8%. This therefore gives rise to a Group tax rate (rounded) of 32.7% (32.7%). The deferred taxes at the companies abroad were calculated using the applicable country-specific tax rates.

Tax-relevant bookings on the Group level are made using the Group tax rate unless they refer specifically to individual companies.

Deferred tax liabilities on profit distributions of significant affiliated companies are established in the year when they are received.

Breakdown of taxes on income

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

Income tax

in EUR million	2023	2022 [1]
Actual tax for the year under review	388.9	301.2
Actual tax for other periods	2.3	-36.9
Deferred taxes due to temporary differences	-317.0	115.5
Deferred taxes from loss carry-forwards	127.8	117.6
Change in deferred taxes due to changes in tax rates	-204.1	-0.4
Value adjustments on deferred taxes	28.4	28.9
Total	**26.4**	**525.9**

[1] Restated pursuant to IAS 8

Domestic / foreign breakdown of recognised tax expenditure / income

in EUR million	2023	2022 [1]
Current taxes		
Germany	151.5	42.4
Abroad	239.7	222.0
Deferred taxes		
Germany	-188.4	297.1
Abroad	-176.5	-35.5
Total	**26.4**	**525.9**

[1] Restated pursuant to IAS 8

The following table presents a breakdown of the deferred tax assets and liabilities into the balance sheet items from which they are derived.

Deferred tax assets and deferred tax liabilities of all Group companies

in EUR million	2023	2022 [2]
Deferred tax assets		
Tax loss carry-forwards	176.0	317.0
Technical provisions	7,355.0	6,425.5
Investments	627.9	1,286.8
Other valuation differences	1,346.7	1,085.7
Value adjustments [1]	-296.1	-119.5
Total	**9,209.6**	**8,995.5**
Deferred tax liabilities		
Technical provisions	8,154.6	7,704.8
Equalisation reserve	1,636.0	1,825.8
Investments	115.2	456.5
Other valuation differences	773.2	729.3
Total	**10,679.0**	**10,716.4**
Deferred tax liabilities	1,469.4	1,720.9

[1] Thereof on tax loss carry-forwards: EUR -95.3 million (EUR -88.5 million)
[2] Restated pursuant to IAS 8

The deferred tax assets and deferred tax liabilities are shown according to their origin in the above table. Deferred taxes resulting from a single transaction and with respect to which the corresponding temporary valuation differences are simultaneously reversed were already netted on recognition. Further netting was made based on the timing of the reversal of temporary differences and other offsetting possibilities, ultimately resulting in the following disclosure of deferred tax assets and deferred tax liabilities in the balance sheet:

Netting of deferred tax assets and deferred tax liabilities

in EUR million	2023	2022 [1]
Deferred tax assets	627.9	457.7
Deferred tax liabilities	2,097.3	2,178.5
Net deferred tax liabilities	**1,469.4**	**1,720.9**

[1] Restated pursuant to IAS 8

In view of the unrealised components of profit and loss recognised directly in equity in the financial year, actual and deferred tax income – including amounts attributable to non-controlling interests – of EUR 113.2 million (tax income of EUR 426.5 million) was also recognised directly in equity. The following table presents a reconciliation of the expected expense for income taxes with the actual expense for income taxes reported in the statement of income. The pre-tax result is multiplied by the Group tax rate in order to calculate the Group's expected expense for income taxes.

Reconciliation of the expected expense for income taxes with the actual expense

in EUR million	2023	2022 [1]
Profit before taxes on income	1,854.0	1,424.2
Group tax rate	32.7%	32.7%
Expected expense for income taxes	606.2	465.7
Change in tax rates	-204.1	-0.4
Differences in tax rates affecting subsidiaries	-361.6	-238.4
Non-deductible expenses	53.3	448.8
Tax-exempt income	-41.1	-92.8
Tax expense/income not attributable to the reporting period	-71.3	-44.2
Value adjustments on deferred taxes/loss carry-forwards	28.4	28.9
Trade tax modifications	5.2	-45.4
Other	11.3	3.6
Actual expense for income taxes	**26.4**	**525.9**

[1] Restated pursuant to IAS 8

The expense for income taxes in the financial year decreased by EUR 499.5 million year-on-year to EUR 26.4 million (EUR 525.9 million). Despite a higher pre-tax profit, this development was driven largely by deferred tax income resulting from implementation of a corporate tax regime in Bermuda. The effective tax rate in the financial year was 1.4% (36.9%).

Availability of non-capitalised loss carry-forwards and other temporary differences

Unused tax loss carry-forwards of EUR 757.3 million (EUR 1,291.0 million) existed as at the balance sheet date. Of existing tax loss carry-forwards and other temporary differences, EUR 1,580.6 million (EUR 482.3 million) was not capitalised in consideration of local tax rates because their realisation is not sufficiently certain.

The assets-side unadjusted deferred taxes on loss carry-forwards amounting to EUR 80.7 million (EUR 228.5 million) will probably be realised in an amount of EUR 26.5 million (EUR 80.5 million) within one year and in an amount of EUR 54.2 million (EUR 148.0 million) in subsequent years.

In the year under review the actual taxes on income were reduced by EUR 0.2 million (EUR 2.2 million) because loss carry-forward were used for which no deferred tax assets were established.

The write-down of deferred tax assets recognised in previous years did not result in a deferred tax expense in the year under review (previous year: EUR 0.1 million) This is opposed by deferred tax income of EUR 4.7 million (EUR 29.0 million) from the reassessment of earlier write-downs.

Excess deferred tax assets are recognised with respect to losses in the year under review or in the previous year only to the extent that, based on strong evidence, it is likely that the company concerned will generate sufficiently positive taxable results in the future. This evidence was provided for deferred tax assets of EUR 158.8 million (EUR 284.1 million).

No deferred taxes were established on liabilities-side taxable temporary differences amounting to EUR 58.6 million (EUR 34.7 million) in connection with interests in Group companies because the Hannover Re Group can control their reversal and will not reverse them in the foreseeable future.

Availability of loss carry-forwards that have not been capitalised:

Expiry of non-capitalised loss carry-forwards and temporary differences

in EUR million	One to five years	Six to ten years	More than ten years	Unlimited	Total
Other temporary differences	–	–	–	1,200.7	1,200.7
Loss carry-forwards	286.3	–	–	93.7	379.9
Total	**286.3**	**–**	**–**	**1,294.3**	**1,580.6**

Introduction of global minimum taxation

In December 2021 the OECD published model rules for a new global minimum rate of taxation aimed at multinational enterprise groups and large-scale domestic companies with combined financial revenues of more than EUR 750 million. The directive on implementation of these rules in the EU was adopted in December 2022. EU Member States were then required to transpose the directive into national law by the end of 2023. In Germany, the directive was transposed into national law on 21 December 2023 by the Minimum Taxation Directive Implementation Act (MinBestRL-UmsG). The provisions of this Act are to be applied to financial years beginning on or after 31 December 2023. In addition, 136 countries within and outside the EU have committed to implement the minimum taxation rules in their respective national law.

The Hannover Re Group, as a subgroup of the HDI Group, falls within the scope of application of the minimum taxation rules and is currently working intensively on preparations for application of the provisions in the coming reporting year. Appropriate organisational and technical steps are currently being taken or are in the pipeline to ensure compliance with the legal requirements.

Given that the legal provisions had not yet entered into force at the reporting date, there is no actual income tax burden for the Group in the year under review. With regard to the recognition of deferred tax assets and liabilities as well as certain disclosures required in connection with the implementation of global minimum taxation, the Hannover Re Group is exercising the temporary exemption provided for in the amendments to IAS 12 issued in May 2023.

Under the global minimum taxation rules, the HDI Group will in future be required to pay a supplementary tax for the difference between the effective rate of taxation per (tax) jurisdiction and the minimum tax rate of 15%.

Based on the current status of the implementation project, the Hannover Re Group is established in 31 jurisdictions in the year under review with entities relevant to the minimum taxation rules and for the most part is subject to an effective tax load of (significantly) more than 15% in these jurisdictions. The HDI Group, which is represented by entities relevant to the minimum taxation rules in altogether 44 jurisdictions, is currently in the process of assessing the implications of the Minimum Taxation Directive Implementation Act following entry into force of the legislation. In this context, an initial estimation of the supplementary tax impact was made based on the data from the HDI Group's country-by-country reporting for 2022, which in the opinion of the Group currently constitutes the most reliable data basis, and the level of the provisional effective tax rate per jurisdiction was calculated. The analysis revealed that 31 jurisdictions currently have an effective tax rate of more than 15%, covering a share of around 75% of the pre-tax profit/loss disclosed in the country-by-country reporting for 2022. This contrasts primarily with the jurisdictions of Ireland, Bermuda and Bahrain, which have an effective tax rate of less than 15% based on the country-by-country reporting for 2022. The most significant material implications are expected for Bermuda and Ireland in the future. At this point in time, it is not possible to quantify the impacts on account of recently completed amendments to national tax legislation in these jurisdictions and the resulting complex implications for the minimum tax rules.

In view of the complexity around application of the legislation and calculation of the effective tax rate under the minimum taxation rules, it is not yet possible to estimate the quantitative effects of the adopted legislation in sufficiently concrete terms. In principle, the application of minimum taxation may have implications even for companies with an effective tax rate of more than 15%.

8. Segment disclosures on the technical account

8.1. Property and casualty reinsurance

Movement in carrying amounts of the liability for remaining coverage and for incurred claims – reinsurance contracts issued in the property and casualty reinsurance segment

	2023			
in EUR million	LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**617.4**	**57.1**	**-355.6**	**318.9**
Opening balance – liabilities	**-2,395.3**	**233.0**	**34,571.6**	**32,409.3**
Opening balance – net	**-3,012.7**	**175.9**	**34,927.2**	**32,090.4**
Contracts under the modified retrospective approach	-234.1	–	–	-234.1
Contracts under the fair value approach	30.2	–	–	30.2
Other contracts	-16,620.0	–	–	-16,620.0
Reinsurance revenue	**-16,823.9**	**–**	**–**	**-16,823.9**
Incurred claims and other reinsurance service expenses	4.3	-158.5	14,170.0	14,015.8
Amortisation of insurance acquisition cash flows	528.3	–	–	528.3
Losses and reversal of losses on onerous contracts	–	40.3	–	40.3
Adjustments to liabilities for incurred claims	–	–	-496.0	-496.0
Reinsurance service expenses	**532.6**	**-118.2**	**13,674.0**	**14,088.4**
Investment component	**-4,282.7**	**–**	**4,282.7**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	470.5	5.0	1,353.1	1,828.6
Currency gains/losses	-36.1	-2.1	-735.2	-773.4
Reinsurance finance result	**434.4**	**2.9**	**617.9**	**1,055.2**
Premiums received	21,341.4	–	–	21,341.4
Claims and other reinsurance service expenses paid, including investment components	–	–	-16,118.2	-16,118.2
Insurance acquisition cash flows paid	-521.6	–	–	-521.6
Cash flows	**20,819.8**	**–**	**-16,118.2**	**4,701.6**
Closing balance – assets	**111.8**	**4.5**	**37.5**	**153.8**
Closing balance – liabilities	**-2,220.7**	**65.2**	**37,421.0**	**35,265.4**
Closing balance – net	**-2,332.5**	**60.6**	**37,383.5**	**35,111.6**

in EUR million	2022 LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**308.9**	**-0.3**	**-265.4**	**43.1**
Opening balance – liabilities	**-50.8**	**234.0**	**31,311.0**	**31,494.2**
Opening balance – net	**-359.6**	**234.3**	**31,576.4**	**31,451.0**
Contracts under the modified retrospective approach	-470.1	–	–	-470.1
Contracts under the fair value approach	-132.9	–	–	-132.9
Other contracts	-15,661.9	–	–	-15,661.9
Reinsurance revenue	**-16,264.9**	**–**	**–**	**-16,264.9**
Incurred claims and other reinsurance service expenses	–	-507.5	15,071.9	14,564.4
Amortisation of insurance acquisition cash flows	477.6	–	–	477.6
Losses and reversal of losses on onerous contracts	–	448.0	–	448.0
Adjustments to liabilities for incurred claims	–	–	-376.6	-376.6
Reinsurance service expenses	**477.6**	**-59.5**	**14,695.3**	**15,113.4**
Investment component	**-4,597.5**	**–**	**4,597.5**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-350.0	1.7	-3,140.9	-3,489.2
Currency gains/losses	108.4	-0.5	626.8	734.6
Reinsurance finance result	**-241.7**	**1.1**	**-2,514.1**	**-2,754.6**
Premiums received	18,487.2	–	–	18,487.2
Claims and other reinsurance service expenses paid, including investment components	–	–	-13,428.0	-13,428.0
Insurance acquisition cash flows paid	-513.8	–	–	-513.8
Cash flows	**17,973.4**	**–**	**-13,428.0**	**4,545.5**
Closing balance – assets	**617.4**	**57.1**	**-355.6**	**318.9**
Closing balance – liabilities	**-2,395.3**	**233.1**	**34,571.6**	**32,409.3**
Closing balance – net	**-3,012.7**	**176.0**	**34,927.2**	**32,090.4**

Movement in carrying amounts by measurement components – reinsurance contracts issued in the property and casualty reinsurance segment

	2023	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**139.1**	**-16.0**
Opening balance – liabilities	**30,349.4**	**729.6**
Opening balance – net	**30,210.3**	**745.5**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	149.6
Experience adjustments	286.1	–
Reinsurance service result – changes relate to current service	**286.1**	**149.6**
Contracts initially recognised in the year	-3,559.1	275.1
Changes in estimates that adjust the CSM	-68.9	59.6
Changes in estimates that result in losses and reversal of losses on onerous contracts	–	–
Reinsurance service result – changes relate to future service	**-3,628.0**	**334.7**
Reinsurance service result – changes that relate to past service	**-195.3**	**-300.7**
Reinsurance finance result before currency gains/losses plus changes through OCI	1,715.7	–
Currency gains/losses	-708.4	-20.5
Reinsurance finance result	**1,007.3**	**-20.5**
Premiums received	21,341.4	–
Claims and other reinsurance service expenses paid, including investment components	-16,118.2	–
Insurance acquisition cash flows paid	-521.6	–
Cash flows	**4,701.6**	**–**
Closing balance – assets	**164.9**	**-5.8**
Closing balance – liabilities	**32,546.9**	**902.8**
Closing balance – net	**32,381.9**	**908.6**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-0.4	**–**	**196.2**	**318.9**
18.3	**31.5**	**1,280.6**	**32,409.3**
18.6	**31.5**	**1,084.4**	**32,090.4**
-88.7	-172.9	-2,458.2	-2,719.8
–	–	–	149.6
–	–	–	286.1
-88.7	**-172.9**	**-2,458.2**	**-2,284.2**
–	–	3,324.3	40.3
92.1	195.5	-274.0	4.3
–	–	–	–
92.1	**195.5**	**3,050.3**	**44.6**
–	**–**	**–**	**-496.0**
0.1	0.2	112.6	1,828.6
-0.1	–	-44.4	-773.4
–	**0.2**	**68.3**	**1,055.2**
–	–	–	21,341.4
–	–	–	-16,118.2
–	–	–	-521.6
–	**–**	**–**	**4,701.6**
–	**–**	**-5.4**	**153.8**
22.0	**54.3**	**1,739.4**	**35,265.4**
22.0	54.3	1,744.8	35,111.6

in EUR million	2022 EPV of future cash flows	Risk adjustment for non-financial risk
Opening balance – assets	**57.0**	**-3.7**
Opening balance – liabilities	**30,027.4**	**643.1**
Opening balance – net	**29,970.4**	**646.8**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-207.1
Experience adjustments	1,337.1	–
Reinsurance service result – changes relate to current service	**1,337.1**	**-207.1**
Contracts initially recognised in the year	-2,596.8	271.3
Changes in estimates that adjust the CSM	-109.3	63.5
Changes in estimates that result in losses and reversal of losses on onerous contracts	210.1	2.2
Reinsurance service result – changes relate to future service	**-2,496.0**	**337.1**
Reinsurance service result – changes that relate to past service	**-327.9**	**-48.7**
Reinsurance finance result before currency gains/losses plus changes through OCI	-3,510.6	–
Currency gains/losses	691.9	17.4
Reinsurance finance result	**-2,818.7**	**17.4**
Premiums received	18,487.2	–
Claims and other reinsurance service expenses paid, including investment components	-13,428.0	–
Insurance acquisition cash flows paid	-513.8	–
Cash flows	**4,545.5**	**–**
Closing balance – assets	**139.1**	**-16.0**
Closing balance – liabilities	**30,349.4**	**729.6**
Closing balance – net	**30,210.3**	**745.5**

2022			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
–	**–**	**-10.1**	**43.1**
8.6	**0.1**	**815.0**	**31,494.2**
8.6	**0.1**	**825.1**	**31,451.0**
-249.2	-111.5	-1,992.3	-2,353.1
–	–	–	-207.1
–	–	–	1,337.1
-249.2	**-111.5**	**-1,992.3**	**-1,223.1**
–	–	2,561.5	235.9
259.3	142.9	-356.4	–
–	–	–	212.4
259.3	**142.9**	**2,205.1**	**448.3**
–	**–**	**–**	**-376.6**
0.1	–	21.3	-3,489.2
–	–	25.3	734.6
–	**–**	**46.5**	**-2,754.6**
–	–	–	18,487.2
–	–	–	-13,428.0
–	–	–	-513.8
–	**–**	**–**	**4,545.5**
-0.4	**–**	**196.2**	**318.9**
18.3	**31.5**	**1,280.6**	**32,409.3**
18.6	31.5	1,084.4	32,090.4

Movement in carrying amounts of the liability for remaining coverage and liability for incurred claims – reinsurance contracts held in the property and casualty reinsurance segment

	2023			
in EUR million	Reinsurance recoverables on LRC without loss recovery component	Loss recovery component	Reinsurance recoverables on LIC	Total
Opening balance – assets	**-100.1**	**-0.8**	**2,269.6**	**2,168.7**
Opening balance – liabilities	**695.2**	**–**	**-474.2**	**221.0**
Opening balance – net	**-795.3**	**-0.8**	**2,743.8**	**1,947.6**
Reinsurance revenue (ceded)	-2,626.4	–	–	-2,626.4
Incurred claims and other reinsurance service expenses	-1.4	–	833.4	832.0
Amortisation of insurance acquisition cash flows	4.1	–	–	4.1
Losses and reversal of losses on onerous contracts	–	–	–	–
Adjustments to liabilities for incurred claims	–	–	-96.7	-96.7
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-2,623.7**	**–**	**736.7**	**-1,887.0**
thereof changes in non-performance risk of reinsurers	–	–	–	–
Investment component	**-11.0**	**–**	**11.0**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	16.0	–	104.5	120.5
Currency gains/losses	29.7	0.1	-58.6	-28.8
Reinsurance finance result	**45.7**	**0.1**	**45.9**	**91.7**
Premiums paid	1,830.1	–	–	1,830.1
Claims and other reinsurance service expenses received, including investment components	–	–	-1,068.2	-1,068.2
Insurance acquisition cash flows	4.0	–	–	4.0
Cash flows	**1,834.0**	**–**	**-1,068.2**	**765.8**
Closing balance – assets	**-554.3**	**-0.7**	**1,890.4**	**1,335.3**
Closing balance – liabilities	**995.9**	**–**	**-578.7**	**417.2**
Closing balance – net	**-1,550.2**	**-0.7**	**2,469.1**	**918.1**

in EUR million	2022 Reinsurance recoverables on LRC without loss recovery component	 Loss recovery component	 Reinsurance recoverables on LIC	 Total
Opening balance – assets	**-85.4**	**–**	**2,062.2**	**1,976.8**
Opening balance – liabilities	**652.4**	**–**	**-525.6**	**126.8**
Opening balance – net	**-737.8**	**–**	**2,587.8**	**1,850.0**
Reinsurance revenue (ceded)	-1,767.6	–	–	-1,767.6
Incurred claims and other reinsurance service expenses	–	9.7	1,395.9	1,405.6
Amortisation of insurance acquisition cash flows	-1.9	–	–	-1.9
Losses and reversal of losses on onerous contracts	–	-10.7	–	-10.7
Adjustments to liabilities for incurred claims	–	–	24.5	24.5
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-1,769.5**	**-1.0**	**1,420.4**	**-350.1**
thereof changes in non-performance risk of reinsurers	–	–	–	–
Investment component	**-5.6**	**–**	**5.6**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-4.0	–	-146.1	-150.1
Currency gains/losses	-58.6	0.2	103.8	45.4
Reinsurance finance result	**-62.6**	**0.2**	**-42.3**	**-104.7**
Premiums paid	1,777.6	–	–	1,777.6
Claims and other reinsurance service expenses received, including investment components	–	–	-1,227.8	-1,227.8
Insurance acquisition cash flows	2.5	–	–	2.5
Cash flows	**1,780.2**	**–**	**-1,227.8**	**552.4**
Closing balance – assets	**-100.1**	**-0.8**	**2,269.6**	**2,168.7**
Closing balance – liabilities	**695.2**	**–**	**-474.2**	**221.0**
Closing balance – net	**-795.3**	**-0.8**	**2,743.8**	**1,947.6**

Movement in carrying amounts by measurement components – reinsurance contracts held in the property and casualty reinsurance segment

	2023	
in EUR million	EPV of future cash flows	Risk adjustment for non-financial risk
Opening balance – assets	**2,101.1**	**32.8**
Opening balance – liabilities	**227.3**	**-6.9**
Opening balance – net	**1,873.9**	**39.7**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	2.6
Experience adjustments	-900.9	–
Reinsurance service result – changes relate to current service	**-900.9**	**2.6**
Contracts initially recognised in the year	-1,022.2	66.0
Changes in recoveries of losses on onerous underlying contracts	–	–
Changes in estimates that adjust the CSM	25.0	11.9
Changes in estimates that result in losses and reversal of losses on onerous contracts	–	–
Reinsurance service result – changes relate to future service	**-997.3**	**77.9**
Reinsurance service result – changes that relate to past service	**-43.0**	**-53.8**
Reinsurance service result – Changes in non-performance risk of reinsurers	**–**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	108.6	–
Currency gains/losses	-26.3	-1.5
Reinsurance finance result	**82.3**	**-1.5**
Premiums paid	1,830.1	–
Claims and other reinsurance service expenses received, including investment components	-1,068.2	–
Insurance acquisition cash flows	4.0	–
Cash flows	**765.8**	**–**
Closing balance – assets	**1,222.6**	**60.8**
Closing balance – liabilities	**441.8**	**-4.2**
Closing balance – net	**780.8**	**65.0**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-3.7	**2.6**	**35.8**	**2,168.7**
–	**–**	**0.6**	**221.0**
-3.7	**2.6**	**35.1**	**1,947.6**
-179.9	-1.3	-709.4	-890.7
–	–	–	2.6
–	–	–	-900.9
-179.9	**-1.3**	**-709.4**	**-1,788.9**
–	–	956.2	–
–	–	–	–
-0.2	1.3	-39.4	-1.4
–	–	–	–
-0.2	**1.3**	**916.9**	**-1.4**
–	**–**	**–**	**-96.7**
–	**–**	**–**	**–**
–	–	11.9	120.5
4.3	-0.3	-5.0	-28.8
4.3	**-0.3**	**6.9**	**91.7**
–	–	–	1,830.1
–	–	–	-1,068.2
–	–	–	4.0
–	**–**	**–**	**765.8**
-179.5	**2.3**	**229.1**	**1,335.3**
–	**–**	**-20.4**	**417.2**
-179.5	2.3	249.5	918.1

	2022	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**1,947.8**	**32.8**
Opening balance – liabilities	**137.7**	**-6.1**
Opening balance – net	**1,810.1**	**38.9**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-3.7
Experience adjustments	295.6	–
Reinsurance service result – changes relate to current service	**295.6**	**-3.7**
Contracts initially recognised in the year	-755.6	19.3
Changes in recoveries of losses on onerous underlying contracts	–	–
Changes in estimates that adjust the CSM	29.9	8.3
Changes in estimates that result in losses and reversal of losses on onerous contracts	-10.3	-0.2
Reinsurance service result – changes relate to future service	**-736.1**	**27.3**
Reinsurance service result – changes that relate to past service	**49.0**	**-24.5**
Reinsurance service result – Changes in non-performance risk of reinsurers	**–**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-151.7	–
Currency gains/losses	54.4	1.8
Reinsurance finance result	**-97.2**	**1.8**
Premiums paid	1,777.6	–
Claims and other reinsurance service expenses received, including investment components	-1,227.8	–
Insurance acquisition cash flows	2.5	–
Cash flows	**552.4**	**–**
Closing balance – assets	**2,101.1**	**32.8**
Closing balance – liabilities	**227.3**	**-6.9**
Closing balance – net	**1,873.9**	**39.7**

	2022			
	CSM			Total
	Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
	1.0	**–**	**-4.7**	**1,976.8**
	–	**–**	**-4.8**	**126.8**
	1.0	**–**	**0.1**	**1,850.0**
	17.2	10.2	-683.2	-655.9
	–	–	–	-3.7
	–	–	–	295.6
	17.2	**10.2**	**-683.2**	**-363.9**
	–	–	736.3	–
	–	–	–	-0.1
	-22.1	-7.5	-8.5	–
	–	–	–	-10.5
	-22.1	**-7.5**	**727.8**	**-10.7**
	–	**–**	**–**	**24.5**
	–	**–**	**–**	**–**
	–	–	1.6	-150.1
	0.2	-0.1	-11.1	45.4
	0.3	**-0.1**	**-9.5**	**-104.7**
	–	–	–	1,777.6
	–	–	–	-1,227.8
	–	–	–	2.5
	–	**–**	**–**	**552.4**
	-3.7	**2.6**	**35.8**	**2,168.7**
	–	**–**	**0.6**	**221.0**
	-3.7	**2.6**	**35.1**	**1,947.6**

Contracts initially recognised – reinsurance contracts issued in the property and casualty reinsurance segment

	2023	
in EUR million	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	14,258.2	309.7
Insurance acquisition cash flows	788.6	6.2
Expected present value of cash inflows	-18,643.0	-278.8
Risk adjustment for non-financial risk	271.9	3.2
Contractual service margin	3,324.3	–
Loss component	–	40.3

[1] Profitable contract includes the buckets profitable and remaining

	2022	
in EUR million	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	13,065.4	3,099.1
Insurance acquisition cash flows	693.7	84.6
Expected present value of cash inflows	-16,551.0	-2,988.6
Risk adjustment for non-financial risk	230.5	40.8
Contractual service margin	2,561.5	–
Loss component	–	235.9

[1] Profitable contract includes the buckets profitable and remaining

Contracts initially recognised – reinsurance contracts held in the property and casualty reinsurance segment

	2023	
in EUR million	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	1,320.8	–
Insurance acquisition cash flows	–	–
Expected present value of cash outflows	-2,343.0	–
Risk adjustment for non-financial risk	66.0	–
Contractual service margin	956.2	–
Loss recovery amount	–	–

	2022	
in EUR million	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	782.8	–
Insurance acquisition cash flows	1.6	–
Expected present value of cash outflows	-1,540.0	–
Risk adjustment for non-financial risk	19.3	–
Contractual service margin	736.3	–
Loss recovery amount	–	–

Development of claims in the property and casualty reinsurance segment

The loss and loss adjustment expense reserves are inevitably based to some extent on estimations that entail an element of uncertainty. The run-off result is defined as the adjustment of the liability for incurred claims of prior periods. In this regard, given that the period of some reinsurance contracts does not correspond to the calendar year or because they are concluded on an underwriting-year basis, it is frequently impossible to make an exact allocation of claims expenditures to the current financial year or the previous year.

Development of gross claims

The following table compares the actual claims payments for the current reporting year with the estimated undiscounted amounts of the expected claims in the context of the loss experience from a gross perspective.

Development of gross claims in the property and casualty reinsurance segment

in EUR million	31.12. 2013	31.12. 2014	31.12. 2015	31.12. 2016	31.12. 2017	31.12. 2018	31.12. 2019	31.12. 2020	31.12. 2021 [1]	31.12. 2022	31.12. 2023	Total
Nominal incurred claims (gross)												
Current Year	5,420	5,329	6,221	6,546	8,571	9,321	10,145	11,671	13,820	15,597	15,153	
One year later	5,623	5,671	6,212	6,585	8,709	10,028	10,797	12,332	14,249	15,657		
Two years later	5,454	5,514	6,056	6,556	8,502	9,903	10,555	11,923	14,260			
Three years later	5,268	5,375	5,884	6,439	8,413	9,646	10,468	11,800				
Four years later	5,101	5,224	5,726	6,357	8,368	9,728	10,497					
Five years later	5,002	5,186	5,700	6,287	8,308	9,852						
Six years later	4,806	5,056	5,608	6,194	8,331							
Seven years later	4,687	4,988	5,529	6,138								
Eight years later	4,674	4,927	5,464									
Nine years later	4,628	4,921										
Ten years later	4,597											
Run-off nominal incurred claims past service (gross)	31	6	65	56	-22	-124	-29	123	-11	-60		34
Run-off nominal incurred claims past service older than 2013 (gross)												76
Total run-off nominal incurred claims past service (gross)												**110**
Total run-off discounted incurred claims past service (gross)												122
Changes risk adjustment for non-financial risk past service discounted (gross)												301
Reinsurance contract related cash flows other than claims past service discounted (gross)												73
Run-off result (gross)												**496**
Beginning of period gross liability for incurred claims 01.01.2023 (gross)												**34,927**
Nominal incurred claims - accident years from 2013 to 2023 (gross)	-31	-6	-65	-56	22	124	29	-123	11	60	15,153	15,119
Claims payments - accident years from 2013 to 2023 (gross)	-56	-71	-112	-113	-227	-292	-680	-836	-1,563	-5,228	-6,064	-15,243
Nominal incurred claims and claims payments for accident years prior 2013 (gross)												-484
Effect of discounting												-360
Investment component												4,283
Currency effects												-735
Changes accounts payable / receivable												-243
Changes risk adjustment for non-financial risk												179
Remaining changes												-59
End of period liability for incurred claims 31.12.2023 (gross)												**37,384**

[1] Values transformed from IFRS 4 up to and including the 2021 reporting year.

Development of net claims

The following table compares the actual claims payments for the current reporting year with the estimated undiscounted amounts of the expected claims in the context of the loss experience from a net perspective.

Development of net claims in the property and casualty reinsurance segment

in EUR million	31.12. 2013	31.12. 2014	31.12. 2015	31.12. 2016	31.12. 2017	31.12. 2018	31.12. 2019	31.12. 2020	31.12. 2021 [1]	31.12. 2022	31.12. 2023	Total
Nominal incurred claims (net)												
Current Year	5,134	5,051	5,939	6,074	7,731	8,316	9,448	10,925	12,260	14,117	14,304	
One year later	5,370	5,276	6,112	6,192	7,729	8,881	9,836	11,340	12,760	14,171		
Two years later	5,162	5,093	5,750	6,190	7,506	8,745	9,564	10,862	12,787			
Three years later	4,932	4,980	5,601	6,089	7,502	8,560	9,463	10,795				
Four years later	4,788	4,812	5,462	6,005	7,455	8,655	9,499					
Five years later	4,693	4,777	5,433	5,939	7,385	8,765						
Six years later	4,498	4,664	5,337	5,830	7,406							
Seven years later	4,381	4,589	5,246	5,772								
Eight years later	4,370	4,518	5,176									
Nine years later	4,316	4,508										
Ten years later	4,286											
Run-off nominal incurred claims past service (net)	30	10	70	59	-20	-109	-36	67	-27	-54		-11
Run-off nominal incurred claims past service older than 2013 (net)												77
Total run-off nominal incurred claims past service (net)												**66**
Total run-off discounted incurred claims past service (net)												81
Changes risk adjustment for non-financial risk past service discounted (net)												247
Reinsurance contract related cash flows other than claims past service discounted (net)												72
Run-off result (net)												**399**
Beginning of period liability for incurred claims 01.01.2023 (net)												**32,183**
Nominal incurred claims - accident years from 2013 to 2023 (net)	-30	-10	-70	-59	20	109	36	-67	27	54	14,304	14,315
Claims payments - accident years from 2013 to 2023 (net)	-57	-71	-108	-106	-196	-249	-605	-718	-1,160	-4,675	-5,721	-13,667
Nominal incurred claims and claims payments for accident years prior 2013 (net)												-479
Effect of discounting												-376
Investment component												4,272
Currency effects												-677
Changes accounts payable / receivable												-758
Changes risk adjustment for non-financial risk												160
Remaining changes												-59
End of period liability for incurred claims 31.12.2023 (net)												**34,914**

[1] Values transformed from IFRS 4 up to and including the 2021 reporting year.

The discounted net run-off result in the current reporting year amounted to EUR 399.3 million (EUR 401.1 million).

Maturities of the contractual cash flows in the property and casualty reinsurance segment

in EUR million	2023 Remaining contractual undiscounted net cash flows		2022 Remaining contractual undiscounted net cash flows	
	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	5,535.9	-239.0	3,795.2	196.3
Due after one through two years	8,251.0	320.1	8,158.4	527.6
Due after two through three years	5,464.5	211.9	5,634.4	350.2
Due after three through four years	4,175.4	157.6	4,133.1	260.9
Due after four through five years	3,124.9	116.4	3,066.7	193.4
Due after five through ten years	7,272.7	267.8	7,181.8	452.7
Due after ten through twenty years	3,484.0	128.7	3,373.3	218.9
Due after twenty years	1,315.4	49.2	1,270.5	85.4
	38,623.8	**1,012.6**	**36,613.3**	**2,285.5**
Discounting	-6,241.9	-231.8	-6,403.0	-411.6
Total	**32,381.9**	**780.8**	**30,210.3**	**1,873.9**

Maturities of the contractual service margin in the property and casualty reinsurance segment

in EUR million	2023 Contractual service margin		2022 Contractual service margin	
	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	1,566.2	75.9	885.1	26.9
Due after one through two years	296.7	–	206.3	6.0
Due after two through three years	43.6	–	44.2	1.3
Due after three through four years	13.0	–	22.1	0.6
Due after four through five years	7.1	–	11.1	0.3
Due after five through ten years	6.2	–	11.1	0.3
Due after ten through twenty years	1.6	–	–	–
Due after twenty years	–	–	–	–
	1,934.3	**75.9**	**1,179.9**	**35.4**
Discounting	-113.2	-3.6	-45.3	-1.3
Total	**1,821.1**	**72.3**	**1,134.5**	**34.1**

Reinsurance revenue (gross) by region in the property and casualty reinsurance segment

in EUR million	2023	2022
Regional origin		
Germany	1,287.0	1,343.5
United Kingdom	1,820.3	1,873.7
France	498.0	474.9
Other	1,726.1	1,550.0
Europe	**5,331.5**	**5,242.2**
USA	6,621.9	6,140.0
Other	1,177.7	1,093.0
North America	**7,799.6**	**7,233.0**
Asia	2,150.1	2,417.0
Australia	681.4	605.1
Australasia	**2,831.5**	**3,022.0**
Africa	203.6	208.2
Other	657.8	559.5
Total	**16,823.9**	**16,264.9**

Components of the reinsurance revenue (gross) in the property and casualty reinsurance segment

in EUR million	2023	2022
Components		
Expected incurred claims and other insurance expenses	12,837.6	12,634.4
CSM recognised for services provided	2,719.8	2,353.1
Change in risk adjustment for non-financial risk for risk expired	330.0	327.5
Experience adjustments for past or current services	408.2	472.3
Recovery of insurance acquisition cash flows	528.3	477.6
Total	**16,823.9**	**16,264.9**

8.2. Life and health reinsurance

Movement in carrying amounts of the liability for remaining coverage and for incurred claims – reinsurance contracts issued in the life and health reinsurance segment

	2023			
in EUR million	LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**1,587.0**	**-11.3**	**-446.6**	**1,129.2**
Opening balance – liabilities	**704.0**	**301.7**	**8,353.9**	**9,359.6**
Opening balance – net	**-883.0**	**313.0**	**8,800.4**	**8,230.5**
Contracts under the modified retrospective approach	-2,103.7	–	–	-2,103.7
Contracts under the fair value approach	-5,139.5	–	–	-5,139.5
Other contracts	-389.3	–	–	-389.3
Reinsurance revenue	**-7,632.5**	**–**	**–**	**-7,632.5**
Incurred claims and other reinsurance service expenses	0.1	-122.9	6,463.0	6,340.2
Amortisation of insurance acquisition cash flows	17.4	–	–	17.4
Losses and reversal of losses on onerous contracts	–	266.3	–	266.3
Adjustments to liabilities for incurred claims	–	–	89.7	89.7
Reinsurance service expenses	**17.5**	**143.4**	**6,552.8**	**6,713.7**
Investment component	**-1,571.4**	**–**	**1,571.4**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	235.1	7.0	64.2	306.4
Currency gains/losses	52.1	-16.1	-217.0	-181.0
Reinsurance finance result	**287.2**	**-9.1**	**-152.8**	**125.4**
Premiums received	8,278.8	–	–	8,278.8
Claims and other reinsurance service expenses paid, including investment components	–	–	-7,569.0	-7,569.0
Insurance acquisition cash flows paid	-38.9	–	–	-38.9
Cash flows	**8,239.9**	**–**	**-7,569.0**	**670.9**
Closing balance – assets	**1,282.6**	**-6.8**	**-409.8**	**866.0**
Closing balance – liabilities	**-259.6**	**440.5**	**8,793.1**	**8,974.0**
Closing balance – net	**-1,542.3**	**447.3**	**9,202.9**	**8,107.9**

in EUR million	2022 LRC excluding loss component	Loss component	LIC	Total
Opening balance – assets	**2,833.5**	**-3.7**	**-1,322.8**	**1,507.1**
Opening balance – liabilities	**3,667.4**	**32.1**	**6,901.9**	**10,601.5**
Opening balance – net	**833.9**	**35.8**	**8,224.7**	**9,094.4**
Contracts under the modified retrospective approach	-2,118.2	–	–	-2,118.2
Contracts under the fair value approach	-6,251.2	–	–	-6,251.2
Other contracts	617.5	–	–	617.5
Reinsurance revenue	**-7,751.9**	**–**	**–**	**-7,751.9**
Incurred claims and other reinsurance service expenses	-7.8	-127.6	6,440.1	6,304.7
Amortisation of insurance acquisition cash flows	9.7	–	–	9.7
Losses and reversal of losses on onerous contracts	–	414.4	–	414.3
Adjustments to liabilities for incurred claims	–	–	455.6	455.6
Reinsurance service expenses	**1.9**	**286.8**	**6,895.7**	**7,184.3**
Investment component	**-1,559.1**	**–**	**1,559.1**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-266.9	2.2	-111.1	-375.7
Currency gains/losses	95.5	-11.8	16.6	100.2
Reinsurance finance result	**-171.4**	**-9.6**	**-94.5**	**-275.6**
Premiums received	7,787.1	–	–	7,787.1
Claims and other reinsurance service expenses paid, including investment components	–	–	-7,784.4	-7,784.4
Insurance acquisition cash flows paid	-23.5	–	–	-23.5
Cash flows	**7,763.7**	**–**	**-7,784.4**	**-20.8**
Closing balance – assets	**1,587.0**	**-11.3**	**-446.6**	**1,129.2**
Closing balance – liabilities	**704.0**	**301.7**	**8,353.9**	**9,359.6**
Closing balance – net	**-883.0**	**313.0**	**8,800.4**	**8,230.5**

Movement in carrying amounts by measurement components – reinsurance contracts issued in the life and health reinsurance segment

	2023	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**2,434.3**	**-107.6**
Opening balance – liabilities	**1,858.2**	**3,055.0**
Opening balance – net	**-576.1**	**3,162.6**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-460.3
Experience adjustments	68.9	–
Reinsurance service result – changes relate to current service	**68.9**	**-460.3**
Contracts initially recognised in the year	-426.5	75.2
Changes in estimates that adjust the CSM	-960.3	-104.0
Changes in estimates that result in losses and reversal of losses on onerous contracts	78.0	173.9
Reinsurance service result – changes relate to future service	**-1,308.9**	**145.1**
Reinsurance service result – changes that relate to past service	**94.1**	**-4.3**
Reinsurance finance result before currency gains/losses plus changes through OCI	-99.0	258.0
Currency gains/losses	9.4	-74.1
Reinsurance finance result	**-89.6**	**183.9**
Premiums received	8,278.8	–
Claims and other reinsurance service expenses paid, including investment components	-7,569.0	–
Insurance acquisition cash flows paid	-38.9	–
Cash flows	**670.9**	**–**
Closing balance – assets	**2,158.0**	**-107.6**
Closing balance – liabilities	**1,017.4**	**2,919.4**
Closing balance – net	**-1,140.6**	**3,027.0**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-355.5	**-424.8**	**-417.2**	**1,129.2**
1,474.1	**2,481.6**	**490.7**	**9,359.6**
1,829.6	**2,906.4**	**908.0**	**8,230.5**
-167.0	-408.7	-308.0	-883.7
–	–	–	-460.3
–	–	–	68.9
-167.0	**-408.7**	**-308.0**	**-1,275.0**
–	–	365.8	14.4
669.2	322.0	73.3	0.1
–	–	–	251.9
669.2	**322.0**	**439.1**	**266.5**
–	**–**	**–**	**89.7**
62.4	54.7	30.3	306.4
-10.3	-88.1	-18.0	-181.0
52.1	**-33.4**	**12.4**	**125.4**
–	–	–	8,278.8
–	–	–	-7,569.0
–	–	–	-38.9
–	**–**	**–**	**670.9**
-320.5	**-385.3**	**-478.5**	**866.0**
2,063.3	**2,401.0**	**572.9**	**8,974.0**
2,383.9	**2,786.2**	**1,051.4**	**8,107.9**

	2022	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**5,046.2**	**-754.4**
Opening balance – liabilities	**4,875.0**	**2,950.0**
Opening balance – net	**-171.2**	**3,704.4**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-180.6
Experience adjustments	-407.7	–
Reinsurance service result – changes relate to current service	**-407.7**	**-180.6**
Contracts initially recognised in the year	-599.7	90.9
Changes in estimates that adjust the CSM	-870.7	596.8
Changes in estimates that result in losses and reversal of losses on onerous contracts	615.7	-205.3
Reinsurance service result – changes relate to future service	**-854.7**	**482.4**
Reinsurance service result – changes that relate to past service	**459.1**	**-3.6**
Reinsurance finance result before currency gains/losses plus changes through OCI	392.2	-875.9
Currency gains/losses	26.9	35.9
Reinsurance finance result	**419.1**	**-840.0**
Premiums received	7,787.1	–
Claims and other reinsurance service expenses paid, including investment components	-7,784.4	–
Insurance acquisition cash flows paid	-23.5	–
Cash flows	**-20.8**	**–**
Closing balance – assets	**2,434.3**	**-107.6**
Closing balance – liabilities	**1,858.2**	**3,055.0**
Closing balance – net	**-576.1**	**3,162.6**

2022			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
-1,264.4	**-1,177.0**	**-343.3**	**1,507.1**
642.6	**1,996.9**	**137.0**	**10,601.5**
1,907.0	**3,173.9**	**480.3**	**9,094.4**
-153.7	-488.5	-199.1	-841.3
–	–	–	-180.6
–	–	–	-407.7
-153.7	**-488.5**	**-199.1**	**-1,429.6**
–	–	512.8	3.9
70.5	87.1	108.4	-7.8
–	–	–	410.4
70.5	**87.1**	**621.2**	**406.5**
–	**–**	**–**	**455.6**
63.4	35.7	8.8	-375.7
-57.5	98.1	-3.2	100.2
5.9	**133.9**	**5.6**	**-275.6**
–	–	–	7,787.1
–	–	–	-7,784.4
–	–	–	-23.5
–	**–**	**–**	**-20.8**
-355.5	**-424.8**	**-417.2**	**1,129.2**
1,474.1	**2,481.6**	**490.7**	**9,359.6**
1,829.6	**2,906.4**	**908.0**	**8,230.5**

Movement in carrying amounts of the liability for remaining coverage and for incurred claims – reinsurance contracts held in the life and health reinsurance segment

	2023			
in EUR million	Reinsurance recoverables on LRC without loss recovery component	Loss recovery component	Reinsurance recoverables on LIC	Total
Opening balance – assets	**266.6**	**22.3**	**131.9**	**420.9**
Opening balance – liabilities	**853.3**	**0.1**	**-517.7**	**335.7**
Opening balance – net	**-586.6**	**22.2**	**649.6**	**85.2**
Reinsurance revenue (ceded)	-740.6	–	–	-740.6
Incurred claims and other reinsurance service expenses	–	-0.7	607.9	607.2
Amortisation of insurance acquisition cash flows	–	–	–	–
Losses and reversal of losses on onerous contracts	–	6.8	–	6.8
Adjustments to liabilities for incurred claims	–	–	17.5	17.5
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-740.6**	**6.1**	**625.5**	**-109.1**
thereof changes in non-performance risk of reinsurers	-57.3	–	-3.3	-60.6
Investment component	**-421.3**	**–**	**421.3**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	5.0	0.7	0.7	6.5
Currency gains/losses	-1.0	-1.4	-4.2	-6.5
Reinsurance finance result	**4.1**	**-0.6**	**-3.4**	**–**
Premiums paid	848.8	–	–	848.8
Claims and other reinsurance service expenses received, including investment components	–	–	-916.1	-916.1
Insurance acquisition cash flows	–	–	–	–
Cash flows	**848.8**	**–**	**-916.1**	**-67.2**
Closing balance – assets	**-156.8**	**6.3**	**341.0**	**190.6**
Closing balance – liabilities	**738.9**	**-21.4**	**-435.8**	**281.7**
Closing balance – net	**-895.6**	**27.7**	**776.9**	**-91.1**

in EUR million	2022			
	Reinsurance recoverables on LRC without loss recovery component	Loss recovery component	Reinsurance recoverables on LIC	Total
Opening balance – assets	**354.5**	**–**	**137.9**	**492.3**
Opening balance – liabilities	**1,022.0**	**–**	**-494.0**	**528.0**
Opening balance – net	**-667.5**	**–**	**631.8**	**-35.7**
Reinsurance revenue (ceded)	-576.9	–	–	-576.9
Incurred claims and other reinsurance service expenses	-0.1	-0.7	467.6	466.7
Amortisation of insurance acquisition cash flows	–	–	–	–
Losses and reversal of losses on onerous contracts	–	24.0	–	24.0
Adjustments to liabilities for incurred claims	–	–	53.6	53.6
Reinsurance service result – net expenses from reinsurance contracts retroceded	**-577.0**	**23.3**	**521.2**	**-32.5**
thereof changes in non-performance risk of reinsurers	-0.1	–	–	-0.1
Investment component	**-429.5**	**–**	**429.5**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	134.8	–	-2.3	132.5
Currency gains/losses	40.0	-1.1	-18.4	20.6
Reinsurance finance result	**174.8**	**-1.1**	**-20.6**	**153.1**
Premiums paid	912.5	–	–	912.5
Claims and other reinsurance service expenses received, including investment components	–	–	-912.3	-912.3
Insurance acquisition cash flows	–	–	–	–
Cash flows	**912.5**	**–**	**-912.3**	**0.2**
Closing balance – assets	**266.6**	**22.3**	**131.9**	**420.9**
Closing balance – liabilities	**853.3**	**0.1**	**-517.7**	**335.7**
Closing balance – net	**-586.6**	**22.2**	**649.6**	**85.2**

Movement in carrying amounts by measurement components – reinsurance contracts held in the life and health reinsurance segment

	2023	
	EPV of future cash flows	Risk adjustment for non-financial risk
in EUR million		
Opening balance – assets	**374.7**	**31.3**
Opening balance – liabilities	**627.9**	**-120.0**
Opening balance – net	**-253.2**	**151.3**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-23.4
Experience adjustments	-17.2	–
Reinsurance service result – changes relate to current service	**-17.2**	**-23.4**
Contracts initially recognised in the year	-7.7	0.3
Changes in recoveries of losses on onerous underlying contracts	0.9	–
Changes in estimates that adjust the CSM	-112.9	7.0
Changes in estimates that result in losses and reversal of losses on onerous contracts	7.5	-0.7
Reinsurance service result – changes relate to future service	**-112.3**	**6.7**
Reinsurance service result – changes that relate to past service	**17.6**	**–**
Reinsurance service result – Changes in non-performance risk of reinsurers	**-60.6**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	-8.4	9.1
Currency gains/losses	-2.9	-1.7
Reinsurance finance result	**-11.3**	**7.4**
Premiums paid	848.8	–
Claims and other reinsurance service expenses received, including investment components	-916.1	–
Insurance acquisition cash flows	–	–
Cash flows	**-67.2**	**–**
Closing balance – assets	**-179.3**	**80.0**
Closing balance – liabilities	**325.0**	**-61.9**
Closing balance – net	**-504.3**	**142.0**

2023			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
–	**14.9**	**-0.1**	**420.9**
-162.9	**-55.0**	**45.7**	**335.7**
162.9	**69.9**	**-45.7**	**85.2**
-24.4	3.5	-11.2	-32.1
–	–	–	-23.4
–	–	–	-17.2
-24.4	**3.5**	**-11.2**	**-72.8**
–	–	7.4	–
–	–	-0.9	–
95.6	-59.8	70.1	–
–	–	–	6.8
95.6	**-59.8**	**76.6**	**6.8**
–	**–**	**–**	**17.5**
–	**–**	**–**	**-60.6**
4.8	1.4	-0.4	6.5
-0.7	–	-1.1	-6.5
4.0	**1.3**	**-1.5**	**–**
–	–	–	848.8
–	–	–	-916.1
–	–	–	–
–	**–**	**–**	**-67.2**
232.4	**44.5**	**13.0**	**190.6**
-5.7	**29.5**	**-5.2**	**281.7**
238.2	14.9	18.2	-91.1

in EUR million	2022 EPV of future cash flows	Risk adjustment for non-financial risk
Opening balance – assets	**442.0**	**32.5**
Opening balance – liabilities	**903.8**	**-143.9**
Opening balance – net	**-461.9**	**176.4**
CSM recognised in the profit or loss for services provided	–	–
Change in risk adjustment for non-financial risk expired	–	-15.3
Experience adjustments	-65.0	–
Reinsurance service result – changes relate to current service	**-65.0**	**-15.3**
Contracts initially recognised in the year	21.7	11.1
Changes in recoveries of losses on onerous underlying contracts	-0.2	–
Changes in estimates that adjust the CSM	-10.0	12.8
Changes in estimates that result in losses and reversal of losses on onerous contracts	24.4	-0.5
Reinsurance service result – changes relate to future service	**35.9**	**23.5**
Reinsurance service result – changes that relate to past service	**53.7**	**-0.1**
Reinsurance service result – Changes in non-performance risk of reinsurers	**-0.1**	**–**
Reinsurance finance result before currency gains/losses plus changes through OCI	158.0	-30.3
Currency gains/losses	25.9	-2.9
Reinsurance finance result	**183.9**	**-33.2**
Premiums paid	912.5	–
Claims and other reinsurance service expenses received, including investment components	-912.3	–
Insurance acquisition cash flows	–	–
Cash flows	**0.2**	**–**
Closing balance – assets	**374.7**	**31.3**
Closing balance – liabilities	**627.9**	**-120.0**
Closing balance – net	**-253.2**	**151.3**

2022			
CSM			Total
Contracts under modified retrospective approach	Contracts under fair value approach	Other contracts	
–	**17.8**	**–**	**492.3**
-185.6	**-39.6**	**-6.9**	**528.0**
185.6	**57.4**	**6.9**	**-35.7**
-16.4	-4.8	-8.5	-29.7
–	–	–	-15.3
–	–	–	-65.0
-16.4	**-4.8**	**-8.5**	**-110.0**
–	–	-32.8	–
–	–	0.3	0.1
-5.8	15.8	-12.9	-0.1
–	–	–	24.0
-5.8	**15.8**	**-45.4**	**23.9**
–	**–**	**–**	**53.6**
–	**–**	**–**	**-0.1**
4.5	0.6	-0.3	132.5
-5.0	0.9	1.7	20.6
-0.5	**1.6**	**1.4**	**153.1**
–	–	–	912.5
–	–	–	-912.3
–	–	–	–
–	**–**	**–**	**0.2**
–	**14.9**	**-0.1**	**420.9**
-162.9	**-55.0**	**45.7**	**335.7**
162.9	**69.9**	**-45.7**	**85.2**

Contracts initially recognised – reinsurance contracts issued in the life and health reinsurance segment

in EUR million	2023	
	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	2,702.0	27.8
Insurance acquisition cash flows	19.5	–
Expected present value of cash inflows	-3,162.2	-13.7
Risk adjustment for non-financial risk	74.9	0.3
Contractual service margin	365.8	–
Loss component	–	14.4

[1] Profitable contract includes the buckets profitable and remaining

in EUR million	2022	
	Profitable contracts issued [1]	Onerous contracts issued
Expected present value of cash outflows	1,812.8	24.8
Insurance acquisition cash flows	8.6	–
Expected present value of cash inflows	-2,424.7	-21.3
Risk adjustment	90.5	0.4
Contractual service margin	512.8	–
Loss component	–	4.0

[1] Profitable contract includes the buckets profitable and remaining

Contracts initially recognised – reinsurance contracts held in the life and health reinsurance segment

in EUR million	2023	
	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	367.5	1.3
Insurance acquisition cash flows	–	–
Expected present value of cash outflows	-375.2	-0.4
Risk adjustment for non-financial risk	0.3	–
Contractual service margin	7.4	-0.9
Loss recovery amount	–	–

in EUR million	2022	
	Contracts retroceded without loss recovery component	Contracts retroceded with loss recovery component
Expected present value of cash inflows	1,124.3	0.2
Insurance acquisition cash flows	–	–
Expected present value of cash outflows	-1,102.6	-0.4
Risk adjustment for non-financial risk	11.1	–
Contractual service margin	-32.8	0.3
Loss recovery amount	–	0.1

Maturities of the contractual cash flows in the life and health reinsurance segment

in EUR million	2023 Remaining contractual undiscounted net cash flows		2022 Remaining contractual undiscounted net cash flows	
	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	819.6	-63.9	969.1	135.4
Due after one through two years	359.6	-79.7	417.8	-27.0
Due after two through three years	189.9	-12.4	52.7	-34.0
Due after three through four years	-241.0	-20.6	-213.7	-13.8
Due after four through five years	-231.6	-22.0	-226.3	-32.8
Due after five through ten years	-1,359.3	-121.2	-1,220.5	-154.7
Due after ten through twenty years	-1,680.8	-242.9	-1,381.1	-181.5
Due after twenty years	628.6	-230.9	980.9	-222.1
	-1,514.9	**-793.7**	**-621.0**	**-530.5**
Discounting	374.3	289.4	45.0	277.3
Total	**-1,140.6**	**-504.3**	**-576.1**	**-253.2**

Maturities of the contractual service margin in the life and health reinsurance segment

in EUR million	2023 Contractual service margin		2022 Contractual service margin	
	Reinsurance contracts issued	Reinsurance contracts retroceded	Reinsurance contracts issued	Reinsurance contracts retroceded
Due in one year	631.8	25.5	658.9	21.3
Due after one through two years	495.3	13.6	434.0	20.3
Due after two through three years	434.3	15.5	418.3	15.9
Due after three through four years	407.0	16.1	365.0	-2.9
Due after four through five years	393.1	16.5	344.2	12.9
Due after five through ten years	1,728.3	84.6	1,479.2	59.5
Due after ten through twenty years	2,169.3	146.8	1,837.9	77.0
Due after twenty years	3,227.8	66.2	3,057.1	77.3
	9,487.0	**384.8**	**8,594.6**	**281.3**
Discounting	-3,265.5	-113.6	-2,950.6	-94.2
Total	**6,221.5**	**271.3**	**5,644.0**	**187.1**

Reinsurance revenue (gross) by region in the life and health reinsurance segment

in EUR million	2023	2022
Regional origin		
Germany	146.2	149.9
United Kingdom	1,974.2	1,934.0
France	308.5	251.3
Other	231.8	272.1
Europe	**2,660.6**	**2,607.2**
USA	2,394.1	2,463.8
Other	124.1	103.1
North America	**2,518.2**	**2,566.8**
Asia	1,030.2	1,184.1
Australia	708.6	677.9
Australasia	**1,738.8**	**1,862.0**
Africa	261.9	320.5
Other	453.0	395.3
Total	**7,632.5**	**7,751.9**

Components of the reinsurance revenue (gross) in the life and health reinsurance segment

in EUR million	2023	2022
Components		
Expected incurred claims and other insurance expenses	6,091.4	6,506.7
CSM recognised for services provided	883.7	841.3
Change in risk adjustment for non-financial risk for risk expired	466.1	196.5
Experience adjustments for past or current services	174.0	197.6
Recovery of insurance acquisition cash flows	17.4	9.7
Total	**7,632.5**	**7,751.9**

9. Other notes

9.1. Derivative financial instruments and financial guarantees

Derivatives are financial instruments, the fair value of which is derived from an underlying trading instrument such as equities, bonds, indices or currencies. We use derivative financial instruments in order to hedge parts of our portfolio against interest rate and market price risks, optimise returns or realise intentions to buy / sell. In this context we take special care to limit the risks, select first-class counterparties and adhere strictly to the standards defined by investment guidelines.

The fair values of the derivative financial instruments were determined on the basis of the market information available at the balance sheet date. Please see section 3.1 "Summary of major accounting policies" with regard to the measurement models used.

Hannover Re holds derivative financial instruments to hedge interest rate risks from loans connected with the financing of real estate; these gave rise to recognition of other liabilities in an amount of EUR 0.0 million (EUR 1.3 million) and financial assets at fair value through profit or loss in an amount of EUR 2.1 million (EUR 3.5 million).

For the purpose of structuring the asset/liability management of non-current liabilities in certain currencies, Hannover Re has used with effect from the 2023 financial year onwards derivatives for interest rate hedging – in addition to those mentioned above and for other scenarios – that result in the recognition of financial assets at fair value through profit or loss in an amount of EUR 2.2 million (none) and other liabilities in an amount of EUR 8.2 million (none).

Hannover Re'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 liabilities in an amount of EUR 56.8 million (EUR 60.1 million) and financial assets at fair value through profit or loss in an amount of EUR 92.1 million (EUR 98.4 million).

The decrease in equity from hedging instruments recognised in OCI pursuant to IFRS 9 in an amount of EUR 1.3 million (increase of EUR 6.0 million recognised in OCI) derived from the forward exchange transactions taken out to hedge currency risks from long-term investments in foreign operations. These hedging instruments resulted in the recognition of other liabilities of EUR 1.1 million (financial assets at fair value through profit or loss of EUR 6.1 million).

Inflation swaps are taken out in the form of cash flow hedges to minimise the inflation risk associated with payments under a morbidity loss reserve portfolio. These serve primarily to hedge volatility in reinsurance payments due. The structuring is such that separate inflation swaps are taken out for the loss payments incurred in each year. These financial instruments result in disclosure of financial assets at fair value through profit or loss in an amount of EUR 4.3 million (EUR 2.1 million). The hedge gave rise to an increase in equity from hedging instruments recognised in OCI in an amount of EUR 2.1 million (EUR 2.1 million).

In order to hedge the risk of share price changes in connection with the stock appreciation rights granted under the share award plan, Hannover Re has taken out hedges since 2014 in the form of so-called equity swaps. The fair value of these instruments was recognised in an amount of EUR 2.2 million (EUR 7.5 million) under other assets as at the balance sheet date. The hedge gave rise to an increase in equity from hedging instruments recognised in OCI in an amount of EUR 2.0 million (EUR 2.0 million).

The maturities of the fair values and notional values of the hedging instruments described above can be broken down as follows:

Maturity structure of derivative financial instruments

in EUR million	2023				
	Less than one year	One to five years	Five to ten years	More than ten years	31.12.2023
Interest rate hedges					
Fair values	2.1	-1.4	-3.6	-1.0	-3.9
Notional values	30.0	63.6	336.1	36.2	466.0
Currency hedges					
Fair values	35.3	14.0	-15.1	–	34.2
Notional values	2,940.8	1,212.4	330.2	–	4,483.4
Inflation hedges					
Fair values	0.7	1.9	1.7	–	4.3
Notional values	41.8	84.2	74.4	–	200.3
Share price hedges					
Fair values	2.2	–	–	–	2.2
Notional values	37.2	–	–	–	37.2
Total hedging instruments					
Fair values	40.1	14.5	-16.9	-1.0	36.7
Notional values	3,049.8	1,360.2	740.7	36.2	5,186.9

in EUR million	2022				
	Less than one year	One to five years	Five to ten years	More than ten years	31.12.2022
Interest rate hedges					
Fair values	1.0	1.2	–	–	2.2
Notional values	79.3	73.9	–	–	153.2
Currency hedges					
Fair values	73.2	-2.2	-26.6	–	44.4
Notional values	1,937.0	922.9	312.3	–	3,172.3
Inflation hedges					
Fair values	0.4	1.2	0.6	–	2.1
Notional values	48.4	130.5	88.5	–	267.3
Share price hedges					
Fair values	7.5	–	–	–	7.5
Notional values	29.8	–	–	–	29.8
Total hedging instruments					
Fair values	82.1	0.2	-26.1	–	56.3
Notional values	2,094.5	1,127.3	400.8	–	3,622.6

The net changes in the fair value of these instruments increased the result of the financial year by EUR 7.1 million (decrease in the result of EUR 8.3 million).

Hannover Re enters into derivative transactions on the basis of standardised master agreements that contain global netting agreements. The netting agreements set out below normally do not meet the criteria for netting in the balance sheet, since Hannover Re has no legal right whatsoever at the present moment in time to netting of the recognised amounts. The right to netting can, as a matter of principle, only be enforced upon occurrence of certain future defined events. Collateral furnished or received is recognised per counterparty up to at most the amount of the respective net liability or net asset.

Netting agreements

in EUR million	2023 Fair value	Netting agreement	Cash collateral received / furnished	Other collateral received / furnished	Net amount
Derivative receivables	96.5	35.1	54.6	0.6	6.2
Derivative liabilities	63.1	35.1	5.2	20.3	2.5

in EUR million	2022 Fair value	Netting agreement	Cash collateral received / furnished	Other collateral received / furnished	Net amount
Derivative receivables	106.0	24.6	65.9	0.1	15.3
Derivative liabilities	59.7	24.6	1.4	31.3	2.4

Derivative financial instruments in connection with reinsurance

A number of treaties in life and health reinsurance meet criteria which require application of the stipulations contained in IFRS 17 "Insurance Contracts" governing embedded derivatives. These accounting regulations require that certain derivatives embedded in reinsurance contracts be separated from the underlying insurance contract ("host contract"), reported separately at fair value in accordance with IFRS 9 "Financial Instruments" and recognised under investments. Fluctuations in the fair value of the derivative components are to be recognised through profit and loss in subsequent periods.

A number of transactions concluded in the Life & Health reinsurance business group in previous years, under which Hannover Re companies offer their contracting parties coverage for risks from possible future payment obligations arising out of hedging instruments, are also to be classified as derivative financial instruments. The payment obligations result from contractually defined events and relate to the development of an underlying group of primary insurance contracts with statutory reserving requirements. The contracts are to be categorised and recognised as stand-alone credit derivatives pursuant to IFRS 9. These derivative financial instruments were carried in equity on initial recognition. Please see section 6.3 "Other assets". The fair value of these instruments was EUR 16.0 million (EUR 21.2 million) on the balance sheet date and was recognised under financial assets at fair value through profit or loss. The change in value in subsequent periods is dependent upon the risk experience and led to an improvement in the result of EUR 38.8 million EUR (42.2 million) in the financial year.

The portfolio contains a hedge against an extreme increase in mortality that protects the Hannover Re Group against a rise in mortality rates, for example due to pandemics, natural catastrophes or terrorist attacks. The risk swap is indexed against a weighted combination of US, UK and Australian population mortality. Payment under the cover is triggered proportionately between 110% and 120% of the mortality index. The derivative was recognised with a negative fair value of EUR 1.8 million (positive fair value of EUR 126.2 million) under other liabilities. The change in the fair value of the derivative gave rise to income of EUR 13.5 million (87.0 million) in the course of the year.

In the area of life and health reinsurance a reinsurance treaty with a financing component was also written in the past under which the amount and timing of the return flows are dependent on lapse rates within an underlying primary insurance portfolio. This treaty and a corresponding retrocession agreement, which are classified as financial instruments pursuant to IFRS 9, resulted in the recognition of other liabilities of EUR 8.9 million (EUR 14.4 million) and financial assets at fair value through profit or loss in an amount of EUR 125.9 million (EUR 124.4 million). Altogether, these arrangements gave rise to an improvement in the result of EUR 11.4 million (deterioration in the result of EUR (4.3 million) in the year under review.

At the end of the 2017 financial year an index-linked cover was written for longevity risks. The resulting derivative was recognised as at the balance sheet date with a positive fair value of EUR 7.1 million (EUR (5.6 million) under financial assets at fair value through profit or loss. The change in the fair value of the derivative gave rise to income of EUR 4.4 million (EUR 3.8 million) in the course of the year.

In the 2022 financial year a cover containing a financing component was taken out for biometric risks in life and health reinsurance. IFRS 9 requires that an embedded derivative be separated from this arrangement. The derivative resulted in recognition of financial assets at fair value through profit or loss in an amount of EUR 12.7 million (EUR 69.8 million) in the year under review. The change in the fair value of this derivative gave rise to income of EUR 4.3 million (EUR 0.1 million) over the course of the year.

All in all, application of the standards governing the accounting for derivatives in connection with the technical account led to recognition of assets totalling EUR 161.8 million (EUR 347.1 million) as well as recognition of liabilities in an amount of EUR 10.6 million (EUR 14.4 million) from the derivatives resulting from technical items as at the balance sheet date. Improvements in the result amounting to EUR 72.4 million (EUR 133.1 million) as well as charges to the result of EUR 0.0 million (EUR 4.3 million) were recognised in the year under review from all separately measured derivatives in connection with the technical account.

Financial guarantees

Structured transactions were entered into in the life and health reinsurance business group in order to finance statutory reserves (so-called Triple-X or AXXX reserves) of US ceding companies. In each case such structures necessitated the involvement of a special purpose entity. The 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 to a member company of the Hannover Re Group. The total amount of the contractually agreed capacities of the transactions is equivalent to EUR 794.5 million (EUR 1,290.9 million); an amount equivalent to EUR 735.2 million (EUR 1,095.6 million) had been taken up as at the balance sheet date. The variable payments to the special purpose entities that are guaranteed by the Hannover Re Group 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 IFRS 9 these transactions are to be recognised at fair value as financial guarantees. To this end Hannover Re 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.

9.2. Related party disclosures

IAS 24 “Related Party Disclosures” defines related parties as group entities of a common parent, associated entities and joint ventures, legal entities under the influence of key management personnel and the key management personnel of the entity itself. Transactions between Hannover Rück SE and its subsidiaries, which are to be regarded as related parties, were eliminated through consolidation and are therefore not discussed in the notes to the consolidated financial statement. In the year under review the significant business relations described below existed with related parties.

Talanx AG holds an unchanged majority interest of 50.22% in Hannover Rück SE. For its part, Haftpflichtverband der Deutschen Industrie Versicherungsverein auf Gegenseitigkeit (HDI), Hannover, holds a stake of 76.7% in Talanx AG.

The business relationship between Hannover Rück SE and its subsidiary E+S Rückversicherung AG is based on a cooperation agreement. A retrocession by Hannover Rück SE to E+S Rückversicherung AG exists in property and casualty reinsurance. E+S Rückversicherung AG and Hannover Rück SE bear exclusive responsibility for German business and for international markets respectively.

Companies belonging to the Talanx Group granted the Hannover Re Group insurance protection inter alia in the areas of public liability, building, contractors all risks, group accident and business travel insurance. Divisions of Talanx AG also performed services for the Hannover Re Group in the areas of taxes and general administration. Divisions of Hannover Rück SE performed services in connection with the insurance and reinsurance business of HDI Global Specialty SE, a participation of HDI Global SE.

Talanx Reinsurance Broker GmbH and Talanx AG grant Hannover Rück SE and E+S Rückversicherung AG a preferential position as reinsurers of cedants within the Talanx Group. In addition, Hannover Rück SE and E+S Rückversicherung AG are able to participate in the protection covers on the retention of Group cedants and share in the protection afforded by them. In certain circumstances Hannover Rück SE and E+S Rückversicherung AG are obliged to assume unplaced shares of the reinsurance of Group cedants from Talanx Reinsurance Broker GmbH or Talanx AG.

The Hannover Re Group provides reinsurance protection for the HDI Group. To this extent, numerous underwriting business relations exist with related parties in Germany and abroad that are not included in the Hannover Re Group’s consolidation. This includes business both assumed and ceded at usual market conditions.

The reinsurance relationships with related parties in the year under review and the previous year are shown with their total amounts in the following table.

Business assumed and ceded in Germany and abroad

in EUR million	2023			2022 [1]		
	Property and casualty reinsurance	Life and health rein-surance	Total	Property and casualty reinsurance	Life and health rein-surance	Total
Material items in the statement of in-come						
Business assumed						
Reinsurance Revenue	761.5	107.4	868.9	1,266.8	103.1	1,369.9
Reinsurance service expenses	-622.8	-81.0	-703.8	-1,184.7	-80.9	-1,265.6
Reinsurance service result	**138.7**	**26.4**	**165.1**	**82.1**	**22.2**	**104.3**
Business ceded						
Reinsurance expenses	7.0	-38.2	-31.2	9.4	-27.4	-18.0
Income from reinsurance contracts held	6.5	25.0	31.5	1.0	19.8	20.8
Net result from reinsurance contracts held	**13.5**	**-13.2**	**0.3**	**10.4**	**-7.6**	**2.8**
Reinsurance service result (net)	**152.2**	**13.2**	**165.4**	**92.5**	**14.6**	**107.1**
Material items in the balance sheet						
Assets						
Reinsurance recoverables on liability for incurred claims	17.5	–	17.5	13.8	–	13.8
Reinsurance recoverables on liability for remaining coverage	14.8	–	14.8	18.1	–	18.1
Recoverables on reinsurance contracts ceded	**32.3**	**–**	**32.3**	**31.9**	**–**	**31.9**
Reinsurance contracts issued in an asset position	28.9	49.0	77.9	31.2	52.7	83.9
Liabilities						
Liability for incurred claims LIC	2,986.7	12.9	2,999.6	3,372.8	12.6	3,385.4
Liability for remaining coverage LRC	-27.3	10.7	-16.6	-150.8	14.3	-136.5
Liabilites from reinsurance contracts issued	**2,959.4**	**23.6**	**2,983.0**	**3,222.0**	**26.9**	**3,248.9**
Reinsurance contracts ceded in a liability position	2.4	10.9	13.3	2.6	8.0	10.6

[1] Restated pursuant to IAS 8 for own additional reserves not recognised in the prior year that were established in previous years supplementary to the ac-tual figures provided by cedants.

In addition, other assets of EUR 148.6 million (EUR 2.9 million) as well as other liabilities of EUR 138.3 million (EUR 43.1 million) exist with respect to Talanx AG and its subsidiaries which are not part of the scope of consolidation of Hannover Re.

The bond issued by Talanx AG, in which Hannover Rück SE and E+S Rückversicherung AG had invested in prior years, matured on 13 February 2023 and has no longer been in the portfolio since that date.

HDI Lebensversicherung AG, Cologne, participated in a nominal amount of EUR 50.0 million in the subordinated bond issued by Hannover Rück SE in September 2014 with a coupon of 3.375%.

Within the contractually agreed framework Ampega Asset Management GmbH performs real estate management as well as investment and asset management services for Hannover Rück SE and the vast majority of its subsidiaries. A total amount of EUR 55.7 million (EUR 59.7 million) was expensed for the rendering of these services in the financial year just ended.

Hannover Rück SE has concluded agreements with Ampega Asset Management GmbH, Talanx Reinsurance Broker GmbH and Svedea AB that enable these companies to use software for screening sanctions lists.

IT and management services were performed for Talanx Reinsurance Broker GmbH, Hannover, under service contracts. Actuarial opinions with respect to the pension commitments given to staff are drawn up for Hannover Rück SE and E+S Rückversicherung AG by HDI Pensionsmanagement AG under an actuarial service contract.

Talanx AG performs various services in the area of taxes for a number of investment vehicles of the Hannover Re Group in the asset classes of private equity and real estate. In this regard corresponding agreements have been concluded with Hannover Re companies.

Since 2012 a service agreement has existed between Hannover Rück SE and Talanx AG regarding the use of data acquisition software for Group accounting purposes.

Hannover Rück SE has concluded a service contract with HDI Service AG in the area of flight services as well as a contract regarding the reciprocal provision of business continuity management services.

Since 2004 a service agreement has existed between Hannover Rück SE, E+S Rückversicherung AG and Talanx Reinsurance Broker GmbH regarding the use of market security services and access to the business partner information system of Hannover Rück SE.

Remuneration and shareholdings of the members of the governing bodies of the parent company

The remuneration of the active members of the Executive Board of Hannover Re amounted to altogether EUR 11.4 million (EUR 9.7 million). In the event of 100% target attainment, the remuneration of the Executive Board consists of a 40% short-term fixed component and a 60% variable component. Each member of the Executive Board receives a contractual commitment to customary target remuneration which is aligned with their scope of responsibility and their expertise and experience of relevance to the position. The long-term incentive is paid out at the end of the four-year performance period in the 2028 financial year.

With effect from 1 January 2021 the variable component of the Executive Board remuneration is split into a short-term incentive (40%) and a long-term incentive (60%) (HR performance share awards). For a detailed explanation of the long-term incentive (LTI) we would refer to section 9.3 “Share-based payment”. The short-term incentive (STI) is geared to Hannover Re's commercial success in the respective financial year. The basis for payment under the STI is the contractually defined STI target amount, which is based on overall target attainment of 100%. The overall target attainment (including the individual premium or deduction) can range from 0% to 200%. The amount paid out under the STI is thus limited to 200% of the target amount. In addition to the return on equity as a financial performance criterion, an individual premium or deduction is also determinative for the STI. The latter encompasses both financial and non-financial performance criteria, particularly including sustainability targets. The amount of the premium or deduction, which can range from -25 percentage points to +25 percentage points, is determined by the Supervisory Board at its reasonable discretion. The criteria and key performance indicators used to establish the individual premium or deduction are defined by the Supervisory Board in advance for the coming financial year and communicated to the members of the Executive Board. The STI for the 2023 financial year amounts to EUR 4.8 million (EUR 3.5 million).

The fixed remuneration is granted in three components, namely fixed remuneration, fringe benefits and retirement provision. The fixed remuneration is aligned with the scope of duties and the professional experience of the individual member of the Executive Board. In addition, each member of the Executive Board receives certain, non-performance-based fringe benefits in the customary scope, for example a company car and insurance coverage. These amounted to EUR 0.2 million (EUR 0.1 million).

The benefits after termination of the employment relationship for the most part consist of a defined contribution retirement plan. Altogether, a pension expense for the active members of the Executive Board amounting to EUR 0.6 million (EUR 0.8 million) was recognised for 2023.

The total remuneration of former members of the Executive Board and their surviving dependants, for whom 16 (16) pension commitments existed, amounted to EUR 2.0 million (EUR 1.9 million) in the year under review. Altogether, a provision of EUR 26.4 million (EUR 24.7 million) has been set aside for pension commitments.

The exclusively short-term total remuneration of the Supervisory Board of Hannover Re amounted to EUR 1.1 million (EUR 1.1 million). Around EUR 0.8 million (EUR 0.8 million) was attributable to remuneration for work on the Supervisory Board. In addition, remuneration of EUR 0.2 million (EUR 0.2 million) was paid for committee work together with EUR 0.1 million (EUR 0.1 million) for attendance allowances. A further EUR 0.1 million (EUR 0.1 million) arose in connection with supervisory board remuneration at Group companies. There are no pension commitments for former members of the Supervisory Board or their surviving dependants.

Remuneration of the active members of the Executive Board

in EUR million	2023	2022
Short-term benefits	9.6	8.4
Other long term benefits	1.8	1.3
Benefits after termination of the employment relationship	0.6	0.8

Members of the Supervisory Board and Executive Board of Hannover Rück SE as well as their spouses or registered partners and first-degree relatives hold less than 1.0 % of the issued shares. The total holding as at 31 December 2023 amounted to 0.00321 % (0.00318 %) of the issued shares, i.e. 3,872 (3,835) shares.

The members of the governing bodies did not receive any advances or loans in the year under review. Nor were there any other material reportable circumstances or contractual relationships as defined by IAS 24 between companies of the Hannover Re Group and the members of the governing bodies or their related parties in the year under review. Furthermore, above and beyond the aforementioned remuneration as supervisory board members at Group companies, the members of the Supervisory Board were not granted any remuneration or benefits for personally rendered services.

All other information regarding the remuneration system and the remuneration report of the Executive Board and Supervisory Board can be accessed online at https://www.hannover-re.com/1849339/remuneration-report-and-system.

9.3. Share-based payment

Since 2011 Hannover Re has had a share-based payment plan with cash settlement (Share Award Plan).

Share Award Plan

With effect from the 2011 financial year the Supervisory Board of Hannover Rück SE implemented a Share Award Plan for the members of the Executive Board of Hannover Re; this provides for the granting of stock participation rights in the form of virtual shares (referred to as “share awards”).

The Executive Board of Hannover Re decided to adopt a Share Award Plan for certain management levels at Hannover Re as well with effect from the 2012 financial year. The Share Award Plan for the Executive Board was modified and expanded with effect from the 2021 financial year (“performance shares”) by a resolution of the Annual General Meeting.

The Share Award Plan replaced the cancelled Stock Appreciation Rights Plan. The share awards do not establish any claim against Hannover Re to the delivery of stock, but merely to payment of a cash amount in accordance with the conditions set out below.

The members of the Executive Board and management of Hannover Re who are eligible recipients under the Share Award Plan are those who have been allowed a contractual claim to the granting of share awards and whose service / employment relationship exists at the time when the share awards are granted and does not end through cancellation or a termination agreement on an effective date prior to expiry of the vesting period.

Share awards were granted separately for the first time for the 2011 financial year and then for each financial year (allocation year) thereafter. The first payout of share awards took place in the 2016 financial year for those share awards that had been allocated in the 2011 financial year to the eligible members of the Executive Board. In the 2017 financial year the first payout was also made to the participating senior executives.

The total number of share awards granted is based on the value per share of Hannover Rück SE. The value per share is established according to the unweighted arithmetic mean of the Xetra closing prices of the Hannover Re share. In the conditions applicable to members of the Executive Board a period of 15 trading days before to 15 trading days after the meeting of the Supervisory Board that approves the consolidated financial statement for the financial year just ended is envisaged for the calculation. For senior executives a period of 20 trading days before to ten trading days after the meeting of the Supervisory Board that approves the consolidated financial statement for the financial year just ended has been agreed. The prices calculated in this way also determine the payout value of the share awards that have become payable. The total number of share awards granted is established by dividing the amount available for the granting of share awards to the respective eligible recipients by the value per share, rounded up to the next full share. For members of the Executive Board 60% and for senior executives 40% or 35% – depending on management level – of the defined variable remuneration shall be granted in the form of share awards. Since the 2021 financial year the calculation of share awards for the Executive Board has been based on the target amount, which – depending on the entrepreneurial and personal target achievement – produces an allocation value that is at most 200% of the target amount.

The share awards are granted automatically without any requirement for a declaration. Following expiry of a vesting period of four years the value of one Hannover Re share calculated at the disbursement date is paid out for each share award. This value is calculated according to the provisions of the preceding paragraph. The amount paid out for the performance shares is additionally influenced by the development of the Total Shareholder Return (TSR). The TSR captures the share price performance as well as the dividends during the vesting period. The TSR of Hannover Re is considered in relation to the unweighted average TSR of a peer group, comprised of Munich Re, Swiss Re, Everest Re, RGA and SCOR, and produces the relative TSR. The base amount paid out derived from the share price and dividends is multiplied by this TSR, producing the final amount paid out – which is at most 200% of the base amount paid out.

The eligible recipient shall be paid an amount that corresponds to the sum total of the values of the share awards calculated at the disbursement date for which the vesting period of four years has expired. The amount is to be paid in the month after expiry of the determinative period for calculating the value per share according to the preceding paragraphs.

In addition, upon payment of the value of the share awards, a sum shall be paid out in the amount of the dividend insofar as dividends were distributed to shareholders. The amount of the dividend is the sum total of all dividends per share paid out during the term of the share awards multiplied by the number of share awards due for disbursement to the eligible recipient at the disbursement date. In the event of early disbursement of the share awards, the value of the dividends shall only be paid out for the period until occurrence of the event that triggers early disbursement. No pro rata allowance shall be made for dividends that have not yet been distributed.

In the event that the Board mandate or service relationship with the member of the Executive Board or the employment relationship with the manager ends, the eligible recipient shall retain his claims to payment of the value of already granted share awards after expiry of the applicable vesting period, unless such termination is based on resignation of office / voluntary termination on the part of the member of the Executive Board or voluntary termination on the part of the manager or dismissal by Hannover Re for a compelling reason. In the event of death the claims arising out of the already granted and / or still to be granted share awards pass to the heirs.

Any entitlement to the granting of share awards after leaving the company is excluded. This shall not apply with respect to claims to variable remuneration acquired (pro rata) in the last year of service of the eligible recipient in the event of exit from the company on account of non-reappointment, occurrence of the pensionable event or death.

The Share Award Plan of Hannover Rück SE gives rise to the amounts shown in the following table.

Share awards of Hannover Rück SE

	Allocation year								
	2023	2022		2021		2020		2019	
	Anticipated allocation	Final allocation 2023 for 2022	Anticipated allocation	Final allocation 2022 for 2021	Anticipated allocation	Final allocation 2021 for 2020	Anticipated allocation	Final allocation 2020 for 2019	Anticipated allocation
Valuation date									
Executive Board	11.12.2023	15.03.2023	30.12.2022	15.03.2022	30.12.2021	17.03.2021	30.12.2020	18.03.2020	30.12.2019
Senior Executives	11.12.2023	22.03.2023	30.12.2022	22.03.2022	30.12.2021	24.03.2021	30.12.2020	25.03.2020	30.12.2019
Valuation per share award in EUR									
Executive Board	220.40	176.95	185.50	148.86	167.15	150.42	130.30	139.04	172.30
Senior Executives	220.40	177.58	185.50	159.54	167.15	147.06	130.30	156.39	172.30
Number of allocated share awards in the allocation year									
Executive Board	31,306	29,705	27,658	27,977	25,130	7,851	9,214	7,993	7,278
Senior Executives	52,042	51,425	44,567	40,954	44,477	45,349	53,465	45,426	45,103
Other adjustments[1]		-1,821		-1,503		-2,363		-5,965	
Total	83,348	79,309	72,225	67,428	69,607	50,837	62,679	47,454	52,381

[1] This figure results from originally granted share awards that have since lapsed.

Development of the provision for share awards of Hannover Rück SE

in EUR million	2023	2022	2021	2020	2019	2018	2017	Total
	Allocation year							
Provision at 31 December 2021	**–**	**–**	**2.6**	**3.8**	**5.3**	**8.7**	**10.6**	**31.1**
Allocation 2022	–	3.0	3.1	2.6	2.6	3.4	0.1	14.8
Utilisation 2022	–	–	–	–	–	–	10.6	10.6
Release 2022	–	–	0.1	0.1	0.1	0.0	0.1	0.5
Provision at 31 December 2022	**–**	**3.0**	**5.6**	**6.2**	**7.8**	**12.1**	**–**	**34.7**
Allocation 2023	4.4	5.0	4.1	3.3	3.3		–	20.2
Utilisation 2023	–	–	–	–	–	11.8	–	11.8
Release 2023	–	0.1	0.1	0.2	0.2	0.3	–	0.9
Provision at 31 December 2023	**4.4**	**7.9**	**9.6**	**9.3**	**10.9**	**–**	**–**	**42.2**

The aggregate provision – recognised under the sundry non-technical provisions – amounted to EUR 42.2 million (EUR 34.7 million) as at the balance sheet date.

The personnel expense for share awards in the case of members of the Executive Board is spread on an accrual basis across the relevant term of the share awards or the shorter term of the service contracts; in the case of senior executives the personnel expense is spread across the relevant term of the share awards. The allocation of the financial year recognised in the expenditures on personnel totalled altogether EUR 20.2 million (EUR 14.8 million). This consists of the expense for share awards of the 2023 financial year as well as the dividend claim and the additionally earned portion of the share awards granted in earlier financial years. The value of the share awards finally granted is also influenced by movements in the share price. The sum total of the dividends included in the expenditures on personnel for earlier financial years amounted to EUR 1.4 million (EUR 1.3 million). The distributed dividend is recognised, with no allowance made for expected dividend payments. Dividend claims are recognised in the discounted amounts.

In the year under review the 7,882 (8,257) share awards of the Executive Board finally allocated in 2018 with a value of EUR 176.95 (148.86) each plus the dividend entitlement of EUR 21.00 (20.25) were paid out to the eligible members of the Executive Board. The 51,393 (51,165) share awards of the senior executives for the 2018 financial year were paid out in 2023 with a value of EUR 177.58 (159.54) each plus the dividend entitlement of EUR 21.00 (20.25). The release of the provision for share awards granted in 2018 derives from the difference between the share price at the last balance sheet date, i.e. EUR 185.50, and the price for payment of the share awards from March 2023, i.e. EUR 176.95 / EUR 177.58.

With regard to the effects of the equity swaps taken out to hedge price risks, please see our explanatory remarks in section 9.1 "Derivative financial instruments and financial guarantees ".

9.4. Staff and expenditures on personnel

Staff

The average number of staff at the companies included in the consolidated financial statement of the Hannover Re Group during the reporting period was 3,626 (3,433). As at the balance sheet date altogether 3,756 (3,519) staff were employed by the Hannover Re Group, with 1,644 (1,537) employed in Germany and 2,112 (1,982) working for the consolidated Group companies abroad.

Personnel information

	2023					2022	
	31.3.	30.6.	30.9.	31.12.	Average	31.12.	Average
Number of employees (excluding members of the Executive Board)	3,542	3,622	3,689	3,756	3,626	3,519	3,433

Expenditures on personnel

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

Personnel expenditures

in EUR million	2023	2022
a) Wages and salaries	372.3	342.6
	372.3	**342.6**
b) Social security contributions and expenditure on provisions and assistance		
ba) Social security contributions	29.5	26.5
bb) Expenditures for pension provision	30.5	31.3
bc) Expenditures for assistance	6.0	5.7
	66.0	**63.5**
Total	**438.3**	**406.1**

9.5. Earnings per share and dividend proposal

Calculation of the earnings per share

	2023	2022[1]
Group net income in EUR million	1,824.8	780.8
Weighted average of issued shares	120,597,290	120,596,910
Basic earnings per share in EUR	15.13	6.47
Diluted earnings per share in EUR	15.13	6.47

[1] Restated pursuant to IAS 8

The earnings per share is calculated by dividing the net income attributable to the shareholders of Hannover Rück SE by the weighted average number of shares outstanding within the period under review.

Neither in the year under review nor in the previous reporting period were there any dilutive effects. The weighted average of the issued shares was, as in the previous year, slightly lower than the value of the shares in circulation on the balance sheet date. In the context of the employee share option plan Hannover Re acquires treasury shares and sells them at a later date to eligible employees. The weighted average number of shares does not include 18,714 (26,927) treasury shares pro rata temporis for the duration of the holding period. For further details please see our comments in section 6.8 "Shareholders' equity and treasury shares".

There were no other extraordinary components of income which should have been recognised or disclosed separately in the calculation of the earnings per share.

The earnings per share could potentially be diluted in future through the issue of shares or subscription rights from the authorised or conditional capital.

Dividend per share

A dividend of EUR 723.6 million (EUR 693.4 million) was paid in the year under review for the 2022 financial year.

It will be proposed to the Annual General Meeting on 6 May 2024 that a dividend of EUR 6.00 and a special dividend of EUR 1.20 per share should be paid for the 2023 financial year. This corresponds to a total distribution of EUR 868.3 million. The dividend proposal does not form part of this consolidated financial statement.

9.6. Lawsuits

Member companies of the Hannover Re Group are involved in judicial and supervisory procedures as well as in arbitration proceedings as part of the conduct of insurance and reinsurance business. Depending upon the subject matter of the procedure, the Hannover Re Group sets aside provisions for the amount in dispute in such proceedings – for the most part in the technical account and in exceptional cases as a charge to other income / expenses – if and to the extent that the resulting commitments are likely to materialise and their amount can be estimated with sufficient accuracy. The provision established in each case covers the expense that can be expected in our assessment as at the balance sheet date.

Neither the outcome nor the duration of pending procedures can be definitively foreseen at the time when provisions are established. The final liabilities of Hannover Re may diverge considerably from the constituted provisions because the assessment of probability and the quantification of these uncertain liabilities in large measure require estimates that may prove not to be accurate as the proceedings in question continue to progress. This is also true of procedures for which no provisions were established. Insofar as a commitment exists under such procedures as at the balance sheet date that may possibly but will probably not result in a loss, the Hannover Re Group estimates this potential loss – where practicable – and reports a contingent liability. For estimation purposes Hannover Re takes into account a number of factors. These include, among others, the nature of the claim, the status of the procedure concerned, decision of courts and arbitration bodies, prior settlement discussions, experience from comparable cases as well as expert opinions and the assessments of legal advisers and other experts. If a provision has been established for a particular procedure, a contingent liability is not recognised.

The other lawsuits concluded and still pending in the year under review and as at the balance sheet date were not material for the Hannover Re Group either individually or combined. Furthermore, there were no contingent liabilities from lawsuits to report as at the balance sheet date.

9.7. Contingent liabilities and commitments

As security for technical liabilities to our US clients, we have established two trust accounts (master trust and supplemental trust) in the United States. They amounted to EUR 4,188.5 million (EUR 4,165.8 million) and EUR 465.7 million (EUR 460.5 million) respectively as at the balance sheet date. The securities held in the trust accounts are shown as investments at fair value through OCI. In addition, we furnished further collateral to ceding companies in an amount of EUR 5,650.7 million (EUR 3,973.3 million) in the form of so-called "single trust funds". This amount includes a sum equivalent to EUR 5,111.8 million (EUR 3,323.0 million) which was furnished by investors as security for potential reinsurance obligations from ILS transactions.

As part of our business activities we hold collateral available outside the United States in various blocked custody accounts and trust accounts, the total amount of which in relation to the Group's major companies was EUR 3,351.0 million (EUR 3,046.8 million) as at the balance sheet date.

The securities held in the blocked custody accounts and trust accounts are recognised predominantly as investments at fair value through OCI.

Letter of credit (LoC) facilities existed with a number of financial institutions as at the balance sheet date in a total volume equivalent to EUR 3,177.4 million (EUR 2,988.6 million) and with various terms maturing at the latest in 2028.

As security for our technical liabilities, various financial institutions have furnished sureties for our company in the form of letters of credit. The total amount as at the balance sheet date was EUR 1,610.9 million (EUR 1,423.5 million).

A number of LoC facilities include standard market contractual clauses that allow the banks rights of cancellation in the event of material changes in our shareholding structure or trigger a requirement on the part of Hannover Re to furnish collateral upon materialisation of major events, for example if our rating is significantly downgraded. Please see also our explanatory remarks in the "Financial position and net assets" subsection of the management report on the information pursuant to § 315a Para. 1 German Commercial Code (HGB).

We put up own investments with a book value of EUR 34.3 million (EUR 33.7 million) as collateral for existing derivative transactions. We received collateral with a fair value of EUR 58.4 million (EUR 89.9 million) for existing derivative transactions.

As security for liabilities in connection with participating interests in real estate companies and real estate transactions the usual collateral under such transactions has been furnished to various banks, the amount of which totalled EUR 1,210.4 million (EUR 1,344.2 million) as at the balance sheet date.

Outstanding capital commitments with respect to alternative investments exist on the part of the Group in an amount of EUR 1,465.3 million (EUR 1,038.7 million). These primarily involve as yet unfulfilled payment obligations from investment commitments given to private equity funds and venture capital firms.

Group companies are members of the association for the reinsurance of pharmaceutical risks and several atomic and nuclear pools. The failure of one of the other pool members to meet its liabilities would result in an additional call according to the quota participation.

Hannover Rück SE has provided an open-ended guarantee limited to EUR 11.5 million in favour of the pension fund "The Congregational & General Insurance Plc Pension and Life Assurance Scheme" at usual market conditions.

The application of tax regulations may not have been resolved at the time when tax items are brought to account. The calculation of tax refund claims and tax liabilities is based on what we consider to be the regulations most likely to be applied in each case. The revenue authorities may, however, take a differing view, as a consequence of which additional tax liabilities could arise in the future.

Hannover Re enters into contingent liabilities as part of its normal business operations. A number of reinsurance treaties concluded by Group companies with outside third parties include letters of comfort, guarantees or novation agreements under which Hannover Rück SE guarantees the liabilities of the subsidiary in question or enters into the rights and obligations of the subsidiary under the treaties if particular constellations materialise.

9.8. Leases

Leased properties

Hannover Re leases various office premises, technical facilities, office equipment and vehicles. A long-term land lease agreement also exists in connection with investment property.

Leases were recognised in the following items of the balance sheet in the amounts stated below:

Leases in the balance sheet

in EUR million	2023	2022
Investment property	33.4	35.0
Own-use property	53.4	62.8
Fixtures, fittings and equipment	0.1	0.1
Sundry assets	0.6	1.4
Lease liabilities	100.8	111.7

The allocation to the right-of-use assets amounted to EUR 3.8 million (EUR 8.7 million) in the financial year.

The following amounts were recognised in the statement of income in connection with leases:

Amortisation of right-of-use assets in connection with leases

in EUR million	2023	2022
Investment property	0.5	0.5
Own-use real estate	11.9	12.7
Sundry assets	0.8	0.9
Total	**13.1**	**14.1**

The interest expenses for lease liabilities totalled EUR 3.3 million (EUR 3.9 million). Expenses in connection with short-term leases were recognised in an amount of EUR 1.3 million (EUR 1.1 million). The total amounts payable for leases came to EUR 14.2 million (EUR 14.4 million).

Rented properties

Future minimum lease payments receivable

in EUR million	Amounts receivable
2024	164.1
2025	152.7
2026	129.6
2027	111.0
2028	86.8
Subsequent years	207.8

The rental payments receivable result from the long-term renting out of properties by the Group's real estate companies. The leases in question are operating leases. The rental income received in the financial year amounted to EUR 195.5 million (EUR 166.5 million).

9.9. Fee paid to the auditor

At its meeting on 8 March 2018 the Supervisory Board of Hannover Re first appointed PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC GmbH) as the statutory auditor of the consolidated financial statements of Hannover Re within the meaning of § 318 German Commercial Code (HGB). On the recommendation of the Supervisory Board, the Annual General Meeting selected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC GmbH) on 3 May 2023 as the statutory auditor of the annual financial statements. The expense recognised for the fees paid to PwC GmbH and worldwide member firms of PwC International Limited (PwC) in the year under review can be broken down as follows:

Fee paid to the auditor

	2023		2022	
in EUR million	PwC worldwide	thereof PwC GmbH	PwC worldwide	thereof PwC GmbH
Services relating to auditing of the financial statements	13.9	4.0	19.4	6.5
Other assurance services	0.9	0.2	0.2	0.1
Other services	0.1	–	0.6	0.6
Total	**14.9**	**4.2**	**20.3**	**7.2**

The fee for services relating to auditing of the financial statements performed by PwC GmbH includes above all the fees for the auditing of the consolidated financial statement including legally required extensions of the mandate, the review report on the interim report as well as audits of annual financial statements and audits of the Solvency II balance sheets of the subsidiaries included in the consolidated financial statement. The significant reduction in fees paid to the auditor compared to the previous year is due to the implementation of the new accounting standards IFRS 9 and IFRS 17, which necessitated more extensive audit services for the 2022 financial year.

The fees for other assurance services relate to legally or contractually required reviews. Furthermore, the auditor performed other assurance services in connection with the combined non-financial statement. The fees for other services encompass, for example, consultancy services in connection with implementation of the Supervisory Requirements for IT in Insurance Undertakings (VAIT).

The auditor responsible for performance of the audit engagement as defined by § 38 Para. 2 of the Professional Charter for Accountants / Certified Auditors (Berufssatzung WP / vBP) as amended on 21 June 2016 is Ms. Janna Brüning. She is serving for the first time as the engagement partner responsible for the audit of the annual and consolidated financial statements effective 31 December 2023.

9.10. Events after the balance sheet date

No significant events beyond the scope of ordinary business activities have occurred since the balance sheet date.

Hannover, 13 March 2024

Executive Board

Henchoz | Althoff | Chèvre | Jungsthöfel

Dr. Miller | Ooi | Dr. Pickel | Sehm

Independent Auditor’s Report

(Disclaimer: Translation of the auditor`s report issued in German language of the annual / consolidated financial statements prepared in German language by the management of Hannover Rück SE which is authoritative.)

To Hannover Rück SE, Hannover

Report on the audit of the consolidated financial statements and of the group management report

Audit Opinions

We have audited the consolidated financial statements of Hannover Rück SE, Hannover, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2023, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2023, and notes to the consolidated financial statements, including material accounting policy information. In addition, we have audited the group management report of Hannover Rück SE, which is combined with the Company’s management report, for the financial year from 1 January to 31 December 2023. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the “Other Information” section of our auditor’s report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2023, and of its financial performance for the financial year from 1 January to 31 December 2023, and
- the accompanying group management report as a whole provides an appropriate view of the Group’s position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the “Other Information” section of our auditor’s report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as “EU Audit Regulation”) in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs). Our responsibilities under those requirements, principles and standards are further described in the “Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report“ section of our auditor’s report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2023. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

Measurement of financial instruments using parameters not observable on the market and forward-looking information
(1) Measurement of certain liabilities from insurance contracts
Our presentation of these key audit matters has been structured in each case as follows:

(a) Matter and issue
(b) Audit approach and findings
(c) Reference to further information

Hereinafter we present the key audit matters:

(1) Measurement of investments using parameters not observable on the market and forward-looking information

(a) Investments of € 60,129 million (90.4 % of the consolidated total assets) are reported in the consolidated financial statements, which have been accounted in accordance with IFRS 9 for the first time since 1 January 2023.

Of these investments, financial assets totalling € 55,536.2 million are measured at fair value, of which in turn fair values of € 3,610.4 million are calculated using valuation models or based on third-party value indicators. These investments in particular relate to unlisted securities, asset backed securities, other structured and illiquid bonds and investments in private equity.

Of the investments reported in the consolidated financial statements, financial assets in the amount of € 50,619.1 million are measured at fair value through other comprehensive income. These are attributable in full to debt instruments for which a risk provision totalling € 186.7 million was recognised as at the reporting date to take account of impairments for expected credit losses in accordance with the requirements of IFRS 9 (Expected Credit Loss), as applicable since 1 January 2023.

The measurement of investments whose fair value must be determined using valuation models or value indicators from third parties is subject to uncertainty, as input parameters that are not observable in an active market are used for the measurement or comparative values are not always available and therefore estimated values are also used. Forward-looking macroeconomic forecasts are also included in the model valuation to take account of impairments for expected credit losses.

Model-measured investments are subject to an increased measurement risk due to the reduced objectivity and the underlying judgements, estimates and assumptions made by the executive directors. As the estimates and assumptions used, in particular those relating to interest rates and cash flows, and the valuation methods applied may have a material impact on the valuation of these investments and on the Group's assets, liabilities and financial performance, and extensive disclosures on valuation methods and judgements are also required in the notes, this matter was of particular significance in the context of our audit.

(b) As part of our audit, we assessed the appropriateness and effectiveness of the controls for the valuation of model-measured investments and investments measured on the basis of third-party indicators. In addition, we assessed, among other things, the integrity of the underlying data and the process for determining the assumptions, estimates and forward-looking information used in the valuation.

With the support of our internal valuation specialists, we also assessed the appropriateness of the methods applied by the executive directors to determine the fair values and the parameters used. We compared the methods and assumptions used to calculate valuation adjustments in the financial year with recognised practices and industry standards and examined the extent to which they are suitable for proper accounting. To assess the inclusion of forward-looking information in the model-based calculation of impairment for expected credit losses, we involved internal specialists with particular expertise in the field of credit risk modelling. We also evaluated the disclosures on valuation methods and judgements contained in the notes to the consolidated financial statements.

On the basis of the audit procedures performed, we were able to satisfy ourselves that the methods and assumptions used by the executive directors to measure certain investments (modelled and measured based on third-party indicators) and the consideration of forward-looking information in determining the impairment for expected credit losses are appropriate overall and that the explanations and disclosures presented in the notes to the consolidated financial statements are appropriate.

(c) The Group's disclosures on the measurement of investments are contained in Notes 6.1 to the consolidated financial statements.

(2) Measurement of certain liabilities from insurance contracts

(a) In the consolidated financial statements, liabilities amounting to € 44,239 million (66.5 % of the consolidated total assets) are reported under the balance sheet item " liabilities from reinsurance contracts issued " which are accounted for in accordance with IFRS 17 beginning 1 January 2023. Of the "liabilities from reinsurance contracts issued", € 46,214 million is attributable to the "Liability for incurred claims", which recognises the expectations regarding insurance claims that have been incurred but not yet settled, and € -1,975 million to the "liability for remaining coverage".

The liability for incurred claims represent the Group's expectation of future payments for known and unknown claims and benefits as well as the associated expenses. The Group uses various methods to estimate these obligations. In addition, the measurement of this liability requires a high degree of judgement by the executive directors of the Group regarding the assumptions to be made, such as the impact of changing inflation rates, loss developments and regulatory changes. In addition, there is a significant judgement of the executive directors regarding the determination of the discount rate for calculatingthe liability. In particular, product lines with a low claims frequency, high individual claims or long claims settlement periods are usually subject to increased estimation uncertainties.

The liability for remaining coverage represent the present value of the future cash flows estimated by the Group. The measurement is based on complex actuarial methods (hereinafter referred to as the "measurement methods") on the basis of comprehensive processes for determining assumptions about future developments of the insurance portfolios to be valued. Within the measurement of the liabilities, the present values of the estimated future cash flows in particular are affected by possible material uncertainties. This uncertainty stems in particular from the risk of chance, change and error associated with the estimation of the present value of cash flows and the methods and financial and non-financial assumptions used for this purpose. In particular, the assumptions in connection with interest rates, investment income, mortality, disability, longevity, costs and policyholder behaviour have a significant impact on the measurement.

The general measurement model (GMM) is used to measure liabilities from insurance contracts.

Against this background and due to the complexity of determining the underlying assumptions and estimates made by the executive directors, the measurement of these liabilities was of particular significance in the context of our audit.

(b) As part of our audit, we assessed the appropriateness of selected controls of the Group for selecting the valuation methods applied as well as for determining assumptions and making estimates for the measurement of certain liabilities from insurance contracts issued.

With the involvement of our internal valuation specialists, we have compared the valuation methods and key assumptions with generally recognised actuarial methods and industry standards and examined to what extent these are suitable for measuring the liabilities.

Our audit also included an evaluation of the appropriateness and integrity of the data and assumptions, including the assessment of the executive directors regarding the impact of changing inflation rates, used in the valuation and a reconstruction of the claims settlement process. Furthermore, we recalculated the amount of the liability for selected lines of product, in particular lines of product with large liability amounts or increased estimation uncertainties. For these lines of product, we compared the amounts calculated by us with the values determined by the Group for the liabilites and evaluated any differences. We also examined whether any adjustments to estimates in the loss reserves were adequately documented and substantiated. A further focus was the assessment of the cash flows used by the IT systems used as well as the appropriate derivation and use of assumptions for the measurement of selected liabilities.

Based on our audit procedures, we were able to satisfy ourselves that the methods, estimates and assumptions used by the executive directors are appropriate overall for measuring the technical liabilities in property and casualty insurance.

(c) The company's disclosures on the measurement of certain liabilities from insurance contracts in property, casualty and life insurance are contained in Notes 6.4 to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Enterprise management" of the group management report
- the non-financial group statement to comply with §§ 315b to 315c HGB included in section "Combined non-financial information statement" of the group management report
- the disclosures contained in the management report and marked as unaudited regarding Solvency II reporting

The other information comprises further all remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.
In connection with our audit, our responsibility is to read the other information mentioned above and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report disclosures audited in terms of content or with our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.
Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) and supplementary compliance with the ISAs will always detect a material misstatement. 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 consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, 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 audit opinions. 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 controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors’ 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 Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. 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 Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group’s position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Group Management Report Prepared for Publication Purposes in Accordance with § 317 Abs. 3a HGB

Assurance Opinion

We have performed assurance work in accordance with § 317 Abs. 3a HGB to obtain reasonable assurance as to whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the electronic file HannoverRueckSE_KA_KLB_2023-12-31.zip and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 1 HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the electronic file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the electronic file identified above and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 1 HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January to 31 December 2023 contained in the "Report on the Audit of the Consolidated Financial Statements and on the Group Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the electronic file identified above.

Basis for the Assurance Opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the electronic file identified above in accordance with § 317 Abs. 3a HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering, of Financial Statements and Management Reports, Prepared for Publication Purposes in Accordance with § 317 Abs. 3a HGB (IDW AsS 410 (06.2022)) and the International Standard on Assurance Engagements 3000 (Revised). Our responsibility in accordance therewith is further described in the "Group Auditor's Responsibilities for the Assurance Work on the ESEF Documents" section. Our audit firm applies the IDW Standard on Quality Management: Requirements for Quality Management in the Audit Firm (IDW QMS 1 (09.2022)).

Responsibilities of the Executive Directors and the Supervisory Board for the ESEF Documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with § 328 Abs. 1 Satz 4 Nr. [number] 1 HGB and for the tagging of the consolidated financial statements in accordance with § 328 Abs. 1 Satz 4 Nr. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of § 328 Abs. 1 HGB for the electronic reporting format, whether due to fraud or error.

The supervisory board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Group Auditor's Responsibilities for the Assurance Work on the ESEF Documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance work on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the electronic file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815 in the version in force at the date of the consolidated financial statements on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, in the version in force at the date of the consolidated financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 3 May 2023. We were engaged by the supervisory board on 7 July 2023. We have been the group auditor of the Hannover Rück SE, Hannover, without interruption since the financial year 2018.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Reference to an Other Matter – use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be filed in the company register – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the "Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Group Management Report Prepared for Publication Purposes in Accordance with § 317 Abs. 3a HGB" and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German public auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Janna Brüning.

Hannover, 14. March 2024

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Martin Eibl	Janna Brüning
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Independent Practitioner’s Report on a Limited Assurance Engagement on Non-financial Reporting

(Disclaimer: PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the combined non-financial statement and issued an independent practitioner`s report in German language, which is authoritative. The following text is a translation of the independent practitioner`s report.)

To Hannover Rück SE, Hannover

We have performed a limited assurance engagement on the combined non-financial statement of Hannover Rück SE, Hannover, (hereinafter the “Company”) for the period from 1 January to 31 December 2023 (hereinafter the “Combined Non-financial Statement”) included in section “Combined Non-financial Statement” of the combined management report.
Not subject to our assurance engagement are the external sources of documentation or expert opinions mentioned in the Combined Non-financial Statement.

Responsibility of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Combined Non-financial Statement in accordance with §§ (Articles) 315c in conjunction with 289c to 289e HGB ("Handelsgesetzbuch": "German Commercial Code") and Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18. June 2020 on establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation”) and the Delegated Acts adopted thereunder, as well as for making their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder, as set out in section “Disclosures under Article 8 of the EU Taxonomy Regulation” of the Combined Non-financial Statement.

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the Group that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as the executive directors consider necessary to enable the preparation of a Combined Non-financial Statement that is free from material misstatement whether due to fraud or error.

The EU Taxonomy Regulation and the Delegated Acts issued thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section “Disclosures under Article 8 of the EU Taxonomy Regulation” of the Combined Non-financial Statement. They are responsible for the defensibility of this interpretation. Due to the immanent risk that indeterminate legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

Audit Firm’s Independence and Quality Management

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors (“Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer“: “BS WP/vBP”) as well as the Standard on Quality Management 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality management for audit firms (IDW Qualitätsmanagementstandard 1: Anforderungen an das Qualitätsmanagement in der Wirtschaftsprüferpraxis – IDW QMS 1 (09.2022)), which requires the audit firm to design, implement and operate a system of quality management that complies with the applicable legal requirements and professional standards.

Responsibility of the Assurance Practitioner

Our responsibility is to express a conclusion with limited assurance on the Combined Non-financial Statement based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's Combined Non-financial Statement, other than the external sources of documentation or expert opinions mentioned in the Combined Non-financial Statement, are not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Disclosures under Article 8 of the EU Taxonomy Regulation" of the Combined Non-financial Statement.

In a limited assurance engagement the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the assurance practitioner.

In the course of our assurance engagement, we have, amongst other things, performed the following assurance procedures and other activities:

- Gain an understanding of the structure of the Group's sustainability organisation and stakeholder engagement
- Inquiries of the executive directors and relevant employees involved in the preparation of the Combined Non-financial Statement about the preparation process, about the internal control system relating to this process and about disclosures in the Combined Non-financial Statement
- Identification of likely risks of material misstatement in the Combined Non-financial Statement
- Analytical procedures on selected disclosures in the Combined Non-financial Statement
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and combined management report
- Evaluation of the presentation of the Combined Non-financial Statement
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the Combined Non-financial Statement

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

Assurance Opinion

Based on the assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Non-financial Statement of the Company for the period from 1 January 2023 to 31 December 2023 is not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Disclosures under Article 8 of the EU Taxonomy Regulation" of the Combined Non-financial Statement.

We do not express an assurance opinion on the external sources of documentation or expert opinions mentioned in the Combined Non-financial Statement..

Restriction of Use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company. We do not accept any responsibility to third parties. Our assurance opinion is not modified in this respect.

Frankfurt am Main, 14 March 2024

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke	ppa. Christopher Hintze
Wirtschaftsprüferin	Wirtschaftsprüfer
German public auditor	German public auditor

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Hannover, 13 March 2024

Executive Board

Henchoz	Althoff	Chèvre	Jungsthöfel
Dr. Miller	Ooi	Dr. Pickel	Sehm

Supervisory Board

Report by the Supervisory Board

of Hannover Rück SE

In the 2023 financial year the Supervisory Board again fulfilled its tasks and duties in accordance with the law, the Articles of Association and its Rules of Procedure. The Supervisory Board monitored the management of business based on regular written and verbal reporting by the Executive Board. The Executive Board informed the Supervisory Board in a regular, timely and comprehensive manner about all matters relevant to the company, especially concerning the strategy, planning, business development, risk position, risk management and compliance. The Chairman of the Supervisory Board also stayed in touch with the Chief Executive Officer between meetings to discuss with him issues relating to the company's strategy, business development, risk position, risk management and compliance. As the Chairwoman of the Finance and Audit Committee, Dr. Lipowsky additionally engaged in a regular dialogue with the Chief Financial Officer and the independent auditor on matters of accounting, auditing and the internal control system. The full Supervisory Board was also informed in writing of important events outside the meetings.

The Supervisory Board held four regular in-person meetings in the 2023 financial year. At all meetings the Executive Board reported on the course of business and elaborated on individual business areas as well as divergences from the planning. In this context, the annual and consolidated financial statements with the audit reports of the independent auditor as well as the half-yearly financial report and the quarterly statements were a core source of information for the Supervisory Board. In addition, the capital adequacy and risk position were discussed with the Executive Board at every meeting. The Supervisory Board regularly communicated about personnel matters on the level of the Executive Board and on issues relating to the internal organisation of the Supervisory Board, including without the presence of the Executive Board.

All the meetings of the Supervisory Board and its committees held in 2023 were attended in person by all respective members. In addition, two representatives of the Federal Financial Supervisory Authority attended one meeting of the Supervisory Board in person. The individual participation in the meetings is shown in the following table:

	Participation rate	
	Number of meetings	in %
Participation in full meetings of the Supervisory Board		
Torsten Leue (Chairman)	4/4	100
Herbert K. Haas (Deputy Chairman)	4/4	100
Natalie Bani Ardalan	4/4	100
Frauke Heitmüller	4/4	100
Ilka Hundeshagen	4/4	100
Dr. Ursula Lipowsky	4/4	100
Dr. Michael Ollmann	4/4	100
Dr. Andrea Pollak	4/4	100
Dr. Erhard Schipporeit	4/4	100
Participation in meetings of the Finance and Audit Committee		
Dr. Ursula Lipowsky (Chairwoman)	4/4	100
Herbert K. Haas	4/4	100
Torsten Leue	4/4	100
Participation in meetings of the Standing Committee		
Torsten Leue (Chairman)	2/2	100
Herbert K. Haas	2/2	100
Dr. Erhard Schipporeit	2/2	100
Participation in meetings of the Nomination Committee		
Torsten Leue (Chairman)	2/2	100
Herbert K. Haas	2/2	100
Dr. Andrea Pollak	2/2	100

Key points of deliberation in the full meetings of the Supervisory Board

In 2023 the Supervisory Board regularly discussed geopolitical developments, climate change and social challenges with the Executive Board. The Covid-19 pandemic and the war in Ukraine were still particularly noteworthy, along with the war in the Middle East as well as rising inflation and the effects of weather events. The company's resilience and its future-readiness were at the heart of the discussions.

At its meeting on 8 March 2023 the Supervisory Board discussed and approved the audited annual and consolidated financial statements as well as the Executive Board's proposal for the appropriation of the disposable profit for the 2022 financial year. In this regard, as in the previous year, the Executive Board described all key performance indicators from the technical and non-technical accounts as well as key data on the investment side. The independent auditor presented the results of the audit and confirmed that an unqualified audit certificate had been issued for the individual and consolidated financial statements. In addition, the Supervisory Board examined and approved the non-financial statement. The report by the Executive Board on relations with affiliated companies was also duly noted and approved by the Supervisory Board. The report by the Supervisory Board for 2022 was similarly adopted.

The Executive Board also reported on the course of business to date and discussed with the Supervisory Board the outlook for the current financial year. The war in Ukraine was a particular focus in this regard. Furthermore, the Executive Board informed the Supervisory Board about the property and casualty reinsurance renewals as at 1 January 2023. The Supervisory Board also exchanged views with the Executive Board on the strategy cycle 2021– 2023 and the status of target attainment. A further point of emphasis in the meeting was the annual reporting on risk management, compliance and internal auditing. The respective key function holders attended the meeting in person and were available to take questions. The Supervisory Board additionally adopted a resolution on the updating of the investment guidelines, in which regard no significant change to the general investment strategy had been proposed. Furthermore, the variable remuneration of the members of the Executive Board was defined on the basis of the findings with respect to attainment of the respective individual targets for the 2022 financial year. As in previous years, the adequacy and market conformity of the remuneration structure and the amount of Executive Board remuneration were again reviewed by an external consultant. This external review confirmed the adequacy and market conformity of the Executive Board remuneration of Hannover Rück SE. The Supervisory Board also considered the agenda and the proposed resolutions for the Annual General Meeting on 3 May 2023 and approved holding it as a virtual Annual General Meeting. The report on the remuneration of the Executive Board was to be presented to the Annual General Meeting for approval of its content in accordance with § 120 a Para. 4 Stock Corporation Act (AktG). Details of the remuneration system can be found in the section of this report entitled "Declaration on Corporate Governance" and the 2023 remuneration report on the Hannover Re website under https://www.hannover-re.com/1849339/remuneration-report-and-system. The Supervisory Board further proposed to the Annual General Meeting – at the recommendation of the Finance and Audit Committee – that PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Hannover, should be appointed as the auditor of the financial statements for the 2023 financial year and as the auditor for the review reports on the interim financial statements for the 2023 financial year and the interim financial statement for the first quarter of the 2024 financial year.

At the meeting held on 10 May 2023 the Executive Board reported on the first quarter of 2023. The quality and adequacy of the loss reserves in property and casualty reinsurance were also considered in detail. Both internal and external experts participated in the meeting for this purpose. In addition to the outlook for the current financial year, which continued to be shaped by geopolitical developments and the impacts of weather events, the examination of the Own Risk and Solvency Assessment (ORSA) report on the previous year, the Regular Supervisory Report (RSR) and the capitalisation under Solvency II constituted further key points of deliberation. The Supervisory Board also took note of the audit report on the Solvency II balance sheet.

The Supervisory Board's Rules of Procedure and Information Policy were also updated at the meeting. The Information Policy sets out in greater detail the duties of the Executive Board to inform and report to the Supervisory Board.

On 8 August 2023, the Executive Board reported on the first half of 2023, describing as usual key performance indicators from the underwriting and non-underwriting side and outlining the progress made in attaining the strategic targets. The Chief Risk Officer also reported on the company's risk position. Furthermore, an account of related party transactions was routinely provided. It was concluded that there were no transactions in the reporting period that fall under the legal requirements governing mandatory approval (§ 111b Stock Corporation Act (AktG)) or compulsory disclosure (§ 111c Stock Corporation Act (AktG)). The Executive Board also described developments at the subsidiaries and strategic participations. Moreover, the Supervisory Board explored with the Executive Board the strategy and measures relating to talent management. In this context, the emphasis was on topics such as international mobility and executive development. After preparation by the Finance and Audit Committee, the Supervisory Board also authorised a capital measure at a subsidiary. Following the meeting of the Supervisory Board, the Executive Board informed the Supervisory Board about implementation of the CSRD project at Hannover Re. The officer responsible for sustainability reporting took part in the sharing of information and reported in particular on regulatory matters and the progress of the project.

At the last meeting of the year held on 8 November 2023, the Executive Board first reported on the results of the third quarter and the outlook for the current financial year. In addition, the Executive Board presented the operational planning for 2024 and the medium-term planning, which was approved by the Supervisory Board.

The focus of this meeting was on discussing and approving the Group strategy 2024–2026. The Supervisory Board was able to explore with the Executive Board all key strategic aspects for various business segments and markets. In addition, special topics such as the sustainability strategy were discussed.

Following approval of the strategy, the Chief Risk Officer reported on the risk position. The Executive Board further informed the Supervisory Board about the status of major pending legal proceedings and reported on employee capacities and the elaboration of the remuneration system for senior executives.

The second part of the meeting in November took place without the entire Executive Board. In this second part the Supervisory Board focused its attention on matters relating to the Executive Board and corporate governance issues. After preparation by the Standing Committee, the Supervisory Board considered the adequacy of the remuneration system, extensions of terms of office on the level of the Executive Board and the review of the remuneration received by members of the Executive Board. Decisions were also taken on the strategic target return and the goals for 2024. A further point of emphasis in the discussions was the results of the Organisational Health Check. Furthermore, the Supervisory Board approved the updating of the schedule of responsibilities for the Executive Board.

The Supervisory Board then turned to the annual self-assessment of its expertise, which it conducts to ensure that an effective and self-reflexive control activity takes place once each calendar year. On this basis, the need for development and existing development opportunities are identified. According to the results of the self-assessment, the Supervisory Board as a whole has the expertise, skills and experience required to supervise the Executive Board. In the 2023 financial year, as in previous years, the members of the Supervisory Board undertook the (further) training measures needed for their tasks at their own responsibility and took part in training on the topics of sustainability, accounting and the duties of the Supervisory Board.

In addition, the Supervisory Board considered the requirements profile for the Supervisory Board. The basis for this discussion consisted not only of regulatory requirements but also the updated competency profile in the form of the skills matrix This is published in the present Annual Report as part of the Declaration on Corporate Governance. Against the backdrop of continuously evolving corporate governance, the Supervisory Board took the decision to update the Rules of Procedure for the Finance and Audit Committee and the Standing Committee. The Supervisory Board also discussed and approved the Declaration of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code.

The Chairman of the Nomination Committee, Mr. Leue, reported at length to the Supervisory Board on the work of the committee. The candidates who are to be proposed to the Annual General Meeting for election as new shareholder representatives on the Supervisory Board also introduced themselves in person to the Supervisory Board. The Supervisory Board had the opportunity to engage in a dialogue with the candidates.

Committees of the Supervisory Board

In order to fulfil its function efficiently and effectively, the Supervisory Board has formed committees that prepare or even assume responsibility for deliberations on or the adoption of resolutions by the Supervisory Board. The committee chairperson reports regularly to the Supervisory Board on the committee's activities. The general advisory and supervisory duties of the Supervisory Board remain unchanged. Particularly when the committees are engaged in work to prepare resolutions, care is taken to ensure that the Supervisory Board can also continue to discuss and decide on the proposed resolution with the required diligence.

The **Nomination Committee** held in-person meetings in May and August 2023. All the committee members attended these meetings. The Nomination Committee is tasked with proposing to the Supervisory Board suitable candidates for election to the Supervisory Board that it can put forward to the Annual General Meeting. At the meeting on 10 May 2023 the Nomination Committee discussed the requirements profile for the Supervisory Board. The discussion revolved around not only regulatory requirements but also the skills matrix and the internal guideline on professional and personal requirements for members of the Supervisory Board. Consideration was also given here to the BaFin Consultation 05/2023 regarding the draft circular on the professional suitability and reliability of members of management and members of administrative and supervisory bodies. The committee considered the proposals to the Annual General Meeting for the election of new shareholder representatives to the Supervisory Board and discussed candidates, especially with an eye to the issues of fit & proper, conflicts of interests and over-boarding.

Moreover, the committee deliberated on a shorter term of office for the elected Supervisory Board members and formulated a corresponding recommendation to the Supervisory Board. After holding personal discussions with the candidates, the committee made a concrete recommendation at its meeting on 8 August 2023 regarding the proposals to the Annual General Meeting for the election of new shareholder representatives to the Supervisory Board.

The **Finance and Audit Committee** met four times in the financial year. Prior to the second meeting in May, the Chairwoman also convened a special meeting on IFRS 9/17 which was intended primarily for training purposes. All committee members, the Chief Financial Officer and representatives from specialist departments attended this meeting to discuss the new accounting standards using practical examples.

The training documents were made available to the Supervisory Board.

All committee members attended all meetings of the Finance and Audit Committee in person. This year, the committee again dealt with the oversight of the accounting process, the effectiveness of the internal control system, the risk management system, the internal audit system and the auditing of the financial statements, in particular the selection and independence of the auditor, the quality of the audit and the additional services provided by the auditor. The committee determined the audit concentrations for the auditing of the financial statements of the year under review and deliberated at length on the audit plan and the audit approach for the auditing of the financial statements. It discussed the assessment of the audit risk and the resulting scope of the audit with the auditors and maintained a dialogue with the auditors, including without the involvement of the Executive Board. Among other things, the Finance and Audit Committee gave preparatory consideration to the consolidated financial statement in accordance with IFRS, including the reporting on non-financial matters (CSR), and engaged with the auditors over their reports. As in previous years, an expert opinion on the adequacy of the loss reserves in property and casualty reinsurance was noted, the retrocession structure of the Hannover Re Group as well as reports of the key functions were received and considered. The Executive Board also reported on capital adequacy in accordance with Solvency II. Capital planning and possible capital measures were also discussed by the committee on a preparatory basis. One meeting focused specifically on current sustainability reporting. While strategic sustainability issues and planning topics continue to be discussed by the Supervisory Board, the Finance and Audit Committee again focuses on audit-related issues and topics relating to the internal control system when it comes to sustainability.

The committee again opted for an external review of the 2024 non-financial statement and placed the mandate for this review with PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. In preparation for the discussion and approval of the Group strategy by the Supervisory Board, the Finance and Audit Committee focused specifically on the financial metrics that will be crucial for monitoring execution of the strategy.

At each meeting the Chief Risk Officer gave an account of the latest developments in risk management and answered questions about the risk report. The committee was able to discuss special topics with him, such as climate change and the implications of the wars in Ukraine and the Middle East. In addition, the committee regularly engaged with the latest developments in the run-off of losses and exchanged views on this with the Executive Board.

At the last meeting of the year, the committee received a detailed report on the implementation of global effective minimum taxation.

The **Standing Committee** met twice in the year under review. All committee members were physically present at both meetings. As in previous years, the Standing Committee reviewed the adequacy of the remuneration system for the members of the Executive Board, determined the variable remuneration of the members of the Executive Board for the 2023 financial year based on the findings pertaining to attainment of their respective targets and examined the remuneration for the Board members who were due for review, among other things. The committee drew up corresponding recommendations for the Supervisory Board with regard to all these matters. In the context of the extensions of the terms of office for individual members of the Executive Board, the Supervisory Board engaged in a dialogue among its own members and, in particular, with the Chief Executive Officer regarding medium- and long-term succession arrangements. Furthermore, the individual targets of the members of the Executive Board for 2024 were defined and prepared for adoption of a resolution by the Supervisory Board.

Audit of the annual financial statements and consolidated financial statements

The accounting, annual financial statements, consolidated financial statements and the combined management report were audited by PricewaterhouseCoopers GmbH Wirtschafts- prüfungsgesellschaft. The auditor was chosen by the General Meeting following the recommendation of the Supervisory Board; the Chairman of the Supervisory Board awarded the audit mandate. The auditor's independence declaration was received. The audit concentrations defined by the European Securities and Markets Authority and the Federal Financial Supervisory Authority were commissioned. The mandate for the review report by the independent auditors on the Half-yearly Financial Report and the audit of the Solvency II balance sheet was also awarded again. The special challenges associated with the international aspects of the audits were met without reservation. Since the audits did not give rise to any objections, PricewaterhouseCoopers GmbH Wirtschafts- prüfungsgesellschaft issued unqualified audit certificates. It was also determined that the annual financial statement contains the information pursuant to § 289f German Commercial Code (HGB). The Finance and Audit Committee discussed the financial statements and the combined management report with the participation of the auditors and in light of the audit reports, and it informed the Supervisory Board of the outcome of its reviews. The audit reports were distributed to all the members of the Supervisory Board and explored in detail – with the participation of the auditors – at the Supervisory Board meeting held in March to consider the annual results. The auditors will also be present at the Annual General Meeting.

The report on the company's relations with affiliated companies drawn up by the Executive Board has likewise been examined by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft and given the following unqualified audit certificate:
"Having audited the report in accordance with our professional duties, we confirm that

1. the factual details of the report are correct,
2. in the case of the transactions detailed in the report, the expenditure of the company was not unreasonably high."

We have examined

a. the annual financial statements of the company, the financial statements of the Hannover Re Group and the combined management report prepared by the Executive Board for the company and the Group, and
b. the report of the Executive Board pursuant to § 312 Stock Corporation Act (AktG) (Report on relations with affiliated companies)

– in each case drawn up as at 31 December 2023 – and have no objections in this regard; nor do we have any objections to the statement made by the Executive Board at the end of the report on relations with affiliated companies.

The Supervisory Board concurred with the opinions of the auditors and approved the annual financial statements and the consolidated financial statements; the annual financial statements are thereby adopted. Our proposal regarding the appropriation of the disposable profit for 2023 is in accordance with that of the Executive Board.

We considered the report by the Executive Board on non-financial matters (cf. section "Non-financial statement" of the combined management report in the present Annual Report) and examined it. PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft also reviewed the information statement with limited assurance in accordance with the audit standard ISAE 3000 (Revised) (see here the Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting in this Annual Report).

Changes on the Supervisory Board and the Executive Board

There were no changes in the composition of the Supervisory Board or its committees in the year under review. The term of office of the company's Supervisory Board ends pursuant to § 10 (3) of the Articles of Association of Hannover Rück SE at the end of the General Meeting that ratifies the acts of management for the 2023 financial year.

There was one change in the composition of the Executive Board in 2023: with effect from 11 January 2023, Ms. Sharon Ooi is a member of the Executive Board of Hannover Rück SE, thereby expanding the body from seven to eight members.

Word of thanks to the Executive Board and members of staff

Thanks to the extraordinary performance and prudent management of the Executive Board in this and past years and even though the 2023 financial year once again presented enormous challenges, Hannover Rück SE generated a good result. A great debt of gratitude is owed here in particular to the employees of the company and the Group for their dedication and their considerable flexibility.

The Supervisory Board would like to express its recognition and special appreciation to the Executive Board and the employees for their efforts.

Hannover, 15 March 2024

For the Supervisory Board

Torsten Leue
Chairman of the Supervisory Board of Hannover Rück SE

Supervisory Board of Hannover Rück SE

Torsten Leue [1, 2, 3]
Hannover
(since 7 May 2018) [4]
Chairman
Chief Executive Officer of HDI Haftpflichtverband der Deutschen Industrie V.a.G., Hannover
Chief Executive Officer of Talanx AG, Hannover

Herbert K. Haas [1, 2, 3]
Burgwedel
(since 24 May 2002) [4]
Deputy Chairman
Member of various supervisory boards

Natalie Bani Ardalan [5]
Springe
(since 8 May 2019) [4]
Employee

Frauke Heitmüller [5]
Hannover
(since 3 May 2012) [4]
Employee

Ilka Hundeshagen [5]
Hannover
(since 8 May 2019) [4]
Employee

Dr. Ursula Lipowsky [2]
Munich
(since 7 May 2018) [4]
Member of various supervisory boards

Dr. Michael Ollmann
Hamburg
(since 8 May 2019) [4]
Member of various supervisory boards

Dr. Andrea Pollak [3]
Vienna, Austria
(since 3 May 2011) [4]
Independent management consultant

Dr. Erhard Schipporeit [1]
Hannover
(since 3 May 2007) [4]
Member of various supervisory boards

[1] Member of the Standing Committee
[2] Member of the Finance and Audit Committee
[3] Member of the Nomination Committee
[4] Date when member was first appointed / elected to the company's Supervisory Board. Current term of office for the entire Supervisory Board commenced at the end of the Annual General Meeting on 8 May 2019
[5] Staff representative
.

Details of memberships of legally required supervisory boards and comparable control boards at other domestic and foreign business enterprises are contained in the Annual Report of Hannover Rück SE

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Further links

Locations
Hannover Re - Our offices (hannover-re.com)

Glossary
Hannover Re - Glossary (hannover-re.com)

Strategy
Hannover Re - Group strategy at a glance (hannover-re.com)

Remuneration report
Hannover Re - Remuneration report and system (hannover-re.com)

For reasons of sustainability Hannover Re does not print or mail out the annual and interim reports. The present Group Annual Report of Hannover Re can be accessed online in English and German as an HTML version and downloaded in PDF format:

www.hannover-re.com

The Annual Report of Hannover Rück SE is also available here in English and German.

Financial calendar 2024 / 2025

18 March 2024
Publication of the annual financial statements 2023
Annual Results Press Conference

6 May 2024
Annual General Meeting

14 May 2024
Quarterly statement as at 31 March 2024

12 August 2024
Half-yearly financial report 2024

11 November 2024
Quarterly statement as at 30 September 2024

13 March 2025
Publication of the annual financial statements 2024
Annual Results Press Conference

7 May 2025
Annual General Meeting

www.hannover-re.com

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