somewhat different

Hannover Re 2023

Solvency and Financial Condition Report

hannover re®

Contents

Executive Summary

Key figures

in TEUR	2023	2022
Solvency II Balance Sheet		
Assets	81,962,813	73,160,096
Technical Provisions	50,360,460	44,490,996
Other Liabilities	14,149,611	13,120,763
Excess of Assets over Liabilities	17,452,742	15,548,338
Eligible Own Funds		
Tier 1 Basic Own Funds (unrestricted)	15,834,810	14,002,020
Tier 1 Basic Own Funds (restricted)	496,435	486,034
Tier 2 Basic Own Funds	2,550,139	2,897,198
Tier 3 Own Funds	70,518	128,783
Eligible Own Funds (SCR)	18,951,902	17,514,035
Capital Requirements		
Solvency Capital Requirement	7,032,514	6,952,301
Minimum Capital Requirement	4,841,186	4,658,752
Coverage Ratio		
Ratio of Eligible Own Funds to SCR (Solvency Ratio)	269%	252%
Ratio of Eligible Own Funds to MCR	357%	331%

Hannover Re Group (hereinafter referred to as “Hannover Re” or “the Group”) fulfils the minimum and solvency capital requirements (hereinafter referred to as MCR and SCR) stipulated by the supervisory authority as at the reporting date 31 December 2023 and during the financial year 2023. In addition, the solvency ratio ranges above the internal threshold of 200% during the entire financial year.

Please note that this report represents a voluntary publication of the Hannover Re Group.

Please note that rounding differences can occur in the presented tables. Values below TEUR 0.5 are displayed as “0”. Empty cells or cells with “-“ represent a value of EUR 0.00.

A. Business and Performance

With a gross reinsurance revenue in 2023 of TEUR 24,456,465 (previous year: TEUR 24,016,736), Hannover Re is one of world's leading reinsurers. Hannover Re transacts all lines of property and casualty and life and health reinsurance. Its global presence and activities across all lines of reinsurance business allows the company to achieve an efficient risk diversification.

We are thoroughly satisfied with the development of business in the 2023 financial year. Group net income was up by 133.7% at TEUR 1,824,775 (TEUR 780,792). We thus achieved our Group earnings guidance which was equal or greater than TEUR 1,700,000.

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.

The gross premium in the property and casualty reinsurance business group grew by 6.5% at constant exchange rates. On the other hand, the expenditures from large losses of TEUR 1,620,636 was below our expected budget of TEUR 1,725,000. In the Life & Health reinsurance business group grew by 1.6% adjusted for exchange-rate effects.

The comparative figures are restated due to IFRS17 and 9; the development is calculated based on these restated figures.

Our ordinary investment income, including interest on deposits, remained at the previous year's level. Gains from the disposal of investments mainly resulted from the sale of fixed-interest securities in the course of portfolio management. The exceptionally high result in the previous year was primarily due to the contribution of unlisted equity investments to a joint venture. Impairments on investments were mainly attributable to bearer bonds held as fixed assets. Overall, we therefore achieved a lower investment result than in the previous year.

The portfolio of our investments under own management increased in the reporting year, as did our portfolio of fixed-interest securities. The net unrealised losses contained therein decreased noticeably at the end of the year, primarily because of the decline in EUR interest rates in the medium and long-term maturity range and lower credit risk premiums on corporate bonds. Overall, we kept our asset allocation largely stable in the reporting year. Only in the emerging markets we slightly expanded our portfolio, while in China, we reduced it. In Latin America and the Asia-Pacific region, we were able to take advantage of market opportunities to further strengthen our property portfolio. There were only minor changes in other asset classes as part of regular portfolio management.

B. System of Governance

Hannover Re has an effective system of governance, which provides for sound and prudent management. Written guidelines are in place for all significant business events. The key functions pursuant to § 26 and §§ 29-31 of the Insurance Supervision Act (VAG) have been set up, entrusted with the tasks described in Section B and equipped with appropriate resources.

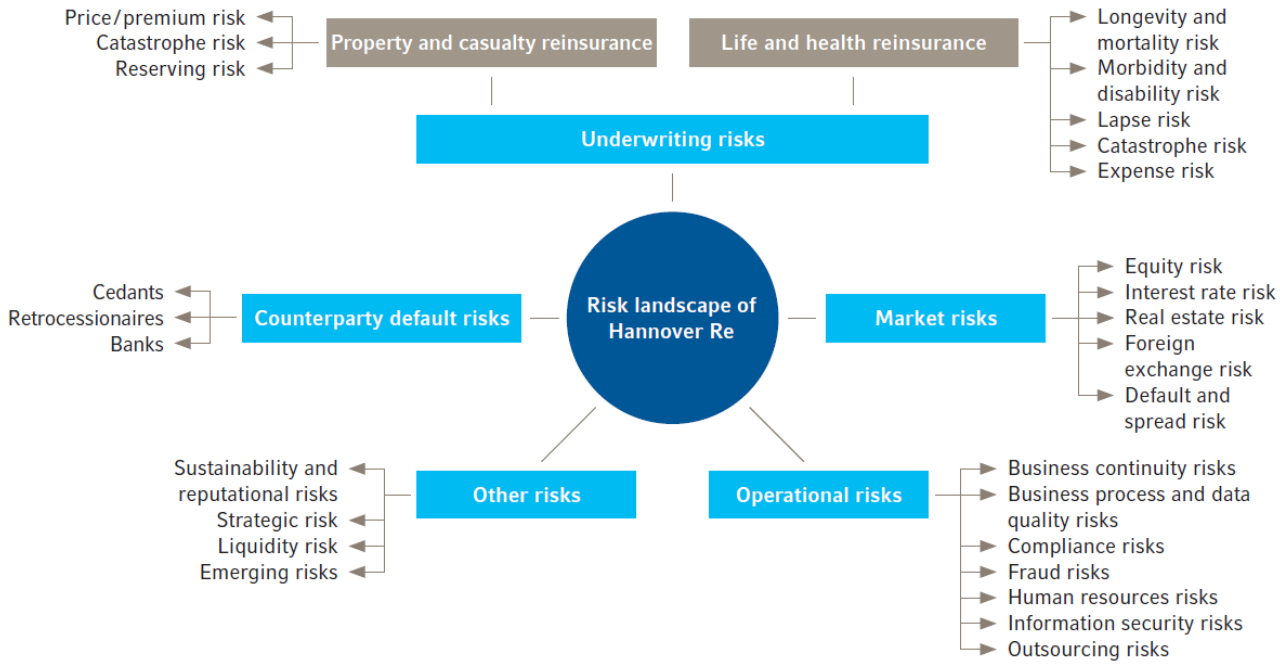
The Executive Board has established a committee, which supports the assessment of the system of governance. Based on the assessment conducted by the committee, the Executive Board has reached the conclusion that the system of governance of Hannover Re is appropriate considering the scope and complexity of its business activities and the inherent risks.

The individual elements of the system of governance of Hannover Re are explained in Section B.

C. Risk Profile

In the context of its business operations Hannover Re is confronted with a broad variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act on the associated opportunities. They specifically concern underwriting risks pertaining to Property & Casualty and Life & Health as well as capital market risks, liquidity risks and counterparty default risks. In addition, Hannover Re faces operational, strategic, sustainability and reputational risks. In Section C, we describe the sources and management of these risks. We also explain how we handle potential future risks (emerging risks).

Risk landscape of Hannover Re



The solvency capital requirements (SCR) as of 31 December 2023 are shown in the following table. The SCR includes the impact from the dynamic volatility adjustment for both reference dates. The impact of the volatility adjustment is displayed separately in Section D.2 as well as in the annex QRT S.22.01.21.

Solvency Capital Requirement (SCR)

in TEUR

Solvency Capital Requirement	2023	2022
Underwriting risk - Property & Casualty	6,085,294	5,664,198
Underwriting risk - Life & Health	2,740,955	2,509,950
Market risk	5,244,241	5,175,558
Counterparty default risk	432,146	434,678
Operational risk	653,621	620,826
Diversification	-5,520,216	-4,862,387
Total risk (pre-tax)	**9,636,040**	**9,542,822**
Deferred tax	2,603,526	2,590,521
Total risk (post-tax)	**7,032,514**	**6,952,301**

The required capital is calculated based on the approved internal model. 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.

Hannover Re applies the volatility adjustment. The volatility adjustment partially mitigates the effect of temporary value fluctuations due to credit spread movements on the bond market. This effect is also captured in the calculation of the Solvency Capital Requirement i.e. Hannover Re applies the dynamic volatility adjustment in its internal model.

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.

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.

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 slight decrease in counterparty default risk can be at-tributed 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 risk monitoring, control mechanisms and developments in 2023 are presented in Section C.

D. Valuation for Solvency Purposes

For the purposes of calculating the eligible own funds, Hannover Re values the assets and liabilities pursuant to the provisions of §§ 74 et seq. of the Insurance Supervision Act (VAG), i.e. in accordance with Solvency II.

The valuation for Solvency purposes is based on fair value principles (market value). Insofar as IFRS values appropriately reflect the fair value of individual assets or liabilities, they are applied.

A comparison of IFRS 17 and Solvency II technical provisions is shown as well as a comparison of current technical provisions under Solvency II and those calculated last year.

Section D explains the details of the valuation for solvency purposes.

E. Capital Management

Hannover Re's solvency ratio amounted to 269 % as of reporting date 31 December 2023. Hannover Re endeavours at all times to maintain a solvency ratio of at least 180 %, and thus exceeds the requirements of 100 % stipulated by the supervisory authority. In addition, a threshold value of 200% has been defined. If the Solvency Ratio was to fall below this threshold Hannover Re will adopt measures aimed at either strengthening the company's own funds or reducing the risk, or both. However, a fall below threshold would most of the time be avoided by proactive measures and thus has never occurred since introduction of the threshold.

The solvency ratio with and without application of the volatility adjustment is continuously monitored and also assessed as part of planning activities and in the event of large transactions. During the financial year 2023, the solvency ratio ranges above the threshold of 200 %. Further information on the calculation of the solvency ratio can be found in Section E.

Own funds include subordinated (Tier 1 and 2) capital. Ancillary own funds were not in use by Hannover Re as at 31 December 2023.

Hannover Re uses an approved full internal model for the purposes of calculating the Solvency Capital Requirement (SCR). The individual risk categories are aligned with the risk modules of the standard formula. The internal model is applied in a broad range of management and decision-making processes. The future development of Solvency and Minimum Capital Requirements are estimated at regular intervals as part of the planning process.

In addition, the potential outcomes of the ongoing Solvency II review are monitored.

Section E explains the details of capital management.

A. Business and Performance

A.1 Business

A.1.1 Business model

With a gross reinsurance revenue in 2023 of TEUR 24,456,465, 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.

In the Property & Casualty reinsurance business group, 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.

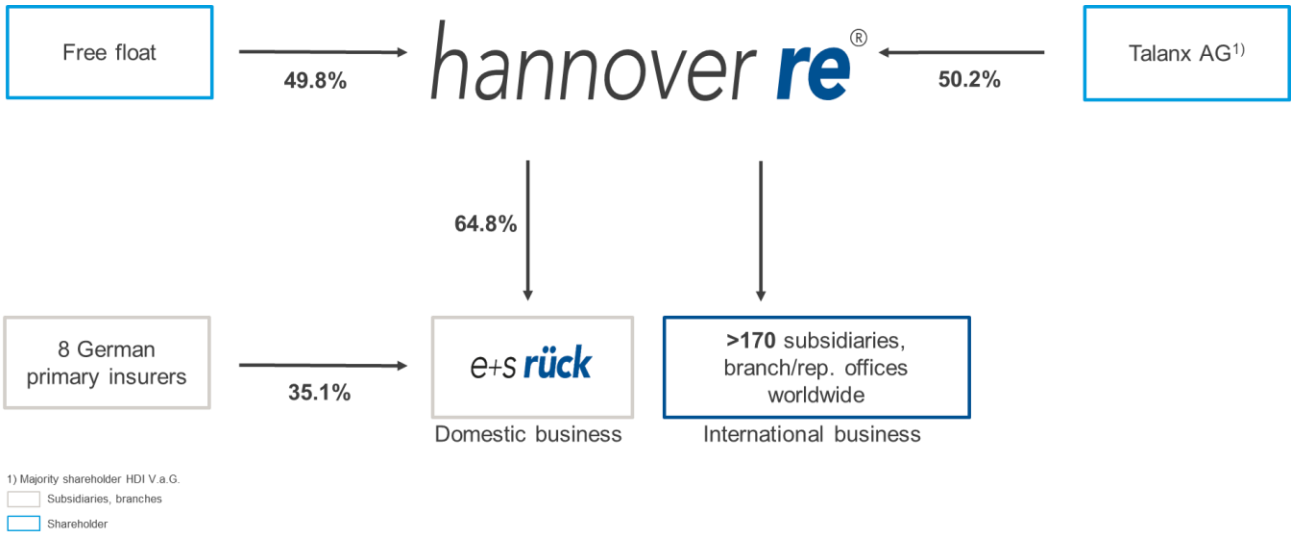
With a view to assuring Hannover Re's lasting stability, our strategy is grounded on a solid foundation: sustainability and integrated corporate governance. Sustainability reflects our aspiration to economic, social and environmental accountability. Through integrated corporate governance we foster the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

A.1.2 Headquarters, supervisors and auditors

Hannover Rück SE – as the parent company of the Hannover Re Group – is a European stock corporation, Societas Europaea (SE), with its headquarters located in Karl-Wiechert-Allee 50, 30625 Hannover, Germany, and has been entered in the Commercial Register of the District Court of Hannover under the number HR Hannover B 6778. A rounded 50.2% of Hannover Rück SE

shares 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.

Shareholders, subsidiaries and branches



Hannover Re as well as Talanx and HDI are subject to the Federal Financial Supervisory Authority (BaFin).

Address of Federal Financial Supervisory Authority (BaFin)

Graurheindorfer Straße 108, 53117 Bonn, Germany
alternative: Postbox 1253, 53002 Bonn, Germany

Contact details of Federal Financial Supervisory Authority (BaFin)

Phone: +49 22 8 / 41 08 – 0, Fax: +49 22 8 / 41 08 – 15 50
E-mail: poststelle@bafin.de, De-Mail: poststelle@bafin.de-mail.de

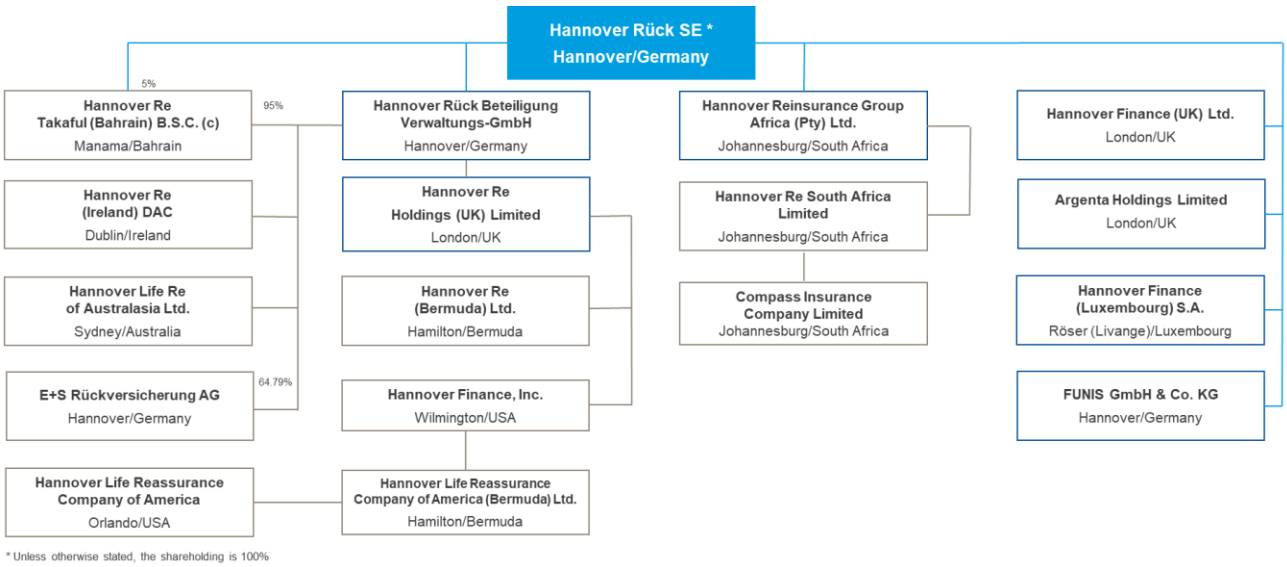
The Group auditor appointed for Hannover Re within the meaning of Section 318 of the German Commercial Code (hereafter referred to as HGB) is PricewaterhouseCoopers GmbH, Wirtschaftsprüfungsgesellschaft, Fuhrberger Straße 5, 30625 Hannover.

A.1.3 Group structure

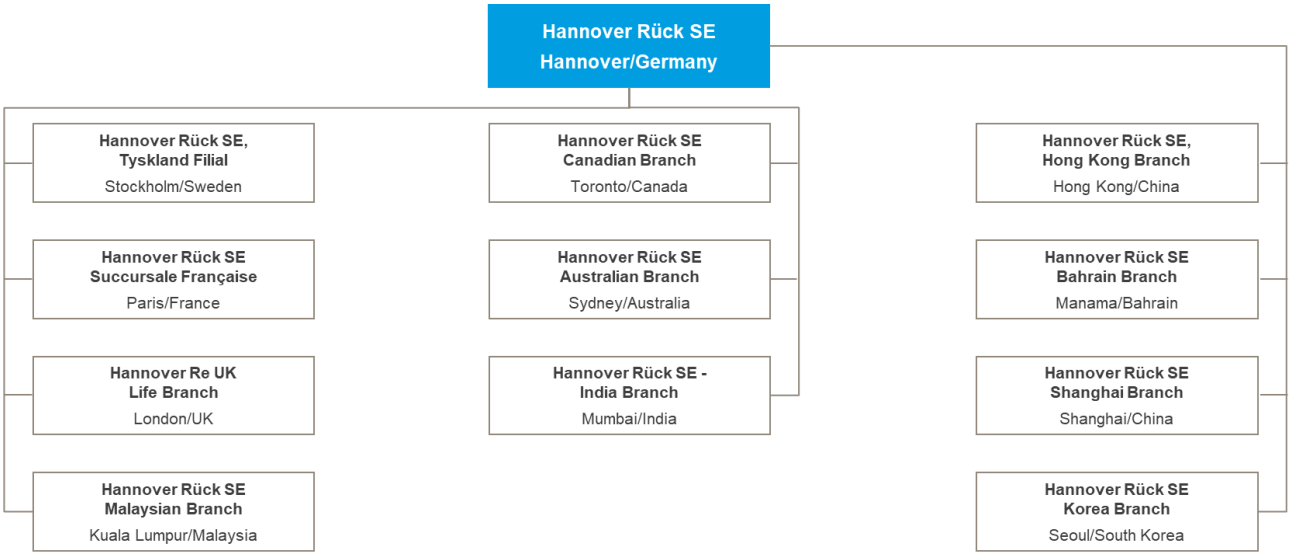
The company's network consists of more than 170 subsidiaries, affiliates, branches and representative offices worldwide with 3,756 employees.

Subsidiaries and branches of Hannover Rück SE are shown in the following charts.

Subsidiaries of Hannover Rück SE



Branches of Hannover Rück SE



A.2 Performance

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.

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.

The operating profit (EBIT) grew by 30.1% to EUR 1,971.2 million (EUR 1,515.7 million). 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).

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.

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%.

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.

In addition, the following table shows the performance targets for the business years 2023 and the attained results.

Business group	Key data	Targets for 2023	Target attainment 2023
Group	Return on equity [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

For further information regarding our performance please refer to our Annual Report. You can receive the Annual Report via download from our homepage (https://www.hannover-re.com/2011493/annual-report-2023.pdf).

B. System of Governance

B.1 General Information on the System of Governance

The Hannover Re Group has an effective system of governance in place, which provides for sound and prudent management. The main elements of the System of Governance are described in the following sections.

B.1.1 Governance structure

B.1.1.1 Our administrative, management or supervisory body

Our administrative, management or supervisory body consists of the Executive Board and the Supervisory Board.

Executive Board

The Executive Board consists of no less than two persons. Furthermore, it is up to the Supervisory Board to determine the number of members of the Executive Board. The members of the Executive Board are appointed by the Supervisory Board for a term of five years.

The following overview shows the allocation of the areas of responsibility to the members of the Executive Board as of 31 December 2023.

Members of the Executive Board

Chairman	Chief Financial Officer	Property & Casualty Reinsurance			
Jean-Jacques Henchoz	**Clemens Jungsthöfel**	**Dr. Michael Pickel**	**Sven Althoff**	**Sharon Ooi**	**Silke Sehm**
Compliance IT and Facility Management Group Human Resources Internal Auditing Group Risk Management and Actuarial Function Group Operations and Strategy Corporate Communications	Asset Management Reinsurance Accounting and Valuation Group Finance Investor and Rating Agency Relations	Property & Casualty Reinsurance Regional responsibility for Germany, Austria, Switzerland, Italy, Latin America, Iberian Peninsula, Middle East Worldwide responsibility for Run-Off Solutions, Agricultural Risks Group Legal Services	Coordination of Property & Casualty Reinsurance Business Group Regional responsibility for North America, United Kingdom, Ireland and London Market Worldwide responsibility for Aviation and Marine, Credit, Surety and Political Risks, Facultative Reinsurance, Quotations	Property & Casualty Reinsurance Regional responsibility for Asia-Pacific and Africa	Property & Casualty Reinsurance Regional responsibilities for Continental Europe and North Africa Worldwide responsibility for Catastrophe XL (CAT XL), Structured Reinsurance, Insurance-Linked Securities, Retrocessions

Life & Health Reinsurance	
Claude Chèvre	**Dr. Klaus Miller**
Life & Health Reinsurance Regional responsibility for Africa, Asia, Australia, Latin America, Middle East, Western and Southern Europe Worldwide responsibility for Longevity Solutions	Life & Health Reinsurance Regional responsibility for North America, United Kingdom, Ireland, Northern, Eastern and Central Europe

The four (Solvency II) key functions are allocated to the Chairman of the Executive Board. For further information on key functions (Solvency II) please refer to the following sections of chapter B.

Supervisory Board

The Supervisory Board consists of nine members appointed by the Annual General Meeting (AGM). Of these nine members, three shall be appointed on recommendation by the employees. The AGM is bound by these recommendations for the appointment of the employees' representatives. Apart from those, the AGM can freely propose candidates. Every member of the Supervisory Board can resign from his membership by adhering to a notice period of one month, without any obligation to specify an important reason, by written notice to the Company, represented by the Management Board and the Chairman of the Supervisory Board (if notice is given by the Chairman himself, to his deputy). The Chairman of the Supervisory Board may choose to forgo adherence to this notice period.

The appointment for a successor of a member who has resigned prior to termination of his term is for the remaining term of the resigned member.

As of 31 December the Supervisory Board consists of the following members:

Members of the Supervisory Board and membership in committees

Members of the Supervisory Board	Standing Committee	Finance and Audit Committee	Nomination Committee	Staff representative
Torsten Leue, Chairman	X	X	X	
Herbert K. Haas, Deputy Chairman	X	X	X	
Natalie Bani Ardalan				X
Frauke Heitmüller				X
Ilka Hundeshagen				X
Dr. Ursula Lipowski		X		
Dr. Michael Ollmann				
Dr. Andrea Pollak			X	
Dr. Erhard Schipporeit	X			

The Supervisory Board may form committees from among its members and authorise them to pass resolutions.

In the 2023 financial year the Supervisory Board again fulfilled its tasks and duties in accordance with 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.

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)).

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 Re Group 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 Re Group, thereby expanding the body from seven to eight members.

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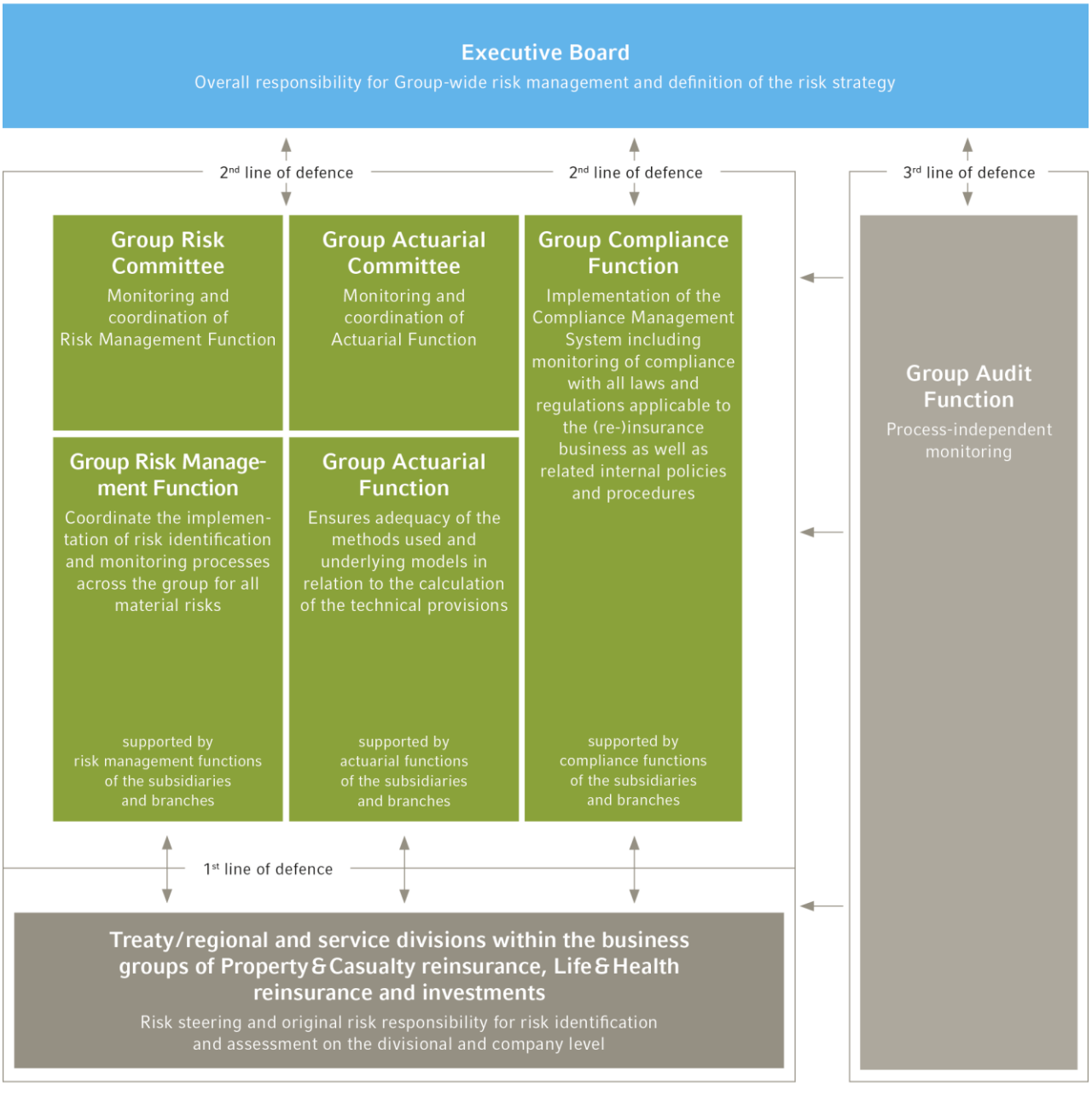
B.1.1.2 Key functions

The following chart provides an overview of the Solvency II key functions and bodies within the overall system as well as of their major tasks and responsibilities:



Hannover Re Group 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.

B.1.2 Remuneration policy

B.1.2.1 Remuneration of the Executive Board

The amount and structure of the remuneration of the Executive Board are geared to the size and activities of the company, its economic and financial position, its success and future prospects as well as the customariness of the remuneration, making reference to the benchmark environment (horizontal) and the remuneration structure otherwise applicable at the company (vertical). The remuneration is also guided by the tasks of the specific member of the Executive Board, his or her individual performance and the performance of the full Executive Board.

With an eye to these objectives, the remuneration system has two components: fixed salary / non-cash compensation and variable remuneration. The variable remuneration is designed to take account of both positive and negative developments. Overall, the remuneration is to be measured in such a way that it reflects the company's sustainable development and is fair and competitive by market standards. In the event of 100 % goal attainment, the remuneration model provides for a split composed of roughly 40 % fixed remuneration and roughly 60 % variable remuneration.

The profit- and performance-based remuneration (variable remuneration) is contingent on certain defined results and the attainment of certain set targets. The set targets vary according to the function of the Board member in question. The variable remuneration consists of a profit bonus and a performance bonus. The variable remuneration is defined at the Supervisory Board meeting that approves the consolidated financial statement for the financial year just ended.

The Executive Board remuneration is stated on the basis of the remuneration granted and owing. The total remuneration received in 2023 by the Executive Board of Hannover Re on the basis of its work for Hannover Re and the companies belonging to the Group amounts to TEUR 11,361.

B.1.2.2 Remuneration of the Supervisory Board

The remuneration of the Supervisory Board is determined by the Annual General Meeting of Hannover Re and regulated by the Statute of Hannover Re.

The total remuneration received by the Supervisory Board of Hannover Re in 2023 amounts to TEUR 1,147.

B.1.2.3 Remuneration of staff and senior executives

The remuneration system for senior executives below the Executive Board (management levels 2 and 3) and for key function holders in Germany belonging as a matter of principle to the ranks of senior executives consists of a fixed annual salary and variable remuneration. This is comprised of

short-term variable remuneration, the annual cash bonus and long-term share-based remuneration, the Share Award Plan.

Non-management employees can participate in a variable remuneration system through the Group Performance Bonus (GPB). The GPB is a remuneration model that is linked to the success of the company.

B.1.3 Related party transactions

Talanx AG holds an unchanged majority interest of 50.2% in Hannover Re. For its part, Haftpflichtverband der Deutschen Industrie Ver-sicherungsverein auf Gegenseitigkeit (HDI), Hannover, holds a stake of 76.7% in Talanx AG.

The business relationship between Hannover Re and its subsidiary E+S Rück is based on a cooperation agreement. A retrocession by Hannover Re to E+S Rück exists in property and casualty reinsurance. E+S Rück and Hannover Re bear exclusive responsibility for German business and for international markets respectively.

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.

B.2 Fit and Proper Requirements

B.2.1 Requirements

A framework directive pertaining to the fulfilment of the Fit & Proper requirements in the Hannover Re Group was established by the Executive Board.

B.2.2 Description of requirements

The professional qualification (fitness) of individuals with key functions refers to a professional qualification suitable for the respective position as well as skills and experience, which are necessary for a robust and cautious management approach, and for the fulfilment of the position. The appropriateness is assessed according to the principle of proportionality, and takes into account the company-individual risks along with the type and scope of business operations. Specialist fitness requirements stemming from established supervisory practices are to be complied with by those individuals who actually head up the company, and the members of the Supervisory Board. Collective “fitness” requirements have been established for mutual controlling and monitoring. The requirements placed on the professional qualification of those holding key functions are closely linked with the special features of the respective governance tasks.

Individuals with key functions must, as part of personal reliability (propriety), act responsibly and with integrity, and carry out activities both dutifully and with the necessary level of care. Conflicts of interest must be avoided and the individual must not have demonstrated a lack of responsibility in the form of criminal actions prior to their nomination / appointment. There is no requirement for personal reliability to be positively established. It will be assumed, whenever there are no

observable facts indicating the contrary. Unreliability is only to be assumed if personal circumstances according to general life experience give reason to believe that this could undermine the thorough and proper exercising of the function.

For Hannover Re, the circle of individuals entrusted with key tasks consists of persons who

- actually head up the company (Executive Board members) including the authorised representatives of an EU / EEA branch,
- hold other key functions (members of the Supervisory Board, owners of one of the key functions including compliance, internal audit, risk management, actuarial function).

With regard to their various roles, these individuals are required to provide evidence of their professional qualifications in different areas as follows:

- Educational background
- Practical knowledge
- Management experience
- Language skills
- Required specialist knowledge in relation to the relevant key function
- Collective requirements

The required specific knowledge for owners of one of the key functions including compliance, internal audit, risk management, and actuarial function is included in the referred role description.

In the event that key functions are outsourced, general requirements for this are defined within a group policy. Currently, we do not outsource key functions of Hannover Re SE.

B.2.3 Evaluation process

The requirements and reporting processes with respect to the supervisory authority correspond to the current standard processes based on the BaFin information sheets on professional competence and reliability.

Pursuant to the framework directive on the fulfilment of the Fit & Proper requirements, at the preliminary stage of recruiting new members of staff who will actually head up the company or hold other key roles, a detailed curriculum vitae will be submitted and a requirements profile set, which detail and describe the necessary qualifications. The framework directive pertaining to the fulfilment of Fit & Proper requirements contains a checklist in the attachment, which is to be used in the assessment of the Fit & Proper requirements of these individuals. The requirements profile contains evidence of the following minimum requirements:

Description of the position with key functions:

- Performance catalogue (job description)
- Authority to make decisions
- Level of staff responsibility

Professional qualification (general):

- Level of education (commercial or vocational training)
- University degree or professional standard (such as, for example, for auditors or actuaries)
- Knowledge and understanding of business strategy
- Knowledge of the system of governance
- Foreign language skills, minimum of English language and other foreign languages where possible

Professional qualification (depending on the particular position):

- Industry experience
- Knowledge and understanding of the business model
- Ability to interpret accounting and actuarial data
- Knowledge and understanding of the regulatory frameworks affecting the company
- Expertise in personnel management, staff selection, succession planning

The professional and personal requirements for members of the Supervisory Board are comprised in a guideline document.

The procedure for assessing the transfer of tasks stipulates that, at the preliminary stage of recruiting new members of staff, a detailed curriculum vitae must be submitted, and a requirements profile must be set, which contains the verification of predefined minimum requirements. The continual safeguarding of compliance with the relevant requirements is undertaken every five years in the form of an assessment of the requirements profile, undertaken by the responsible organisational unit.

As part of the event-driven assessment, any significant changes in the underlying parameters trigger an assessment of the compliance with the catalogue of requirements. This involves a differentiation of the characteristics deemed necessary in the person and in the position.

The assessment and control procedures are summarised in an overview, which contains the assessment cycle of the requirements profile and the responsibility for the assessment and duty to inform held by those individuals who actually head up the company, and those individuals who have other key functions.

B.3 Risk Management System including the Own Risk and Solvency Assessment

B.3.1 Strategy implementation

Robust governance and strong risk management establish the foundation for our business operations. This is enshrined in our company strategy.

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

Our solvency ratio is subject to a limit of 180% and a threshold of 200%. Countermeasures would be triggered if the solvency ratio were to fall below this threshold. These indicators are monitored using our internal capital model and the Executive Board is informed quarterly about adherence to these key parameters as part of regular reporting. The necessary capital resources are determined according to the requirements of our economic capital model, regulatory parameters, the expectations of rating agencies with respect to our target rating and the expectations of our clients. We maintain a capital cushion in order to be able to act on new business opportunities.

B.3.2 Risk capital

In the interests of our shareholders, clients and employees, 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 all risks affecting the company as well as of our capital position. The internal capital model – a stochastic enterprise model – is our 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 capital, which is calculated according to market-consistent measurement principles and also constitutes the basis for calculating the own funds under Solvency II.

Hannover Re calculates the required risk capital as the Value at Risk (VaR) of the change of economic capital over a period of one year with a confidence level of 99.5%, in accordance with Solvency II using a full internal model.

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.

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.

B.3.3 Internal model governance

The governance of the internal model is defined in a number of documents and policies. In particular, governance rules include roles, responsibilities and standards for changes to the internal model and model validation as well as standards for internal and external data and expert settings used in the internal model. The rules have been set-up in compliance with the requirements of Solvency II.

The risk management function provides quarterly reports on internal model results and changes to the Executive Board and the Risk Committee. The reporting supports the tracking of changes to the risk profile and the solvency ratio over time. Apart from this reporting, internal model results are

embedded in the essential internal steering processes such as capital cost allocation and new product evaluation.

The annual model validation ensures that the internal model meets all defined quality standards of the policies. The Solvency II directive requires that the validation is performed as an independent process. Therefore, Hannover Re has set-up a validation process which assigns validation to departments different from the departments responsible for model operation, calibration and maintenance. The validation report includes numerous stress tests and sensitivity analyses.

There have not been any significant changes in the model governance during the reporting period. The model change policy remained unchanged as well.

B.3.4 Organisation of risk management and the tasks of the risk management function

An overview of risk management's organisational structure is provided in Section B.1 above.

The risk management function consists of three primary components: the Risk Committee, the Chief Risk Officer and the risk monitoring function.

Risk Committee

The tasks of the Risk Committee – the body charged with the monitoring and coordination of risk management – are derived from the Risk and Capital Management Guideline. The scope of decision-making for the Risk Committee lies within the boundaries of risk appetite set by the Executive Board. Changes, and any instances of increase in risk appetite, require the approval of the Executive Board. Further tasks include quality assurance of the ORSA process and monitoring of the implementation of risk-related measures. The Risk Committee also receives the model change reports according to the model change policy.

Chief Risk Officer

The Chief Risk Officer is also the head of the risk monitoring function and a member of the Risk Committee. The Chief Risk Officer coordinates the ORSA process and ensures the framework conditions of an effective risk management system.

Risk monitoring function

The risk monitoring function coordinates and bears responsibility for comprehensive monitoring (systematic identification, evaluation, monitoring and reporting) of all significant asset- and liability-related risks and the regular execution of the ORSA process (cf. section B.3.7). Furthermore, the risk monitoring function develops methods, standards and processes for the assessment and monitoring of risk.

The risk monitoring function fulfils its tasks objectively and independently for Hannover Re.

Regular reporting on geopolitical risks was expanded during the reporting period. This is a response to the emergence of more conflicts and tensions with regional and global repercussions. Numerous systems and processes were improved. This enables a more detailed and faster analysis of risk exposure. Internal model changes and improvements were made. Assessments of the impact of new products and capital were also carried out.

B.3.5 Key elements of our risk management system

Our Risk and Capital Management Guideline including our 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, action, control and improvement. Systematic risk identification, analysis, measurement, steering and monitoring as well as risk reporting are especially crucial to the effectiveness of the system as a whole.

This guideline describes, among other things, the major tasks, rights and responsibilities, the framework conditions and the risk control process. The rules, which are derived from the corporate strategy and the risk strategy, additionally take account of the regulatory requirements for risk management as well as international standards and developments relating to appropriate enterprise risk management. 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. Beyond that, risk management's requirements are stated in guidelines and policies, which are communicated Group-wide.

Risk identification

A key source of information for monitoring risks is the risk identification carried out on a periodic basis. All identified risks are documented in a central register containing all material risks. Risk identification takes the form of, among other things, structured assessments, interviews or scenario analyses. External insights such as recognised industry know-how from relevant bodies or working groups are incorporated into the process. Risk identification is important for ensuring that our risk management consistently remains up to date.

Risk analysis and assessment

In principle, every risk that is identified and considered material is assessed quantitatively. Only risk types for which quantitative risk measurement is currently impossible or difficult are mostly assessed qualitatively (e.g., strategic, reputational or emerging risks). Qualitative assessment can take the form of, for example, expert evaluations. Quantitative assessment of material risks and the overall risk position is performed using the internal risk model. The model makes allowance for risk concentration and risk diversification.

Risk steering

The steering of all material risks is the task of the operational business units on the divisional and company level. In this context, the identified and analysed risks are either consciously accepted, avoided or minimised. The risk / reward ratio is factored into the division's decision. Risk steering is assisted by the parameters of the central and local underwriting guidelines and by defined limits and thresholds.

Risk monitoring

The monitoring of all identified material risks is a core task of Group 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 ascertainment of whether risk steering measures were carried out and whether the planned effect of the measures is sufficient.

Risk communication and risk culture

Risk management is firmly integrated into our operational processes. It is assisted by transparent risk communication and the open handling of risks as part of our risk culture. Risk communication takes the form, for example, of internal and external risk reports, in the context of committee and project work, through information on current risk complexes in the intranet and training opportunities for staff. The regular sharing of information between risk-steering and risk-monitoring units is also fundamental to the proper functioning of risk management.

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 utilization within specific 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 competencies, 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. Furthermore, the Executive Board is the owner of the economic capital model and is responsible for the approval of major model changes. Process-independent monitoring and quality assurance of risk management is carried out by the internal audit function and external instances (regulators, independent auditors and rating agencies). Most notably, the independent auditors review the trigger mechanism and the internal monitoring system. The entire system is rounded off with process-integrated procedures and rules, such as those of the internal control system.

B.3.6 Risk landscape

In the context of its business operations, the Hannover Re Group enters into a broad variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act 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. Through our business operations on all continents and the diversification between our Property & Casualty and Life & Health reinsurance business groups we are able to effectively allocate our capital in light of opportunity and risk considerations. Along with our principal business operations as a reinsurer of property & casualty and life & health business, we also transact primary insurance in selected niche markets as a complement to our core reinsurance business. Crucial importance attaches to our risk management in order to ensure that, among other things, risks to the reinsurance portfolio remain calculable and also 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 long-term reinsurance obligations,

- 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 as well as
- Reputational and sustainability, liquidity, strategic and emerging risks.

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.

B.3.7 Own Risk and Solvency Assessment (ORSA)

The ORSA cycle mirrors our circuit of planning, action, monitoring und enhancement, and comprises the elements listed in Section B.3.5.

The ORSA report is prepared on an annual basis and summarizes the results of the last ORSA cycle. Here, the internal model is used – especially for the calculation of solvency requirements. The interplay between risk and capital management is highlighted here. Finally, it explains the inclusion of the Executive Board into the ORSA process and its use as one of the controlling instruments at the company's disposal.

The ORSA report is coordinated by the risk management division and is subject to both assessment and approval by the Executive Board. In addition, the report is submitted to the Supervisory Board and the BaFin.

Risk reporting

The risk monitoring function produces regular reports, which show the company's risk position. These reports form the basis for the solvency and risk assessments described in the ORSA report. Therein, all employees contributing to the above procedures are involved as data and information suppliers and consulted for quality assurance.

The Executive Board takes the ORSA results into consideration when assessing the degree of accomplishment of defined business targets; if needed, changes in the business process take place. This establishes a surveillance circuit for business enhancements and risk mitigation.

In the event that – because of a material change in risk profile – an ad hoc ORSA report is necessary, Hannover Re has defined specific procedural plans and responsibilities.

In addition to the internal risk reporting and the ORSA report, we generate this annual Solvency and Financial Condition Report (SFCR) and an annual Regular Supervisory Report (RSR).

B.4 Internal Control System

B.4.1 Elements of the 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.

B.4.2 Compliance function

Compliance Management System

Hannover Re defines compliance as the observance of the applicable statutory and regulatory provisions and intra-company guidelines.

Hannover Re implemented a Compliance Management System (CMS) to ensure overall compliance. It is based on accepted international standards and consists of six elements: compliance culture, compliance function, compliance risk, compliance program, compliance communication, compliance monitoring and improvement.

Compliance culture

Compliance culture provides the basis for the adequacy and effectiveness of the CMS. The importance of compliance is not only reflected in the Code of Conduct (CoC), but also an explicit part in the group strategy which in turn further emphasises the importance of compliance from the management perspective (Tone from the Top).

In 2022, the Hannover Re Executive and Supervisory Boards adopted the CoC. The CoC is available in an English and a German version as well as published in Chinese, French, Italian and Spanish on the Hannover Re website.

Compliance function

Hannover Re has opted for a decentralised approach towards the implementation of the compliance function, i.e. the tasks of the compliance function will not only be fulfilled by one department, but by various departments. The compliance function is therefore located in several departments.

The head of the Hannover Re department Group Legal Services (GLS) is the holder of the key compliance function as well as the Chief Compliance Officer (CCO).

The Executive Board of Hannover Re has established the compliance division within GLS for the fulfilment of some of the tasks of the compliance function. The CCO is authorised to appoint further members of staff from GLS for the purpose of fulfilling compliance function tasks as necessary.

In the process of planning and organising the CMS the particularly sensitive compliance topics were identified through the employment of a risk-based approach and past experiences gained primarily by the Compliance and Internal Audit department (Group Auditing, GA). The scope is assessed annually. The CCO will propose an appropriate adjustment to the Executive Board if a change in assessment occurs.

The key areas of compliance as mentioned above are monitored by the compliance function at Hannover Re. Therefore, different departments work together in order to fulfil this function. E.g., employment law remains the responsibility of the Human Resources department, tax law falls under the jurisdiction of the Tax department of Hannover Re.

The handling of subjects of particular compliance relevance by the departments, who collectively form the compliance function, comprises at the least the following activities:

- Identification and evaluation of risks, which are associated with the non-compliance of statutory requirements (risk control)
- Evaluation of the possible consequences for the company's activity as a result of changes in legal operating conditions (risk relating to changes in the law/early warning)
- Consultation with regard to compliance with the legal provisions which apply to company activity
- Assessment of the appropriateness of implemented measures in relation to compliance with statutory requirements (monitoring function)

Compliance risk

The term compliance risk is commonly referred to as the risk of legal or regulatory sanctions due to non-compliance with laws, regulations and regulatory requirements or due to a serious financial loss or a loss of reputation.

The compliance risk assessment is based on the compliance risk matrix which allows for a systematic evaluation and assessment of individual compliance risks. The risk assessment is thereby the result of the combination of probability of occurrence and impact (consequence).

Compliance programme

Every year, the CCO prepares a compliance plan for the following year. This plan determines the key areas of compliance activity in the subsequent year. The compliance plan takes into account all relevant areas of activity of the company and the compliance risk situation. The CCO implemented a compliance plan for 2023.

Hannover Re has specified its compliance policy in writing bearing the title “Group Compliance Handbook”. This policy is regularly assessed for its topicality and, if necessary, updated – at least once a year – and on an event-driven basis by the members of staff within the compliance function when new developments occur.

The appointed CCO for Hannover Re bears particular responsibility for the monitoring of changes made to legal provisions and standards made by legislators, as well as case law. He assesses the new developments for their relevance and communicates pertinent innovations and changes to the respective departments and the Executive Board.

The CCO advises members of the Executive Board and members of staff of Hannover Re upon request regarding compliance topics.

Compliance communication

Compliance communication comprises several aspects including reporting, training and a speak-up culture.

The CCO maintains constant contact and exchange with the further members of the compliance function both in Germany and abroad.

As the holder of the key function compliance, the CCO reports directly to the members of the Executive Board responsible for GLS and the compliance function within Hannover Re. Reports are provided on relevant compliance incidents and are completed in written, verbal or electronic form, although verbal reports are, as a rule, subsequently backed up in writing. Depending on the seriousness of the incident, the reporting can be performed within a regular annual report or on an ad hoc basis.

For the preparation of the Hannover Re annual compliance report to be presented to the Supervisory Board in its Finance & Audit Committee meeting the CCO and the compliance staff assess the monitoring plan of the Hannover Office as well as the compliance reports by the Local Offices. The report contains information on all compliance-relevant topics.

The compliance function also holds regular training sessions for members of staff, in particular with regard to legislative reforms, announcements by the insurance supervisory authority or other changes. As part of the introduction of the revised CoC in 2022, a new compliance training course was set up on the topics addressed therein. All employees will participate in this training over the course of three years.

Compliance monitoring and improvement

By way of continuous monitoring, the CCO and the members of staff of the compliance function contribute to ensuring compliance by the executive bodies (Executive Board and Supervisory Board) and the members of staff of Hannover Re with legal and regulatory operating conditions.

Compliance evaluates adequacy and effectiveness of implemented measures to mitigate identified compliance risks on an annual basis. The result of this evaluation did not show any indications that single measures for prevention of non-compliance would have failed.

B.5 Internal Audit Function

Implementation of the Internal Audit Function

The Company's internal audit function is performed by the department Group Auditing (GA). GA provide independent objective audit services, including evaluations and recommendations, which help in particular to ensure external and internal compliance of processes, the internal control system (ICS) and other areas of the Company, identify potential scope for improvements and hence generate added value. Along with the auditing activity, GA provides value-adding inputs as an internal consultant in its interconnected cooperation with other units and functions of the Company.

The Executive Board guarantees that GA is not bound by any instructions in the planning of audits, conduct of audits, reporting and evaluation of audit results. In order to safeguard this independence, the Head of GA, who is at the same time the key function holder for the internal auditing of the Company pursuant to § 30 as well as § 47 No. 1 VAG, reports directly to the Executive Board. GA team members are not employed in other areas of the Company and only perform tasks that are in conformity with the GA "Internal Audit Charter". This charter, which has been approved by the Executive Board, also sets out the powers of the internal audit function.

The GA team encompasses staff with various areas of expertise, university degrees and supplementary vocational examinations in order to cover the wide specialist spectrum of (audit) tasks. The members of staff in GA have a broad mix of professional experience both internally (in specialist terms especially from the underwriting side) and externally (especially from external auditing and consulting). If a need for special capacity or expertise arises, GA can additionally involve internal peers and/or appropriate external resources.

Tasks

GA supports the Executive Board in the achievement of objectives by evaluating all business centres, processes and systems of the Company on a targeted, independent and objective basis through a systematic, risk-oriented approach in the planning and conduct of audits and by contributing to further development. Audit results are reported directly to the full Executive Board. The evaluation of individual findings and the overall evaluation of the audit result are the exclusive responsibility of GA. The classification scheme defined by GA for this purpose ensures an objective basis for the evaluations made.

Reporting lines

The internal audit function reports its audit results and recommendations directly to the Executive Board on an ongoing basis through written audit reports, or immediately in the case of serious findings, as well as annually in the form of the GA Annual Report. Implementation of the recommendations/measures agreed in the audits is monitored by GA at the due dates.

B.6 Actuarial Function

Implementation of the Actuarial Function

Tasks and responsibilities of the Actuarial Function (AF) are defined in the AF policy which has been approved by the Executive Board. The owner of the AF coordinates the tasks of the AF.

The tasks are conducted by the division Group Risk Management and its departments. This reflects the common understanding of AF and Risk Management Function (RMF) that a broad exchange of information and a competent support of each other’s function is useful to fulfil their individual tasks in an effective and efficient way.

Tasks

The tasks of the AF are inter alia:

- Coordination and validation of the calculation of the Solvency II technical provisions (TP)
- Ensure the appropriateness of the applied methods, the underlying models and assumptions
  - used for the calculation of the TP for solvency as well as for accounting purposes

  - used as a basis for the appropriate recognition of the inherent risks of these methods, models and assumptions in the internal model
- Evaluation of the uncertainty associated with the estimations made in the calculation of the TP
- Regular review and assessment of the underlying data in terms of sufficiency and quality
- Regular comparison of best estimates against experience
- Reconciliation of TP between financial accounting and Solvency II basis
- Recommendations on improving processes and models used for the calculation of the TP, including data collection, if deficiencies have been observed, and monitoring of their implementation
- In the context of the contribution to the RMF inter alia
  - Support of the internal model, especially with respect to underwriting risks including the delivery and validation of models, data, parameters
  - Monitoring of the resilience level within the scope of the system of limits and thresholds
  - Analysis of large transactions and new types of business
- Preparation of the AF report containing inter alia the following topics
  - Tasks of the AF
  - Activities of the AF in the reporting period
  - Methods, results and sensitivity analyses in respect of TP
  - Opinion on the underwriting policy and the retrocession policy

Reporting Lines

In addition to the annual AF report, the responsible owner of the AF reports regularly directly to the Executive Board and to the Actuarial Committee, which is the responsible committee for the information exchange with the AF. If necessary, the AF reports on an ad hoc basis or upon requests. Direct reporting to Executive Board and Actuarial Committee ensures the independence of the AF from the other key functions and the operational management.

The Actuarial Committee consists of the CEO, CFO, a member of the Executive Board responsible for Property & Casualty reinsurance, a member of the Executive Board responsible for Life & Health reinsurance, the head of the AF, head of the department responsible for the valuation of technical provisions for Property & Casualty reinsurance, head of the department in risk management dealing with Life & Health reinsurance, and the head of the department in risk management dealing with reserving for Property & Casualty reinsurance business.

B.7 Outsourcing

Hannover Re has a guideline in place approved by the Executive Board, which governs third party provisions and outsourcing. Among others, the guideline details all requirements imposed on the outsourcing of (re-)insurance activities and functions. Here, the entire management process is described, which consists of the following four process steps:

- Initial analysis, incl. materiality assessment and initial risk assessment and due diligence
- Initial contracting, incl. notification
- Continuous steering and monitoring
- Renewal and termination

All relevant stakeholder groups are involved in the management process. Intra-Group outsourcings are also integrated into the management process. In future, the procurement process will be coordinated by a central organisational unit.

Among others, Hannover Re has currently outsourced essential parts of the asset and investment management to Ampega Asset Management GmbH, located in Cologne (Germany), as well as cloud-based services such as M365 and Azure to Microsoft Ireland Operations Limited, located in Dublin (Ireland). These matters concern the only outsourcings classified as important outsourcings of the Hannover Re Group.

B.8 Any other information

Evaluating the appropriateness of the system of governance

On an annual basis, the Executive Board receives an opinion on the adequacy of Hannover Re's System of Governance (SoG) from the System of Governance Assessment Committee regarding the past financial year. This opinion presented by the committee dated 12 February 2024 was assessed and approved by the Executive Board.

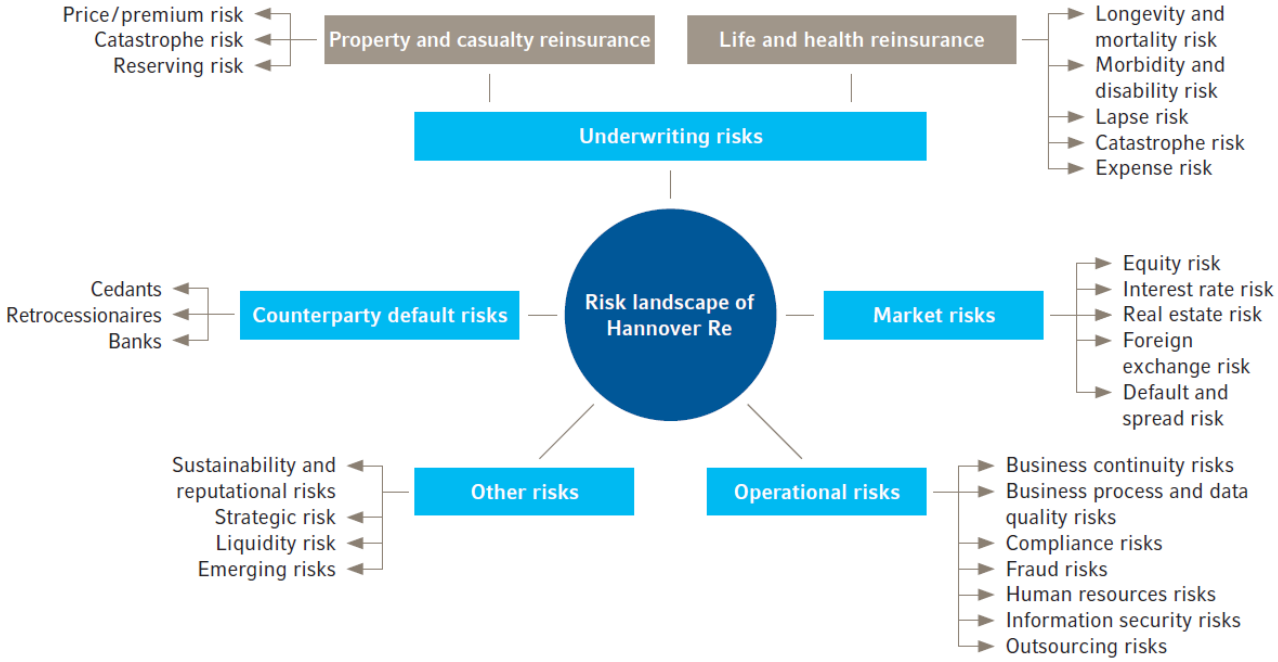
Members of the committee are the Heads of Hannover Re's key functions (Actuarial Function, Internal Audit, Risk Management, and Compliance), the Head of Global Human Resources and the Head of Group Operations & Strategy – Costs, Organisation, Processes & Procurement. It usually convenes twice a year. Guests are invited on an event-driven basis. The basis for the assessment of the SoG includes, among other things, the annual reports submitted by the key functions.

Based on the assessment conducted by the committee, the Executive Board has reached the conclusion that the SoG of Hannover Re is appropriate considering the scope and complexity of its business activities and the inherent risks.

C. Risk Profile

The risk landscape is presented in Section B.3.6 and displayed in the following graph.

Risk landscape of Hannover Re



In the context of its business operations 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.

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.

Retrocession has a particular significance within risk appetite and risk reduction. It is used to protect the capital of the Hannover Re Group. The process of strategic retrocession placement for the Group, subsidiaries or branches is determined by the responsible Board member and overseen by the Executive Board.

In the course of the mid-term planning, we monitor the business development over a time horizon of five years. Besides the basic scenario, we also behold alternative scenarios in respect of the evolution of (re)insurance markets including different impacts related to business growth and performance. Under the assumptions within the mid-term business plan, the risk profile and the capitalisation of Hannover Re Group remain comfortable. It is worthwhile to notice that the forecast of the capital requirements is based on various assumptions for the future economic and business environment and is therefore to be handled carefully.

Large transactions are assessed with regards to their influence on the risk profile, capitalisation and the defined thresholds for different risk categories. Therewith, we ensure that the risks develop in line with our risk appetite.

New reinsurance and investment products are analysed under a dedicated process, namely the New Products Process (NPP). In addition to analysing the risk profile, integration into all internal processes, such as accounting and risk monitoring, is defined.

In addition to stochastic modelling, we perform stress tests, scenario and sensitivity analyses on a regular basis. This represents a central element of our risk management. The main stress tests and analyses have to be performed at least annually. They include analyses regarding natural catastrophes, terror events, equity and fixed-income securities as well as real estate. Selected scenarios and stress tests based on the Solvency II ratio for year-end 2023 are presented in the following graph.

Sensitivities of the Solvency II ratio YE 2023
Values in percent

As of year-end 2023 the Solvency II ratio is well protected against parallel downward shifts of interest rates, available and required capital move by similar amounts. However, this does not hold for nonparallel stress scenarios. A decrease in interest rates in combination with an interest rate twist – as could be observed in the past - can lead to a more notable decrease in the Solvency II ratio.

Additional information on individual risk categories can be found in the following sections.

C.1 Underwriting risk

C.1.1 Underwriting risk Property & Casualty

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 utilise 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 and casualty reinsurance business group is actively managed through allocation of the cost of capital according. 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 is as follows:

Solvency Capital Requirement for underwriting risks in property and casualty reinsurance

in TEUR	2023	2022
Premium risk (incl. catastrophe risk)	4,405,318	4,119,771
Reserve risk	3,527,533	3,273,771
Diversification	-1,847,557	-1,729,345
Underwriting risk property and casualty	**6,085,294**	**5,664,198**

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.

C.1.1.1 Risks arising from natural disasters

A large share of the required risk capital for the premium 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 (with a confidence level of 99,5%) for five of our largest natural hazards scenarios:

Required risk capital for five major natural hazards scenarios

in TEUR	2023	2022
Hurricane US	2,414,748	2,273,411
Earthquake US West Coast	1,720,804	1,625,424
Winter storm Europe	1,435,425	1,016,747
Earthquake Japan	1,205,567	1,218,948
Earthquake Chile	1,503,476	1,360,593

The capital requirement increases for almost all scenarios compared to last year, mainly due to business and lower retrocession capacities. This is partially offset by exchange rate effects.

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 adjustments based on the experience of our specialist departments. The monitoring of the risks resulting from natural hazards is complemented by scenario analyses. Major scenarios and stress tests are shown in the following table:

Stress tests for natural catastrophes after retrocessions
Effect on net income

in TEUR	2023	2022
Hurricane US		
100-year loss	-1,426,351	-1,377,995
250-year loss	-1,946,295	-1,858,961
Earthquake US West Coast		
100-year loss	-781,818	-758,439
250-year loss	-1,424,861	-1,385,456
Winter storm Europe		
100-year loss	-822,649	-613,556
250-year loss	-1,184,805	-874,415
Earthquake Japan		
100-year loss	-608,906	-644,720
250-year loss	-977,751	-966,022
Earthquake Chile		
100-year loss	-505,344	-513,396
250-year loss	-1,345,197	-1,179,654

As part of this process for managing risks connected with natural catastrophes, the Executive Board defines the risk appetite and the limit for natural perils once a year based on 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; the limits set take into account the profitability of the business in question. Risk management ensures adherence to these maximum amounts. The Executive Board, Risk Committee and P&C Executive Committee are kept regularly updated on the degree of capacity utilisation

C.1.2 Reserve risk

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).

C.1.3 Risk mitigation techniques Property & Casualty

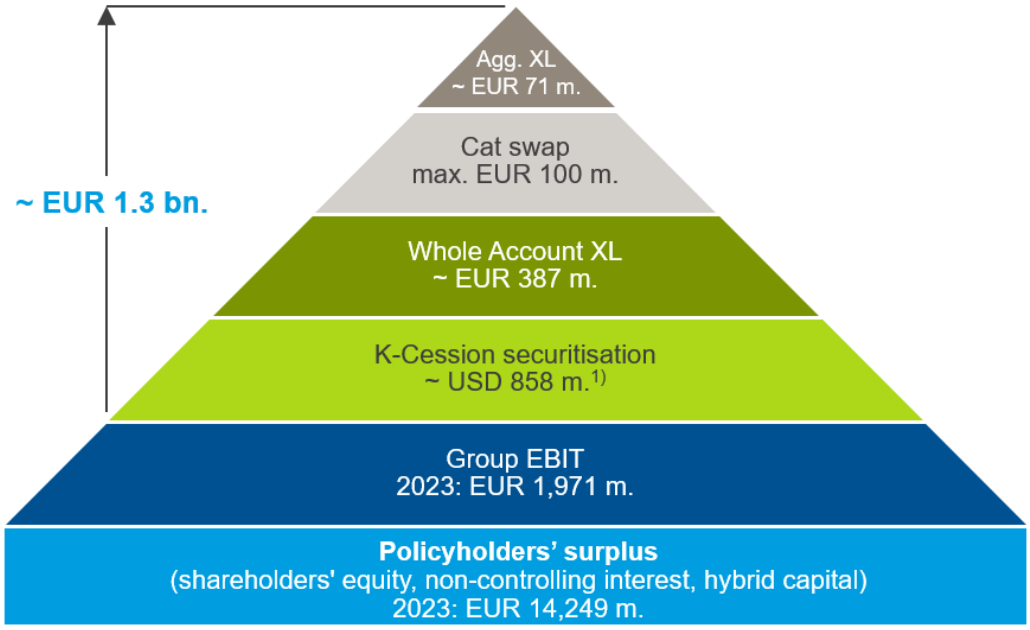
C.1.3.1 Strategic aims and key figures

The strategic aims in relation to the placement of retrocessions are determined by the responsible member of the Executive Board. The Executive Board oversees the placement of the retrocessions as a whole, in particular the limits, premiums and contractual terms.

The Executive Board derives the risk budget for natural perils from the global risk budget. Many risk tolerances are based on net metrics, i.e. the placement of retrocessions plays a key role in adhering to the limits.

During the planning phase in September and October every year, the Executive Board decides on the capacities for the following year. The planning process includes an assessment of the utilisation of all risk tolerances. An overutilisation would be inconsistent with the risk appetite and an underutilisation would result in under-deployment of allocated capital.

The resulting multilevel protection increases the reinsurance capacity for natural catastrophes and thus provides additional revenues with a defined risk appetite.



1) Plus expected premium

Additional retrocessions for Marine, Aviation, Cyber and facultative reinsurance are in place.

C.1.3.2 Description of main types of cover against natural perils

Details on the individual forms of reinsurance covers are described below.

Whole Account Protection 2023

The Whole Account Protections cover all property, motor hull and engineering business of the Hannover Re Group, i.e. business recorded in Hannover and through subsidiaries or branch offices. The protections are placed on a gross claim basis.

Large Loss Aggregate XL 2023

The Large Loss Aggregate XL is an aggregate protection and covers all natural catastrophe perils for the Hannover Re Group on a gross basis.

K-Quota Share 2023

The portfolio covered under the K-quota share consists of the following segments and regions of the Cat XL business of the Hannover Re Group:

- Natural perils in Australia, Japan, Canada and USA (mainly wind and earthquakes)
- Natural perils in northern Europe (mainly wind, earthquakes, hail and floods)
- Natural perils in New Zealand, Chile (mainly earthquakes)
- Aviation (all XL contracts) and Marine & Energy (all XL contracts)

By way of its “K-transactions”, Hannover Re has raised underwriting capacity for catastrophe risks in 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. A large part of the total volume of the K-Cession was securitised via structured entities. The transaction has an indefinite term. It can be cancelled annually by investors. Segregated accounts of Kaith Re Ltd. and other structured entities outside the Group are used for transformer purposes for part of this transaction. The structured entities are fully funded by contractually defined investments in the form of cash and equivalent liquid assets and therefore there exists no default risk for Hannover Re.

C.1.4 Underwriting risk Life & Health

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 recent years 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 an increasingly 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 for underwriting risks life and health reinsurance
Required risk capital at a confidence level of 99.5 %

in TEUR	2023	2022
Mortality risk (incl. catastrophe risk)	1,782,201	1,791,549
Longevity risk	1,823,941	1,448,376
Morbidity and disability risk	1,337,535	1,369,917
Lapse risk	394,408	379,618
Expense risk	420,425	157,985
Diversification	-3,017,555	-2,637,496
Underwriting risk life and health	**2,740,955**	**2,509,950**

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.

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.

A risk concentration in life and health reinsurance business arises from longevity and mortality risks, followed by morbidity risks. Concerning mortality risks, the risk of a pandemic event represents a main driver for our solvency capital requirement for life and health business with regard to concentration risks. To govern our risks we regularly monitor our exposure regarding potential pandemic events in the context of internal model runs. More information is available in Section D.2.2.

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 of 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.

C.1.4.1 Risk mitigation techniques Life & Health Reinsurance

In the Life & Health business group, retrocessions for the purpose of risk reduction are only used on a limited basis.

An index-based pandemic cover was structured in 2013 as a swap and, since then, has been placed with different investors in various tranches. The overall capacity placed is flexibly collateralised, such that the level of collateralisation can be increased depending on the current WHO pandemic alert phases. Payments for Covid-19-claims from this cover were made in the reporting years 2022 and 2023 to the Life & Health business group.

Some large longevity deals are retroceded proportionally and on a regular premium basis in order to reduce the volatility of the longevity portfolio with regards to particular large contracts. Two sided collateral provisions ensure that future liabilities will be collateralised if receivables from or to the retrocessionaires resulting from expected business development are projected to exceed an agreed threshold.

The existing pool retrocessions for high sum assured individual policies mainly originate from times when a lower per life retention applied for the Hannover Re. For risk reduction reasons, they are no longer necessary and have been placed in run-off.

All other existing retrocessions are not placed for reasons of active risk reduction, but rather to maintain existing customer relationships and gain access to attractive inward business or are placed with affiliates and non-affiliates in order to reduce the HGB strains from large financing transactions.

The effectiveness of the retrocessions is closely linked to the default risk of the retrocessionaires. The monitoring of the default risk of retrocessionaires is performed across all business segments of Hannover Re in a standardised way, using standard systems and methods which are described in Section C.3.

C.2 Market risk

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 for market risks
Including private equity

in TEUR	2023	2022
Default and spread risk	3,348,111	3,027,134
Interest rate risk	1,178,219	1,004,115
Foreign exchange risk	1,983,415	1,774,882
Equity risk	1,700,522	2,021,904
Real estate risk	1,031,160	946,474
Diversification	-3,997,186	-3,598,951
Market risk	**5,244,241**	**5,175,558**

Market risk increased slightly, primarily as a result of an increase in default 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.

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 Hannover Re 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 Hannover Re. 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.

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

		Portfolio change on a fair value basis	
in TEUR	Scenario	2023	2022
Equity securities and private equity	Share prices -10%	-202,865	-199,613
	Share prices -20%	-405,729	-399,227
	Share prices +10%	+202,865	+199,613
	Share prices +20%	+405,729	+399,227
Fixed-income securities	Yield increase +50 basis points	-1,261,841	-1,187,869
	Yield increase +100 basis points	-2,455,628	-2,311,851
	Yield decrease -50 basis points	+1,333,468	+1,255,253
	Yield decrease -100 basis points	+ 2,747,878	+ 2,585,785
Real Estate	Real estate market values -10%	-407,233	-381,478
	Real estate market values +10%	+407,233	+381,478

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.

Equity risks derive from the possibility of unfavourable changes in the value of equities, 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 exposure therefore amounts 0.0% (0.0%). Changes in fair value here tend to be prompted less by general market conditions and more by entity-specific assessments. The risks are associated principally with the business model and profitability and less so with the interest rate component in the consideration of cash flow forecasts.

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.

Real estate risks result from the possibility of unfavorable 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 recognising 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 as a supplementary liquidity management tool. The holdings exchanged in this context are fully collateralised. Some insurance derivatives linked to insurance business are also recognized under the investments due to IFRS financial reporting requirements.

Our investments entail credit risks that arise out of the risk of a failure to pay (interest and / or capital repayment) or a change in the credit status (rating downgrade) of issuers of securities. We attach equally vital importance to exceptionally broad diversification as we do 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.

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.

C.3 Counterparty default risk

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.

Required risk capital (confidence level 99.5 %)

in TEUR	2023	2022
Counterparty default risk	432,146	434,678

The slight decrease in counterparty default risk can be attributed principally to a smaller volume of financing business in life and health reinsurance.

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 for 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 %	2023	2022
Total	86.2	90.2
Property and casualty reinsurance	84.4	89.1
Life and health reinsurance	90.3	92.6

Alongside traditional retrocessions in property and casualty reinsurance we also transfer risks to the capital market. Please refer also to Section C.1.3.

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.

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.

The average default rate over the past four years was 0.2 %.

Retrocession gives rise to claims that we hold against our retrocessionaires. These reinsurance recoverables – i.e. the reinsurance recoverables on unpaid claims – amounted to TEUR 3,313,370 (TEUR 2,674,107) at the balance sheet date.

The following table shows our reinsurance recoverables – split by rating quality – due from our retrocessionaires. Offsetting items as letters of credit and reinsurance deposits held as security against reinsurance recoverables on unpaid claims are consolidated in the column “secured”.

Reinsurance recoverables as at the balance sheet date

in TEUR	2023	%
Secured	1,074,872	54.4%
AAA		
AA	250,739	12.7%
A	243,560	12.3%
≤ BBB, NR	406,263	20.6%
Total	**1,975,434**	**100%**

C.4 Liquidity risk

Liquidity risk refers to the risk of being unable to meet our financial obligations when they become due. 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 poorer 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.

Regarding the “total amount of the expected profit included in future premiums” required by Art. 295 (5) of the Delegated Regulation 2015/35 please refer to the Quantitative Reporting Template S.23.01.22, item R0790. We do not use this quantity for our liquidity management.

C.5 Operational risk

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.

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.

The following table shows the required risk capital for operational risk as at 31 December.

Required risk capital (confidence level 99.5 %)

in TEUR	2023	2022
Operational risk	653,621	620,826

The changes in the operational risk result above all from updated expert assessments regarding the impact of individual scenarios.

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 arise from natural or man-made hazards that threaten or disrupt the business operations. The risk also includes IT service continuity risks. 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 infrastructures/external service companies
- Critical events without direct impact on our business operation

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 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 Hannover Re. 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 relevant parts of the Hannover Re'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 and interfaces with risk management have been put in place. The set of tools is rounded off with regular compliance training programs 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.

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.

The generally increasing shortage of qualified specialists also poses challenges for the Hannover Re. 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 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 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.

C.6 Other material risks

Of material importance to our company in the category of other risks are primarily emerging risks, strategic risks as well as sustainability and reputation risks.

Furthermore, we monitor the contagion risk between single entities of the Hannover Re Group and in respect of the relation to the HDI Group.

C.6.1 Emerging risks

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, partly being megatrends so as 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. Therefore e.g. 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 & 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 consistent participant in the CRO Forum's Emerging Risk Initiative, which continuously tracks and analyses various emerging risks, publishes information on megatrends and associated risks and conducts corresponding impact analyses. The megatrends 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.

C.6.2 Strategic risks

Strategic risks derive from a possible imbalance between the corporate strategy of the Hannover Re and the constantly changing general business environment, for example with respect to evolving regulatory requirements or the geopolitical environment. 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.

C.6.3 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.

Reputational 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 Hannover Re. A good corporate reputation is therefore an indispensable prerequisite for our core business as a reinsurer. Reputational risks may arise out of all business activities conducted by the Hannover Re. 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 reputational 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.

C.6.4 Important developments

In this section, we describe external developments in 2023 with particular relevance for risk management.

C.6.4.1 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.

C.6.4.2 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.

C.6.4.3 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.

C.6.5 Contagion risks

Contagion risk refers to the risks originated by interactions between individual entities of Hannover Re Group. More precisely, contagion risk is the propagation of the effect of a failure or

financial distress of an organisation in a sequential manner to other organisations, markets or systems, or to other parts of a financial group or financial conglomerate.

Hannover Re manages this risk by a strict look-through approach in its management systems.

D. Valuation for Solvency purposes

A valuation principle assigns monetary values to sets of rights and obligations in a structured way. The decision on what rights and obligations need to be considered is one of the distinguishing features of the valuation principles.

Hannover Re's internal valuation approaches are based on economic valuation principles. In principle economic valuation assigns to each right or obligation the price at which this right or obligation would be traded in an arms-length transaction between willing and knowledgeable parties. This principle has the advantages of being:

- Objective, since transaction prices can (in theory) be simply observed and do not require any further input,
- Comprehensive, since a transaction would incorporate all potential cash flows arising from those rights or obligations. In particular there can be no off-balance sheet items within an economic valuation framework,
- Risk-adjusted, since trades between risk-adverse parties will always incorporate the price of risk.

Depending on the specific position being valued and the state of the market at the time of valuation, two different and mutually exclusive levels of valuation can be distinguished:

Mark-to-market: This is the prototypical and simplest level of economic valuation. It is applicable if the positions to be valued are quoted in an active market. In that case, the value of the position is just the market price. Examples for positions, which can be valued on a mark-to-market basis are US treasuries, blue chips or futures with standard maturities on broad indices, such as the S&P 500. In general, everything traded in a deep and liquid market can be valued on a mark-to-market basis.

Market-consistent valuation (mark-to-model): This principle applies if neither prices themselves nor all inputs required for generally accepted pricing models can be observed in active markets. Accordingly, at least some parameters and inputs will be based on judgmental, and thus subjective, decisions. The valuation of many investments and most insurance contracts falls within this category, which is why this level of valuation is the most important one within the internal model. For consistency of the valuation with mark-to-market principles, it is required that

1. Observable prices and model parameters derived from them are used wherever available,

2. Parameter estimates are unbiased and derived according to sound techniques based on statistics or expert judgment,

3. Unavoidable risk must be allowed for in the valuation, consistent with the prevailing market price of risk. For this, it does not matter whether the risk is caused by the cash flows themselves or due to uncertainties in models or parameter estimates. This allowance for risk is called the risk margin.

Unavoidable risk is defined as the risk, which cannot be replicated completely by financial instruments. If it can be replicated by such instruments, the risk can be avoided by investing in the replicating portfolio and the price of the position will be identical to the price of the replicating portfolio.

Many risks are hedgeable in principle but some positions in the resulting hedge portfolios might not be quoted in active markets. One example is credit risk of smaller or non-listed obligors, where in theory OTC CDS are available from certain counterparties but observable market prices are not. In

addition, if the position cannot be replicated perfectly, i.e. if basis risk remains, this residual risk is still considered unavoidable and requires a risk margin.

The terms unavoidable and non-hedgeable will be used synonymously below.

Non-hedgeable risk is allowed for in Hannover Re's economic valuation framework by decreasing assets and / or increasing liabilities with a risk margin. Hannover Re defines the risk margin for non-hedgeable risk as the market cost of capital required for the orderly run-off of all its rights and obligations.

Fair value hierarchy according to IFRS

The fair value hierarchy according to IFRS, which reflects characteristics of the price data and inputs used for measurement purposes, is similar to Solvency II valuation methods and 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.

General valuation principles

The primary objective is an economic, market-consistent approach to the valuation of assets and liabilities. According to the risk-based approach in the internal steering processes as well as under Solvency II, when valuing balance sheet items on an economic basis, the risks that arise from a particular balance sheet item need to be considered, using assumptions that market participants would use in valuing the asset or the liability.

According to this approach, assets and liabilities should be valued as follows:

- Assets should be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction.
- Liabilities should be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction.
- The time value of money should be reflected, i.e. all cash flows are discounted. The discount rate should take the long-term asset management strategy into account, i.e. whether the company acts as held-to-maturity investor or not.
- When valuing liabilities no adjustment to take account of the own credit standing of the insurance or reinsurance undertaking shall be made.

- Assets and liabilities shall be valued based on the assumption that the undertaking will pursue its business as a going concern.
- Individual assets and liabilities are valued separately.
- The application of materiality, whereby the omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the Solvency II balance sheet. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor.
- The application of simplifications is feasible when the method is proportionate to the nature, scale and complexity of the risks inherent.

Unless otherwise stated, assets and liabilities other than technical provisions shall be recognised in conformity with the international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002.

- Valuation of assets and liabilities other than technical provisions shall be carried out, unless otherwise stated, in conformity with international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002 provided that those standards include valuation methods that are consistent with the valuation approach set out in Article 75 of Directive 2009/138/EC. If those standards allow for more than one valuation method, only valuation methods that are consistent with Article 75 of Directive 2009/138/EC can be used.
- Where the valuation methods included in international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002 are either temporarily or permanently not consistent with the valuation approach set out in Article 75 of Directive 2009/138/EC, insurance and reinsurance undertakings shall use the other valuation methods that have been deemed to be consistent with Article 75 of Directive 2009/138/EC.
- When valuing liabilities using fair value, the adjustment to take account of the own credit standing as required by IFRS 13 Fair Value Measurement has to be eliminated. When valuing financial liabilities this only applies to the subsequent adjustment after initial recognition.
- As a Guidance for marking-to-market and marking-to-model the guidance on fair value measurement within IFRS 13 may be used, for example the characteristics of inactive markets described in IFRS 13.

IFRS do not always require an economic valuation as envisaged by Article 75 of Directive 2009/138/EC.

Hannover Re makes use of the volatility adjustment.

D.1 Solvency II balance sheet

Difference in valuation

in TEUR	Item	Solvency II	IFRS
Assets			
Goodwill	R0010		77,968
Deferred acquisition costs	R0020		-5
Intangible assets	R0030		134,746
Deferred tax assets	R0040	70,518	627,922
Pension benefit surplus	R0050	1,946	1,946
Property, plant & equipment held for own use	R0060	162,198	148,596
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	59,211,532	59,447,524
Property (other than for own use)	R0080	3,033,259	2,536,501
Holdings in related undertakings, including participations	R0090	3,021,142	3,019,187
Equities	R0100	0	0
Equities - listed	R0110		
Equities - unlisted	R0120	0	0
Bonds	R0130	48,147,898	50,775,981
Government Bonds	R0140	27,300,529	30,262,558
Corporate Bonds	R0150	19,044,143	18,786,761
Structured notes	R0160	151,475	0
Collateralised securities	R0170	1,651,750	1,726,663
Collective Investments Undertakings	R0180	3,677,928	2,232,952
Derivatives	R0190	102,857	264,636
Deposits other than cash equivalents	R0200	1,176,809	552,337
Other investments	R0210	51,638	65,930
Loans and mortgages	R0230	1,009,530	275,498
Loans and mortgages to individuals	R0250	1,346	
Other loans and mortgages	R0260	1,008,184	275,498
Reinsurance recoverables from:	R0270	1,556,090	2,013,086
Non-life and health similar to non-life	R0280	1,523,564	1,868,237
Non-life excluding health	R0290	1,513,861	1,857,401
Health similar to non-life	R0300	9,702	10,836
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	-33,662	144,849
Health similar to life	R0320	207,977	-8,973
Life excluding health and index-linked and unit-linked	R0330	-241,639	153,822
Life index-linked and unit-linked	R0340	66,188	
Deposits to cedants	R0350	10,357,234	10,187,231
Insurance and intermediaries receivables	R0360	7,479,226	16,936,554
Reinsurance receivables	R0370	410,773	1,317,113
Receivables (trade, not insurance)	R0380	444,185	1,966,820
Cash and cash equivalents	R0410	1,054,517	1,054,791
Any other assets, not elsewhere shown	R0420	205,064	205,769
Total assets	**R0500**	**81,962,813**	**94,395,558**

in TEUR	Item	Solvency II	IFRS
Liabilities			
Technical provisions – non-life	R0510	42,299,221	45,047,314
Technical provisions – non-life (excluding health)	R0520	39,593,487	42,331,647
TP calculated as a whole	R0530		
Best Estimate	R0540	38,862,911	
Risk margin	R0550	730,576	
Technical provisions - health (similar to non-life)	R0560	2,705,734	2,715,667
TP calculated as a whole	R0570		
Best Estimate	R0580	2,621,256	
Risk margin	R0590	84,478	
Technical provisions - life (excluding index-linked and unit-linked)	R0600	5,626,062	14,266,597
Technical provisions - health (similar to life)	R0610	3,485,272	3,967,376
TP calculated as a whole	R0620		
Best Estimate	R0630	3,048,140	
Risk margin	R0640	437,133	
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	1,939,348	10,299,221
TP calculated as a whole	R0660		
Best Estimate	R0670	302,448	
Risk margin	R0680	1,636,900	
Technical provisions – index-linked and unit-linked	R0690	2,636,618	
TP calculated as a whole	R0700		
Best Estimate	R0710	2,481,435	
Risk margin	R0720	155,183	
Contingent liabilities	R0740		
Provisions other than technical provisions	R0750	219,906	219,906
Pension benefit obligations	R0760	164,342	164,342
Deposits from reinsurers	R0770	302,028	228,570
Deferred tax liabilities	R0780	4,005,290	2,097,304
Derivatives	R0790	66,117	76,754
Debts owed to credit institutions	R0800	632,411	632,411
Financial liabilities other than debts owed to credit institutions	R0810	1,111,720	1,143,347
Insurance & intermediaries payables	R0820	2,018,582	10,850,157
Reinsurance payables	R0830	1,533,357	2,453,935
Payables (trade, not insurance)	R0840	624,179	624,179
Subordinated liabilities	R0850	3,046,574	3,229,874
Subordinated liabilities not in BOF	R0860	0	0
Subordinated liabilities in BOF	R0870	3,046,574	3,229,874
Any other liabilities, not elsewhere shown	R0880	425,105	2,341,356
Total liabilities	**R0900**	**64,510,071**	**83,376,046**
Excess of assets over liabilities	**R1000**	**17,452,742**	**11,019,512**

For general differences in valuation between Solvency II and IFRS please refer to Section D.

Comparison to prior year

in TEUR	Item	Solvency II 2023	Solvency II 2022
Assets			
Intangible assets	R0030		
Deferred tax assets	R0040	70,518	1,309,190
Pension benefit surplus	R0050	1,946	
Property, plant & equipment held for own use	R0060	162,198	180,631
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	59,211,532	55,117,406
Property (other than for own use)	R0080	3,033,259	2,857,986
Holdings in related undertakings, including participations	R0090	3,021,142	3,041,489
Equities	R0100	0	0
Equities - listed	R0110		
Equities - unlisted	R0120	0	0
Bonds	R0130	48,147,898	44,508,215
Government Bonds	R0140	27,300,529	25,587,524
Corporate Bonds	R0150	19,044,143	17,336,172
Structured notes	R0160	151,475	125,504
Collateralised securities	R0170	1,651,750	1,459,015
Collective Investments Undertakings	R0180	3,677,928	3,082,344
Derivatives	R0190	102,857	202,670
Deposits other than cash equivalents	R0200	1,176,809	1,320,962
Other investments	R0210	51,638	103,738
Assets held for index-linked and unit-linked contracts	R0220		
Loans and mortgages	R0230	1,009,530	403,043
Loans and mortgages to individuals	R0250	1,346	2,087
Other loans and mortgages	R0260	1,008,184	400,956
Reinsurance recoverables from:	R0270	1,556,090	2,147,057
Non-life and health similar to non-life	R0280	1,523,564	2,046,388
Non-life excluding health	R0290	1,513,861	2,035,250
Health similar to non-life	R0300	9,702	11,138
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	-33,662	79,155
Health similar to life	R0320	207,977	190,910
Life excluding health and index-linked and unit-linked	R0330	-241,639	-111,754
Life index-linked and unit-linked	R0340	66,188	21,513
Deposits to cedants	R0350	10,357,234	10,348,498
Insurance and intermediaries receivables	R0360	7,479,226	1,626,128
Reinsurance receivables	R0370	410,773	195,143
Receivables (trade, not insurance)	R0380	444,185	326,398
Cash and cash equivalents	R0410	1,054,517	1,323,006
Any other assets, not elsewhere shown	R0420	205,064	183,596
Total assets	**R0500**	**81,962,813**	**73,160,096**

in TEUR	Item	Solvency II 2023	Solvency II 2022
Liabilities			
Technical provisions – non-life	R0510	42,299,221	35,534,341
Technical provisions – non-life (excluding health)	R0520	39,593,487	33,061,299
TP calculated as a whole	R0530		
Best Estimate	R0540	38,862,911	32,328,248
Risk margin	R0550	730,576	733,050
Technical provisions - health (similar to non-life)	R0560	2,705,734	2,473,043
TP calculated as a whole	R0570		
Best Estimate	R0580	2,621,256	2,382,449
Risk margin	R0590	84,478	90,594
Technical provisions - life (excluding index-linked and unit-linked)	R0600	5,626,062	8,241,337
Technical provisions - health (similar to life)	R0610	3,485,272	3,788,965
TP calculated as a whole	R0620		
Best Estimate	R0630	3,048,140	3,269,063
Risk margin	R0640	437,133	519,902
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	1,939,348	4,452,372
TP calculated as a whole	R0660		
Best Estimate	R0670	302,448	2,627,764
Risk margin	R0680	1,636,900	1,824,607
Technical provisions – index-linked and unit-linked	R0690	2,636,618	715,318
TP calculated as a whole	R0700		
Best Estimate	R0710	2,481,435	705,963
Risk margin	R0720	155,183	9,355
Contingent liabilities	R0740		
Provisions other than technical provisions	R0750	219,906	189,703
Pension benefit obligations	R0760	164,342	153,757
Deposits from reinsurers	R0770	302,028	620,856
Deferred tax liabilities	R0780	4,005,290	4,832,252
Derivatives	R0790	66,117	61,417
Debts owed to credit institutions	R0800	632,411	675,894
Financial liabilities other than debts owed to credit institutions	R0810	1,111,720	1,170,209
Insurance & intermediaries payables	R0820	2,018,582	988,234
Reinsurance payables	R0830	1,533,357	204,606
Payables (trade, not insurance)	R0840	624,179	352,375
Subordinated liabilities	R0850	3,046,574	3,383,232
Subordinated liabilities in BOF	R0870	3,046,574	3,383,232
Any other liabilities, not elsewhere shown	R0880	425,105	488,229
Total liabilities	**R0900**	**64,510,071**	**57,611,759**
Excess of assets over liabilities	**R1000**	**17,452,742**	**15,548,338**

Solvency II recognition, valuation and presentation of balance sheet items follows regulatory requirements. The IFRS balance sheet is taken from Hannover Re Group's annual financial statements and shown in the column "IFRS" on the right-hand side.

Note that for allocation of investments under own management to Solvency II balance sheet items, detailed EIOPA regulations on classification as well as BaFin regulations (e.g., regarding collective investment undertakings) have to be followed and are not utilised for the IFRS balance sheet items.

In 2023 IFRS 17 and IFRS 9 was introduced. As a consequence, the IFRS balance sheet changed compared to previous years.

Comparing Solvency II and IFRS balance sheets, Hannover Re Group classifies differences in recognition, valuation and presentation into the following categories:

- Adjustments of self-managed investments, which comprise market valuation vs. valuation at amortised cost for several, but not all self-managed investments under IFRS,
- Adjustments of technical items (incl. risk margin), where technical items are revaluated for Solvency II purposes as described in Section D.2,
- Adjustments of other balance sheet items (without deferred taxes), which mostly consist of differences in recognition of balance sheet items for Solvency II vs. IFRS (e.g. intangible assets) as well as reclassifications, together with market valuation (e.g. of subordinated liabilities),
- Deferred tax, which comprises the effects on deferred tax assets and deferred tax liabilities when moving from IFRS to Solvency II valuation.

Those adjustments amounted to a difference in excess of assets over liabilities (including minorities) for Solvency II compared to IFRS of TEUR 6,433,230 as at the balance sheet date.

With the publication of the Implementing Regulation (EU) 2023/894 by the European Commission on April 4, 2023, the application of Directive 2009/138/EC of the European Parliament and the Council was adapted.

In accordance with the aforementioned legal bases, reinsurance receivables and payables have to be split according to their certainty and existence of a settled agreement. Future payments whose absolute amount and due date are known after settlement with the cedant are reported within the respective balance sheet items. Estimated balances, on the other hand, are included into the reinsurance recoverables.

Since 2019, the Federal Financial Supervisory Authority's (BaFin) interpretative decision on the treatment of settlement receivables and liabilities required a breakdown by amounts due and overdue, both in assumed and ceded business. The application of the interpretative decision was suspended in 2021 and revised in the reporting period on 11 October 2023 with reference to the amendments by the new Implementing Regulation.

The aforementioned changes have an effect on the disclosure in the Solvency II balance sheet. Apart from this development, the principles of recognition, valuation and presentation remained unchanged compared to the previous period.

Apart from the mentioned adjustments in the Solvency II balance sheet, the principles of recognition, valuation and presentation remained unchanged compared to the previous year.

D.2 Technical provisions

The technical provisions (TP) under Solvency II are determined as the sum of the best estimate liability (BEL) and the risk margin (RM).

Cash flows are discounted with risk-free rates in line with EIOPA requirements. A matching adjustment is not applied. Furthermore, the risk-free yield curves are not adjusted as set out in Art. 308c of the directives 2009/138/EC.

A temporary deduction according to Art. 308d of the directives 2009/138/EC is not applied. Furthermore, the concept of calculating the "TP as a whole" is currently not applied.

Hannover Re applies the static volatility adjustment according to Article 77d of the Directive 2009/138/EC. This is intended to mitigate the effect of temporary value fluctuations due to credit spread movements on the bond market. In order to capture this effect adequately for the calculation of the required capital Hannover Re uses the dynamic volatility in its internal model. The following table shows the impact of a non-application of a volatility adjustment on the TP, the Solvency Capital Requirement (SCR) and the basic own funds and the amounts of own funds eligible to meet the SCR.

Even under a non-application of a volatility adjustment, the solvency ratio is still comfortable.

Impact of non-application of a volatility adjustment

in TEUR	Amount with Long Term Guarantee measures and transitionals	Impact of volatility adjustment set to zero
Technical provisions	50,360,460	560,336
Basic own funds	18,951,902	-312,543
Eligible own funds to meet Solvency Capital Requirement	18,951,902	-312,543
Solvency Capital Requirement	7,032,514	294,152

Transitionals are currently not applied at Hannover Re. For Solvency II purposes, all contracts have to be evaluated over the whole lifetime within the individual contract boundaries (ultimate view). The contract boundary is defined as the future date on which at least one of the following criteria is met:

- The (re)insurance undertaking has a unilateral right to terminate the contract.
- The (re)insurance undertaking has a unilateral right to reject premiums payable under the contract.
- The (re)insurance undertaking has a unilateral right to amend the premiums or benefits payable under the contract in such a way that the premiums fully reflect the risks.

In case no such condition is met, the policies are projected until their natural expiry.

The BEL is shown on a gross basis in the following, i.e. before the deduction of reinsurance recoverables, if not stated otherwise. The RM is shown on a net basis, i.e. reflecting the risk mitigating effect of retrocessions. This is consistent with the methodology used in the Solvency II balance sheet.

Best Estimate Liability (BEL)

The calculation of the BEL is based on the projection of future cash in- and outflows including premiums, claims, and expenses. Best estimate assumptions are used in the calculation of the BEL. The expenses consist of direct administration expenses and costs of on-going operations.

Cash flows in connection with funds withheld (FWH) – increase, decrease or interest on FWH – of the underlying business are usually not netted against the liability cash flows. For very risk remote transactions a netted presentation is proceeded. For all other transactions the FWH are grossed up.

In the previous years, balances of accounts payables and receivables not due were allocated to the best estimates of technical provisions (for assumed business) or reinsurance recoverables (for retroceded business). Starting this year, only open items not yet agreed with retrocession partners with a certain amount are netted against the reinsurance recoverables.

According to Solvency II, there is a differentiation between business accepted – shown on the liability side – and business ceded – shown on the asset side. According to IFRS, the assignment to the asset and liability side, respectively, partially depends on the sign of the accounting figures.

For the Property & Casualty business, the TP does not include any financial options and guarantees (FOGs). For the Life & Health business, there is an immaterial amount of FOGs for US business. The latter is included in the BEL.

The projections are done separately for assumed and retroceded business using the same bases, methods and assumptions.

Risk Margin (RM)

According to Art. 37 (1) of the delegated acts (EU) 2015/35, a uniform Cost of Capital (CoC) approach is used for calculating the risk margin.

The CoC factor is 6%. The required capital is the SCR under Solvency II according to Hannover Re's internal model. The allocation of the SCR to the lines of business reflects the contribution to the SCR (Art. 37). The allocated SCR contributions are projected to future periods using appropriate risk drivers for each line of business.

According to Solvency II principles, the risk margin of all legal entities is calculated on a standalone basis, thus there is no allowance for diversification effects between legal entities. Diversification is taken into account within a legal entity including diversification effects between Property & Casualty and Life & Health.

D.2.1 Technical provisions of Property and Casualty Reinsurance

This section provides information on the technical provisions held for property and casualty reinsurance and insurance. The next section shows BEL and RM per line of business and the following section provides further detail on the valuation methods.

D.2.1.1 Value of technical provisions

Gross technical provisions property & casualty by lines of business
in TEUR

Line of business	BEL	RM	TP	TP IFRS 17	Difference SII and IFRS 17
General liability insurance	4,882,506	100,136	4,982,642	5,229,118	-246,475
Workers' compensation insurance	127,412	10,646	138,058	59,017	79,041
Income protection insurance	764,639	20,124	784,763	942,713	-157,950
Fire and other damage to property insurance	8,726,593	172,413	8,899,005	7,871,113	1,027,892
Motor vehicle liability insurance	2,942,437	37,712	2,980,150	1,757,866	1,222,284
Credit and suretyship insurance	1,614,834	35,386	1,650,219	1,942,835	-292,616
Marine, aviation, transport	1,167,949	19,685	1,187,634	1,090,216	97,418
Other motor insurance	1,382,082	31,384	1,413,466	731,753	681,713
Other insurance	591,414	10,086	601,500	620,873	-19,373
Non-proportional health reinsurance	1,552,727	51,625	1,604,352	1,572,389	31,963
Non-proportional property reinsurance	7,456,777	101,554	7,558,331	6,725,303	833,029
Non-proportional marine, aviation and transport	1,047,124	15,348	1,062,472	1,137,249	-74,777
Non-proportional casualty reinsurance	9,227,674	208,955	9,436,629	11,162,770	-1,726,142
Total Non-Life Obligation	**41,484,167**	**815,054**	**42,299,221**	**40,843,216**	**1,456,005**

The line of business "Other insurance" comprises assistance, legal expenses insurance, medical expense insurance and miscellaneous financial loss.

Within the TP IFRS 17 figures shown above the funds and deposits are netted. Furthermore, the TP IFRS 17 is shown before netting accounts payables and accounts receivables.

D.2.1.2 Valuation of technical provisions

For the calculation of the BEL under Solvency II the business of the company is split into homogeneous risk groups such that the nature, scale and complexity of the business is adequately taken into account.

In general, there are no deviations regarding the valuation methods between the different lines of business, therefore the valuation methods described in the following paragraphs are valid for all segments of property and casualty reinsurance.

The evaluation of the BEL is based on the estimation of future cash flows, including all expected (future) cash in- and outflows related to existing obligations taking into account the time value of money. The BEL is calculated separately with respect to the best estimate premium provisions and the best estimate claims provisions. First, average inflation rates of the past are taken into account. With the help of scenario-based analyses for expected future inflation rates, the necessity of surcharges is examined.

The Solvency II calculations to determine all relevant cash flows for premium and claims provision reflect a best estimate projection. The calculation of the BEL is based on gross data. Cash flows for premiums, claims and costs are modelled separately.

For the calculation, a whole-contract-view (with respect to the contractual agreements) is taken into account, i.e. all cash in- and outflows are projected to the economic ultimate within the contract boundaries.

The BEL comprises the sum of the discounted cash flows and is aggregated to the minimum lines of business according to Solvency II requirements.

For the calculation of the BEL, development pattern and estimated ultimates are applied on the homogeneous risk groups. The pattern and the ultimates are determined on run-off triangles using standard actuarial methods, in particular, variations of the Chain-Ladder-Method. The triangles are generated using up-to-date and trustworthy data.

The cash flows are discounted using the risk-free interest rates provided by EIOPA and converted to the reporting currency EUR using the exchange rate on the valuation date.

Overall, the described valuation bases, methods and assumptions ensure that the calculation of the BEL is proportionate to the nature, scale and complexity of the underlying risks.

Reinsurance Recoverables

In general, the projection of the reinsurance recoverables is undertaken analogously to the principles applied for the calculation of technical (gross) provisions of property and casualty reinsurance.

The reinsurance recoverables are adjusted with regard to the expected loss upon default of the counterparty. This adjustment is determined separately and is based on the valuation of the probability of a default per counterparty over the whole lifetime – whether be it through insolvency or legal dispute – as well as the resulting change in cash flows due to loss per default at the respective time under consideration.

D.2.1.3 Comparison with other provisions

Comparison to IFRS provisions

This section outlines the reconciliation of the net technical provisions from IFRS to the Solvency II.

Reconcilliation Solvency II vs. IFRS
in TEUR

Description	2023
IFRS 17 liability net of reinsurance	**38,825,124**
Elimination of Contractual Service Margin	-1,748,840
Elimination of deposits netted under IFRS 17	4,316,315
Difference between IFRS 17 Risk Adjustment and SII Risk Margin	-28,528
Further differences in methods / assumptions	-775,398
Total revaluation effect from IFRS 17 to Solvency II	**1,763,549**
Solvency II TP net of reinsurance	**40,588,673**

The IFRS 17 TP net of reinsurance is shown before netting accounts payables and accounts receivables.

The main sources of the differences in methods and assumptions are:

- Under IFRS 17, only directly attributable costs are taken into account whereas under Solvency II, all expenses are considered.
- Under both regimes, current risk-free interest rates (including a volatility adjustment (VA) under Solvency II and illiquidity premium (ILP) under IFRS 17, respectively) are used. However, the VA / ILP are determined based on different concepts.
- For some treaties the Solvency II contract boundaries may differ from the contract boundaries under IFRS 17 as well as the initial recognition date.

Comparison to BEL of last year

Comparison to prior year

in TEUR	2023	2022
BEL gross	41,484,167	34,710,697
BEL net	39,960,604	32,664,309
RM	815,054	823,644

The increase in BEL is mainly based on changed treatment of accounts payables and receivables for assumed business, which are no longer netted. Further reasons are economic effects and an increased business volume.

D.2.2 Technical provisions Life & Health

In the section, we provide quantitative information with respect to the Life°&°Health BEL, RM and TP as well as a comparison to the IFRS 17 liability.

Details with respect to the basis of valuation, the valuation methods, and the main assumptions underlying the calculation of the TP are given in Section „D.2.2.2 Valuation of technical provisions“. Details regarding the treatment of funds withheld (FWH) as well as payables and receivables are provided in Section D.2.

Material differences between the TP and the IFRS 17 liability are explained in Section D.2.2.4.

D.2.2.1 Quantitative Information on technical provisions Life & Health

The following table provides an overview of the liabilities of the segments. The index-linked and unit-linked business is contained in the life segment.

Technical provisions Life & Health per line of business
in TEUR

Line of Business	BEL	RM	TP	IFRS 17 liability	Comparison IFRS 17/ Solvency II
Life	2,783,883	1,792,084	4,575,966	10,299,221	-5,723,254
Health	3,048,140	437,133	3,485,272	3,967,376	-482,104
Total	**5,832,022**	**2,229,216**	**8,061,239**	**14,266,597**	**-6,205,358**

A reconciliation from the IFRS 17 liability net of reinsurance to the Solvency II TP net of reinsurance is provided in Section D.2.2.3.

D.2.2.2 Valuation of the technical provisions Life & Health

Valuation basis

All business is valued employing current best estimate assumptions. The general methodology used for calculating the BEL, RM and TP is described in Section D.2.

With only a few exceptions, the BEL is calculated individually per treaty. The calculation is based on weighted model points or – if available and material – based on individual policy data. The portfolio development is modelled using appropriate mortality and morbidity tables, respectively, as well as lapse rates. A certain part of the risk premium basis business is modelled based on a loss-ratio based approach.

Valuation methods

Based on weighted model points (e.g. tariff, gender mix, entry age, policy term, reinsurance conditions) and policy data, respectively, as well as assumptions for mortality, morbidity, lapse and relevant interest rate curves, the portfolio development and all resulting reinsurance profit items (i.e. premium, commission, benefits, reserve changes, and interest) are projected into the future.

Assumed and retroceded business is projected separately. Management expenses are allocated and projected into the future. Usually, thereby the reporting currency of the respective entity is applied.

The BEL is calculated in the respective treaty main currency and using currency specific interest rate curves.

Simplified methods are not used for calculating the BEL and RM, respectively.

Material assumptions for the Life & Health business (excluding longevity business)

Business is written all over the world with a wide range of different policy types, tariffs and mortality / morbidity tables.

For treaties projected individually, the calculation of the BEL is initially based on weighted model points (or detailed policy data). The assumptions are regularly reviewed and - if necessary - adjusted on the basis of the accounts from the cedents or detailed experience analyses. The base mortality / morbidity table is usually the table used in pricing. Also here, adjustments are made in case that the actual figures materially differ from expectation, or if other relevant information becomes available. The reinsurance conditions of the treaty are reflected in the calculation of the BEL.

For the majority of the business in the US and UK market, specific mortality and morbidity assumptions are derived from Hannover Re's base standard tables and updated regularly. For financial solution and morbidity risk solution business in the US market, mortality / morbidity assumptions are set using best estimate pricing assumptions. Also they are validated regularly. The projection of structured financial transactions in the US market allows for counterparty recapture assumptions. Rates can be increased for certain health business in the US market. This circumstance is reflected in the projections since this is market practice of managing the business.

Lapse rates are set from the original pricing basis of the treaty and adjusted for actual experience where credible data exists and for changes of the internal view of long-term lapse rates.

With exception of mortality or morbidity business in the North American, UK and Irish market, no allowance for future trends is made.

A few smaller treaties modelled are in an aggregate manner using more general assumptions. Base mortality / morbidity tables are chosen in order to be appropriate for the market of the respective treaties. The assumptions are monitored based on the booked results from the past and adjusted if necessary.

For a portion of the business expected claims are based on claims ratios. I.e. instead of using explicit mortality / morbidity and lapse rates, the claims are estimated via a certain proportion of the premium.

Future Management Actions (FMA) are reflected for certain American, Australian and Asian business. Except for some Asian and some US business, the management actions have generally no impact on the Best Estimate Projections, but only on the stress scenarios used for the internal model. Therefore, they affect the SCR and the risk margin. For Asian business, FMA is only considered in the BEL.

Material assumptions for the longevity business

The calculation of the BEL is based on policy data. Best estimate base mortality assumptions are set on a treaty level. Best estimate mortality improvement assumptions are set either by treaty or by country. The assumptions are monitored when the accounts from the cedants are booked and are in turn adjusted, if necessary, or if other relevant insight emerges. Furthermore, detailed mortality studies are carried out to allow for a comparison between expectation and experience and to adjust if necessary.

Assumptions changes in comparison to the previous reporting period

For the longevity business in the UK market, there was a BEL reducing effect from the adjustment of the mortality improvement and mortality assumptions for large parts of the portfolio. This reduction was so material that it outweighed the BEL-increasing effects mentioned in the next section.

There were adjustments to the morbidity assumptions for selected critical illness contracts of the Shanghai branch. The mortality, mortality improvement and expense assumptions were revised for some material mortality contracts in the UK market. The lapse and morbidity assumptions were adjusted for a contract in the Australian market. Adjustments were made to the mortality and mortality improvement assumptions for mortality business of the branch in Canada.

Reinsurance recoverables

For all retrocessions to third party reinsurers where the recoverable represents an asset to Hannover Re, a default adjustment according to their rating was included.

In total the reinsurance recoverables under Solvency II are positive (TEUR 32,526), i.e. this position is to be seen as an asset for Hannover Re and reduces the net Solvency II reserves.

The respective IFRS 17 reinsurance recoverables amount to TEUR 144,849. Some revaluation steps between IFRS 17 and Solvency II are provided in Section D.2.2.4.

Risk assessment

The main area of uncertainty around the level of the TP relates to a potential deviation of actual experience from the underlying assumptions and the sensitivity of cash flows to changes in those assumptions. The Risk Margin can serve as an indicator of such uncertainty.

The key driver to the overall level of uncertainty comes in the form of the mortality, longevity and morbidity business. This also becomes evident from the capital requirements under Solvency II presented in Section E.

For the mortality business, small changes in the mortality rates can have significant effects on the claims payments. However, for a significant share of the portfolio, this risk is largely mitigated by profit commission arrangements or by limits regarding the retention of the cedant such that changes in mortality rates would change the underlying cash flow pattern but would have a limited impact on the associated BEL. The mortality rates are well grounded in available data. For longer tailed products, in particular in the North American and UK market, mortality improvement and expert settings can also play an important role. Significant mortality risk is stemming from US mortality business.

The longevity business is very dependent on the appropriateness of the underlying mortality tables and mortality improvement assumptions, in particular due to its long-term nature. While the premiums are known, the expected claim payments are sensitive to the underlying mortality table, and more importantly in the later years, the mortality improvement that is applied to the underlying table. The underlying mortality assumptions are based on copious amounts of data and experience studies, both internally held and industry accepted. However, a certain level of judgment is involved in assessing the applicability of historical mortality improvement observations for forward-looking purposes. In general, changes in the interest rates have little impact as to the cash flows; however, they can have a material impact on the discounting of the cash flows.

Morbidity risks are a material driver of uncertainty in the modelling of business. Relevant morbidity risks are stemming from potential changes of incidence rates for Chinese critical illness business as well as from Australian and Taiwanese disability business and UK critical illness business.

Changes in lapse rates are material for certain products as well, with a varying level of confidence based on product design and the experience available. The direction of the lapse effect is dependent on the treaty and type of reinsurance used. In aggregate, an increase in lapse rates would be more adverse in that Hannover Re Group would forgo positive expected future cash flows.

Pandemic risk is a tail risk, i.e. a risk with a low probability of occurrence but a potential high impact. It is one of the key drivers of capital requirements and is therefore allowed for in the Risk Margin. Only minor impacts are expected from Covid-19 going forward.

Financing business is generally not or only moderately exposed to mortality or morbidity risks and thus experiences a low level of uncertainty. Repayment of the outstanding financing amount can diminish on a combination of adverse biometric experience and lapses, but this is accounted for in the Risk Margin. Cedant default risk is also accounted for in the Risk Margin.

D.2.2.3 Comparison of the technical provision with the IFRS 17 liability

In the following, a reconciliation between IFRS 17 and Solvency II liabilities is provided. The reconciliation steps are explained below. The figures are net of reinsurance recoverables.

Reconciliation from IFRS 17 to Solvency II
in TEUR

Reconciliation Step	Explanation	2023
(1)	**IFRS 17 liability net of reinsurance**	**8,161,466**
(2)	Elimination of Contractual Service Margin	-5,950,291
(3)	Elimination of deposits netted under IFRS 17	5,642,346
(4)	Elimination of accounts payables and receivables netted under IFRS 17	317,936
(5)	Difference between IFRS 17 Risk Adjustment and SII Risk Margin	-655,841
(6)	Further differences in methods / assumptions	513,098
(7)=(1)+…+(6)	**Solvency II TP net of reinsurance**	**8,028,713**

The main sources of the differences in methods and assumptions are:

(6a) The Solvency II BEL includes certain IFRS 9 and IFRS 15 transactions which are accounted as (re-)insurance business under Solvency II, but not under IFRS 17.

(6b) Under IFRS 17, only directly attributable costs are taken into account whereas under Solvency II, all expenses are considered.

(6c) Under both regimes, current risk-free interest rates (including a volatility adjustment (VA) under Solvency II and illiquidity premium (ILP) under IFRS 17, respectively) are used. However, the VA / ILP are determined based on different concepts.

(6d) For some treaties the Solvency II contract boundaries differ from the contract boundaries under IFRS 17.

E. Capital Management

This section presents the main elements of Hannover Re's capital management.

E.1 Own Funds

E.1.1 Management of own funds

Hannover Re aims to maintain a capitalisation of at least 180% under Solvency II. In addition, a threshold of 200% is defined. Own funds are managed in such a way that the minimum capitalisation is not undercut in the planning. This is achieved through coordinated planning and management of all own funds components, dividend payments and the risk profile.

The capital management process comprises a classification of all own funds components with regard to the Solvency II tiering specifications, with regard to basic and ancillary own funds and an assessment of the availability of the different own funds components.

In general, it is our objective for our hybrid capital instruments to correspond with the tier 2 category requirements. The timing of each issue takes into account the current market conditions and our medium-term growth objectives. In case of a required replacement of a subordinated bond, the detailed replacement planning process normally begins a year before the regular call date.

Hannover Re Group's economic capital model is used for the evaluation of both the quantitatively measurable individual risks and also the overall risk position. The assumptions and calculation methods for the determination of the risk-bearing capacity of the company are recorded in the documentation of the risk model and in regular reports.

E.1.2 Tiering

The classification of own funds with regard to their ability to cover losses represents a central component of regulatory capital requirements pursuant to Solvency II. The individual components of the own funds will be classified into one of three quality classes ("tiers").

Own fund items classified under tier 1 possess the highest degree of quality, due to the fact that they are permanently available. They equalise verifiably unexpected losses, both during ongoing business operations and in the event of a company liquidation. Tier 2 refers to basic own funds and ancillary own funds which possess the ability to equalise losses incurred in the event of a company liquidation. Own fund items, which are not categorised under tier 1 or tier 2, are categorised under tier 3.

E.1.3 Basic own funds

The following table displays the composition of basic own funds held by Hannover Re Group as of 31 December 2023.

Basic own funds

in TEUR	2023	2022
Tier 1 unrestricted	15,834,810	14,002,020
Ordinary Share capital	120,597	120,597
Share premium account related to ordinary share capital	880,608	880,608
Reconciliation reserve	15,468,710	13,650,756
Non available minority interests at Group level	-635,105	-649,941
Tier 1 restricted	496,435	486,034
Subordinated liabilities	496,435	486,034
Tier 2	2,550,139	2,897,198
Subordinated liabilities	2,550,139	2,897,198
Tier 3	70,518	128,783
Net deferred tax assets	70,518	128,783
Total	**18,951,902**	**17,514,035**

The change in basic own funds is a result of the increasing reconciliation reserve, the redemption of a subordinated bond and deteriorating net deferred tax assets.

The reconciliation reserve change results from a change in excess of assets over liabilities and – compared to the previous year – change in foreseeable dividend.

Solvency II imposes restrictions on the availability of own funds to cover SCR. For Hannover Re restrictions arise from non-available minority interests at Group level which relate primarily to the minority interests in E+S Rück.

Tier 3 capital arises as a consequence of net deferred tax assets in branches and subsidiaries of the Hannover Re Group.

Restrictions may arise from limitations to use tier 2 and tier 3 capital to meet SCR and MCR. Such restrictions do not arise for Hannover Re with respect to SCR coverage but with respect to the availability of tier 2 and tier 3 capital to cover MCR.

Funds are denoted as eligible if they can effectively be used to cover the SCR or MCR.

Available and eligible own funds

in TEUR	2023	2022
Available own funds	18,951,902	17,514,035
Eligible own funds to meet SCR	18,951,902	17,514,035
Eligible own funds to meet MCR	17,299,483	15,419,805

E.1.3.1 Movement analysis of eligible own funds and solvency capital requirements

The movement analysis of Solvency II eligible own funds and SCR in the year under consideration is presented in the table below.

Eligible own funds and SCR movement analysis

in TEUR	Eligible own funds	SCR
Year end 2022	**17,514,035**	**6,952,301**
Model changes	154,160	-43,964
Operating Impact	2,837,613	351,210
Market variances	545,913	-138,983
Taxes	-736,454	-88,050
Capital management	-1,363,364	-
Year end 2023	**18,951,902**	**7,032,514**

Model changes include internal model changes approved by the regulator in the course of the model governance process. In addition, it includes model updates for the calculation of technical provisions or other items. The main impact for eligible own funds during the reporting period relates to the calculation of technical provisions for life and health business. A number of minor model changes, with each of them having a small impact, affected the SCR.

Operating impacts mainly comprise the investment result above risk-free, unwind, new business value and the property and casualty run-off result as well as assumption changes. The operating impact was clearly positive during the reporting period, mainly due to the positive contribution from new business for both life and health and property and casualty business. For the SCR the effect from operating experiences mainly stems from an increased business volume. This relates to P&C and L&H business but also to new investment.

Market variances comprise changes in eligible own funds and SCR due to changes of foreign exchange rates, interest rates, credit spreads and other financial market indicators. All in all, the changes in the financial 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 development of exchange rates and credit spreads. Depreciated exchange rates compared to EUR contribute mainly to the decrease in SCR. We observe an offsetting effect from the lower interest rate level as well as from changes in the average spread levels and the update of the EIOPA VA portfolio.

All items are shown on a pre-tax basis, tax effects including tax payments and changes in deferred taxes are shown separately.

Capital management comprises dividend payments and changes in foreseeable dividends. Moreover, a subordinated bond has expired and was repaid in the reporting period.

E.1.3.2 Reconciliation IFRS to Solvency II basic own funds

Finally, we present the transition from IFRS shareholders' equity to Solvency II basic own funds.

Reconciliation of IFRS shareholders' equity to Solvency II own funds

in TEUR	2023	2022
Shareholders' equity IFRS incl. minority interests	**11,019,512**	**9,956,864**
Adjustments Solvency II to IFRS		
Adjustments of investments under own management	-475,604	542,292
Adjustments of technical items (incl. risk margin)	8,625,357	6,385,905

Adjustments of other balance sheet items	748,867	465,334
Deferred tax	-2,465,390	-1,802,057
Economic shareholders' equity incl. minority interests	**17,452,742**	**15,548,338**
Foreseeable dividends	-912,310	-767,593
Subordinated liabilites	3,046,574	3,383,232
Available economic shareholders' equity incl. minority interests	**19,587,007**	**18,163,976**
Non available minority interests at Group level	-635,105	-649,941
Total amount of basic own funds after deductions	**18,951,902**	**17,514,035**

The reconciliation for 31 December 2022 was adjusted retrospectively due to the transition to IFRS 17 and IFRS 9.

E.1.3.3 Ordinary share capital

The ordinary share capital (capital stock of Hannover Rück SE) stands at TEUR 120,597 as of the balance sheet date. The shares have been paid up in full. The capital stock is divided into 120,597,134 no-par value registered shares which carry both voting and dividend rights. Every share grants the same right to vote and same dividend entitlement. As at the balance sheet date no treasury shares were held by the company.

No new shares were issued in the reporting period.

The capital stock paid in and the corresponding issue premium in the capital reserve form the own funds bearing the highest degree of quality, which can be relied upon to equalise losses in the course of business operations.

E.1.3.4 Share premium account related to ordinary share capital

The issue premium in relation to the capital stock of Hannover Re Group stands at TEUR 880,608 as of the balance sheet date.

The share premium account is a separate item to which premiums, the amount between the value attained at the point in time of issuance and the value recorded in the capital stock, are transferred in accordance with national statutory provisions.

E.1.3.5 Reconciliation reserve

The reconciliation reserve pursuant to Solvency II represents an item of basic own funds attributable (in unlimited capacity) to category tier 1. It primarily comprises the excess of assets over liabilities, adjusted by the subscribed capital, the capital reserve and shareholder dividend payouts.

At the balance sheet date, the reconciliation reserve was TEUR 15,468,710.

The reconciliation reserve represents reserves (in particular retained earnings) less value adjustments; it does, moreover, contain the differences between the accounting valuation pursuant to IFRS and the valuation pursuant to the Directive 2009/138/EC.

E.1.3.6 Subordinated own funds

Hannover Re Group holds five subordinated bonds in its portfolio at the balance sheet date, which fulfil the criteria stipulated under Solvency II pertaining to subordinated liabilities, and which thus can be categorised under basic own funds.

Subordinated own funds

in TEUR	2023	2022
Subordinated debts (Tier 1 – restricted)	496,435	486,034
Subordinated debts (Tier 2)	2,550,139	2,897,198
Total	**3,046,574**	**3,383,232**

In the reporting period, the subordinated bond issued by Hannover Finance (Luxembourg) S.A. with a nominal value of TEUR 500,000 was redeemed.

In addition, further subordinated liabilities with equity character exist as of the reporting date:

On 14 November 2022 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 22 March 2021 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 8 July 2020 Hannover Rück raised a subordinated bond with a nominal value of TEUR 500,000 from capital markets. The bond issued is classified as tier 2.

On 9 October 2019 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 15 September 2014 Hannover Rück raised a subordinated bond with a nominal value of TEUR 500,000 from capital markets. This debt is classified under Solvency II as “Grandfathered restricted tier 1” own funds for a transitional period of a maximum of 10 years.

On the basis of their tiering classes, the value of the subordinated debt can be fully used to cover the Solvency Capital Requirement when applying the limit on eligible own funds in accordance with Article 82 Delegated Regulation 2015/35.

E.1.4 Transferability

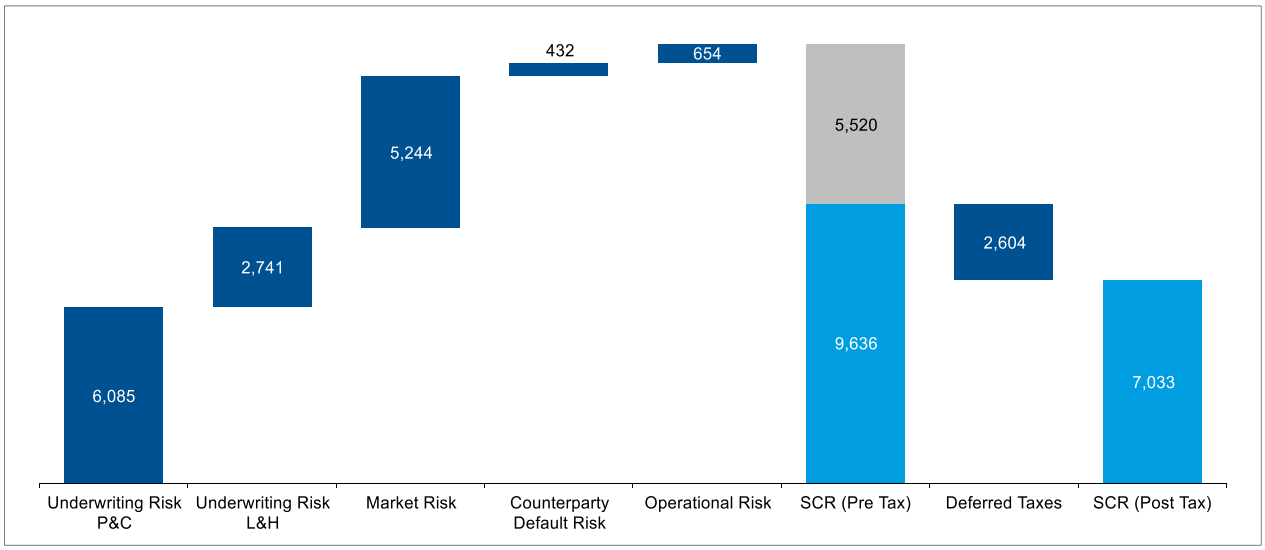
Hannover Re Group actively manages its capital resources. Restraints in transferability arise due to minority interests in E+S Rück of TEUR 635,105. In the period under consideration, no further issues were identified that restrict the transferability of the capital for the covering of the solvency capital requirements.

E.2 Solvency Capital Requirement and Minimum Capital Requirement

E.2.1 Solvency Capital Requirement per Risk Category

This section deals with the Solvency Capital Requirement and its sources. The risk categories of the internal model of Hannover Re are defined in Section E.4.1.4. Capital requirements per risk category are shown in the following.

Solvency Capital Requirement – per risk category
in EUR million



Solvency Capital Requirement (SCR)
in TEUR

Solvency Capital Requirement	2023	2022
Underwriting risk - Property & Casualty	6,085,294	5,664,198
Underwriting risk - Life & Health	2,740,955	2,509,950
Market risk	5,244,241	5,175,558
Counterparty default risk	432,146	434,678
Operational risk	653,621	620,826
Diversification	-5,520,216	-4,862,387
Total risk (pre-tax)	**9,636,040**	**9,542,822**
Deferred tax	2,603,526	2,590,521
Total risk (post-tax)	**7,032,514**	**6,952,301**

The required capital has been calculated based on the approved internal model. Hannover Re applies the static volatility adjustment according to §82 of the Insurance Supervision Law VAG. This is intended to mitigate the effect of temporary value fluctuations due to credit spread movements on the bond market. In order to capture this effect adequately for the calculation of the required capital Hannover Re uses the dynamic volatility in its internal model.

The model is subject to strict internal quality checks and extensive validation. Moreover, the continuous model supervision has not revealed any material limitations in the determination of capital requirements so far. In particular, there are no capital add-ons imposed by the regulator.

Overall, the required capital at the confidence level of 99.5% slightly increased in 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.

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.

The higher business volume and the decline in interest rates leads to an increase in underwriting risks in life and health reinsurance. This particularly affects longevity risk and pandemic risk.

The slight increase in the market risk reflects the 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.

A smaller volume of financial business in life and health reinsurance was the main driver for the slight decrease in counterparty default risks.

The changes in operational risk can be attributed to updated expert assessments regarding the impact of individual scenarios.

The increase in the diversification effect is a result of changes in the composition of the risks. The loss-absorbing effect of taxes remains stable.

For the calculation of the loss-absorbing capacity of deferred taxes, a major model change has been implemented due to regulatory requirements. The build-up of deferred tax assets is restricted to the amount of initial net deferred tax liabilities. The net deferred tax liabilities basically stem from temporary valuation differences compared to the tax balance sheet.

The following table displays the Solvency Capital Requirement and the ratio of eligible own funds to SCR taking into account tiering restrictions.

Ratio of eligible own funds to Solvency Capital Requirement

in TEUR	2023	2022
Eligible own funds	18,951,902	17,514,035
SCR	7,032,514	6,952,301
Ratio of eligible own funds to SCR	**269%**	**252%**

E.2.2 Minimum Capital Requirement (MCR)

The following table displays the Minimum Capital Requirement and the ratio of eligible own funds to MCR taking into account tiering restrictions.

Ratio of eligible own funds to Minimum Capital Requirement

The group MCR is the result of the sum of the MCRs of the different legal entities.

in TEUR	2023	2022
Eligible own funds	17,299,483	15,419,805
MCR	4,841,186	4,658,752
Ratio of eligible own funds to MCR	**357%**	**331%**

E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement

Germany did not make use of the option to allow the use of a duration-based equity risk sub-module.

Consequently, Hannover Re does not use a duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement.

E.4 Differences between the standard formula and any internal model used

E.4.1 The internal model

Hannover Re received approval from the regulatory authorities to calculate its solvency requirements using a full internal capital model. This section provides information regarding the internal capital model.

E.4.1.1 Introduction

The quantitative risk management of Hannover Re provides a standardised framework for the assessment and management of all risks the undertaking is exposed to and of our capital position. In this context, the internal model is our key instrument. It is a stochastic enterprise model, covering all subsidiaries and business areas of Hannover Re.

The central key figure in risk and company management is the economic capital, which is evaluated according to market-consistent valuation principles and forms the basis for the calculation of the Solvency II capital.

The internal model of Hannover Re reflects all risks influencing the development of the economic capital. These risks are classified into underwriting, market, counterparty default and operational risks. For each of these risk categories, we have determined a series of risk factors for which we define a probability distribution. Risk factors are, as for instance, economic indicators, like interest rates, exchange rates and inflation rates, as well as insurance-specific indicators such as the

mortality rates in a specific age group of our insurance portfolio in a certain country, or the number of natural disasters in a certain region and the insured loss per disaster.

We use publicly accessible and historical data to specify the probability distributions of risk factors. In addition, we use industry specific and internal (re-)insurance data of Hannover Re. The judgement of internal and external experts supplements this process. The suitability of probability distributions is subject to regular review by our specialist departments and verified in conjunction with the regular, company-wide application of the capital model and allocation of costs of capital. Hannover Re calculates the required capital using the Value at Risk (VaR) reflecting the changes in economic value over a period of one year with a confidence level of 99.97%. This is equivalent to the target to limit the ruin probability over a horizon of one year to 0.03%. The internal target capitalisation of Hannover Re is significantly larger than that to a confidence level of 99.5% as required by Solvency II.

The internal capital model uses state-of-the-art techniques of insurance and financial mathematics. In case of underwriting risks, we draw on a comprehensive history of internal data to estimate probability distributions, e.g., for reserving risk. In the context of natural catastrophe risks, we use external models that we adjusted in the course of detailed internal reviews to represent our risk profile adequately. For Life and Health reinsurance we determine long-term cash flows for different scenarios. The determination of scenarios and probability distributions is based on internal data for all mentioned risks. The internal data base is enriched with parameters set by experts. These parameters are of importance in particular in the area of extreme events that have not been observed by now.

The aggregation of single risks takes into account dependencies between risk factors. Dependencies arise, e.g., during financial crises, which affect several market segments at the same time. Furthermore, market phenomena such as pricing cycles can cause dependencies over time. We generally assume that extreme events do not all occur simultaneously. The absence of complete dependency is denoted as diversification. Hannover Re's business model is based i.a. on establishing a preferably well-balanced portfolio such that a significant diversification effect is achieved and the capital can be used efficiently. Diversification effects exist between reinsurance contracts, divisions, business segments and risks. Given the costs of capital of our business segments, divisions and on the basis of their contribution to the diversification effect, we determine the costs of capital that have to be achieved per single business unit.

E.4.1.2 Basic principles

A key purpose of the capital model of Hannover Re relates to the calculation of the required and available capital for Hannover Re. The principles outlined below are the manifestation of Hannover Re's risk capacity and how it is consistently measured within a quantitative framework.

- Target variable: Our main target variable for the calculation of risk based capital is the deviation of the net asset value (or own funds) from its expected value.
- Time horizon: For calculating the required capital a one-year time horizon is considered.
- Risk measure: We use two statistics to measure and allocate risk capital, namely the Value-at-Risk (VaR) and the Expected Shortfall (ES).
- Ongoing business operations: We operate on the premise of existing business and a going-concern assumption.
- New business assumptions: We consider one year of new business. This assumption holds for all lines of business.

- Stochastic simulation: The capital model of Hannover Re is based on stochastic simulations, i.e. we generate discrete approximations for the probability distribution of our target variables.
- Capital fungibility: Hannover Re's capital model covers the risks stemming from several (legally independent) business units within the Group. We assume full capital fungibility. This is based on the assessment of stress tests for capital fungibility and transferability.
- Consolidation method: The capital model of Hannover Re comprises all business units by using the consolidation method. Deduction and aggregation as defined under Solvency II as an alternative method is not applied.

The capital model uses a stochastic simulation model for the purposes of implementing these principles, which combines random variables using the company-specific dependency structure.

E.4.1.3 Main applications

Hannover Re's internal capital model is a key component of the risk management system. It serves to analyse its overall risk position, to quantify risks and to determine the economic capital required to assume those risks.

The results of Hannover Re's internal model provide support to senior management in their decision-making. Main applications are:

- Analysis of the financial position
- Assessment of the overall required capital and monitoring of key risk metrics
- Capital consumption by each risk category
- Capital allocation for pricing and performance measurement
- Risk budgeting, limit allocation and monitoring
- Strategic asset allocation
- Assessment of risk mitigation strategies
- Assessment of new business

E.4.1.4 Scope of the model

Hannover Re's complete risk landscape comprises the main risk categories underwriting risks (life and health as well as property and casualty), market risks, counterparty default risks, operational risks and other risks (see Section "C. Risk Profile").

The risk categories addressed by the internal model of Hannover Re using a quantitative model are the categories underwriting risk life and health, underwriting risk property and casualty, market risk, counterparty default risk and operational risk. These risks and their interactions are accounted for in the presentation of target variables through the application of stochastic simulation models. Concentration risk is taken into account in the calculations of required capital for each risk category.

E.4.2 Calculation techniques for the purposes of integrating results into the standard formula

Hannover Re uses a full internal model. In consequence, there are no results of standard formula modules which have to be integrated in the internal model.

E.4.2.1 Type and suitability of data

Hannover Re has a comprehensive internal control system in place to ensure quality and timeliness of data. The specific data used in the internal model is documented in the data requirements for the different modules and interfaces. All data used in the internal model is subject to the data standards for the internal model. This set-up is appropriate to provide for timely data that is free of material errors.

Hannover Re utilises the relevant historical company data, in order to calibrate the model – in particular for the underwriting risk. Generally speaking, company data relating to insurance performance within property and casualty is available for more than 30 years. This is deemed sufficiently historical information. However, due to the particular characteristics of early underwriting years, e.g., low premium volume, changing business segmentation or non-representative market segments, only portions of this data are used as part of the internal model calibration.

Internal company data, above all for the model validation, is used for underwriting risk pertaining to life and health insurance, due to the fact that only a limited number of significant (and thus rare) deviations are available that are suitable for the calibration of extreme events.

Long-term market data is used for the calibration of the market and counterparty risk model.

The operational risk model is based on information retrieved from a self-assessment process with experts from all relevant units and departments. Wherever possible available data and additional information are used. Given the limited history of operational risk events as well as the low frequency and high severity character of some operational risks, Hannover Re is convinced that input parameters for the SCR calculation cannot be solely derived by quantitative methods.

In general, Hannover Re relies on data that is used in other business applications, too, as often as appropriate to ensure consistent use of information within the company. Examples are the technical provisions which are calculated as part of the Solvency II balance sheet process and data items used in the accounting process under IFRS, thereby providing an anchor to other established reporting processes. Thus, many data items are subject to multiple quality checks and internal as well as external review.

E.4.3 Comparison between the internal model and the standard formula

The standard formula is designed to fit a typical European (or EEA) primary insurer. As a consequence, mainly European data has been used to calibrate the standard formula.

There are many aspects which make Hannover Re quite different from a typical European primary insurer, in particular, its access to global diversification across regions, markets, cedants and all lines of business. The difference in diversification is the driving force of differences between the standard formula and the internal model for life, health and property and casualty underwriting risk. It also has some influence on counterparty and market risk.

A further difference is caused by the fact that Hannover Re has received approval for a dynamic modelling of the volatility adjustment from BaFin. By this, the effect of the volatility adjustment is captured in the calculation of the required capital more adequately compared to the standard formula.

The standard formula offers a detailed module for the quantification of EU natural catastrophe risk. Due to its focus it does offer a very broad, premium-based approximation for non-EU and non-proportional natural catastrophe risk, only. Hannover Re assumes more than 70% of its natural catastrophe risk outside the EU and thus has a detailed internal model for such risks.

The standard formula is designed for a single primary insurer and thus has no module to recognise diversification between different primary insurers. The latter is an important feature of Hannover Re's internal model and founded on Hannover Re's internal data analysis.

The standard formula allows for appropriate recognition of some but not all reinsurance structures. For example multi-line covers are not fully effective. The internal model is able to recognise all retrocession structures currently implemented by Hannover Re.

In contrast to the standard formula, Hannover Re's internal model has capital requirements for all government bonds.

Technically, the internal model is a stochastic approach while the standard formula is a factor-based (deterministic) approach. The concept for underlying risk factors is in many areas similar, e.g. for market and counterparty risk but in general more detailed in Hannover Re's internal model. Hannover Re's internal model allows for bottom-up, non-linear dependency structures within and between market, underwriting, operational and counterparty risk.

E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement

Both solvency and minimum capital requirements – with and without application of the volatility adjustment - were complied with at all times during the period under consideration.

Abbreviations and glossary

AF: Actuarial function

AGM: Annual General Meeting

BaFin: Bundesanstalt für Finanzdienstleistungsaufsicht, Federal Financial Supervisory Authority

BEL: Best Estimate Liability

BOF: Basic own funds

CCO: Chief Compliance Officer

CDS: Credit Default Swap

CEO: Chief Executive Officer

CFO: Chief Financial Officer

CMS: Compliance Management System

EBIT: Earnings before interest and taxes

EEA: European Economic Area

EIOPA: European Insurance and Occupational Pensions Authority

ESG: Environment Social Governance

E+S Rück: E+S Rückversicherung AG, Hannover

FWH: Funds withheld

GA: Group Auditing, internal audit of Hannover Re Group

GLS: Group Legal Services, legal division of the Hannover Re Group

Hannover Re: Hannover Re Group, Hannover

Hannover Rück: Hannover Rück SE, Hannover

HDI: HDI Haftpflichtverband der Deutschen Industrie V.a.G., Hannover

HGB: Handelsgesetzbuch, German Commercial Code

IAS: International Accounting Standard

ICS: Internal Control System

IFRS: International Financial Reporting Standards

L&H: Life and Health

MCR: Minimum Capital Requirement

NGO: Non-Governmental Organisation

ORSA: Own Risk and Solvency Assessment

OTC: Over the Counter

P&C: Property and Casualty

QRT: Quantitative Reporting Template

RM: Risk margin

RMF: Risk Management Function

SCR: Solvency Capital Requirement

SII: Solvency II

TP: Technical provisions

US GAAP: United States Generally Accepted Accounting Principles

VAG: Gesetz über die Beaufsichtigung der Versicherungsunternehmen (Versicherungsaufsichtsgesetz), Insurance Supervision Act

VaR: Value-at-Risk

WHO: World Health Organization

Quantitative Reporting Templates

All values are shown in TEUR if not otherwise stated.

Values below TEUR 0.5 are displayed as “0”. Empty cells represent the fact that Hannover Re has no value to state.

Please note that this report represents a voluntary publication of the Hannover Re Group. Hence, we provide information we think are most informative for our stakeholders.

Additional disclosure according to Art. 192 (2) of the Delegated Regulation 2015/35

The Hannover Re Group has collateral arrangements with a total value well below 60% of total assets. The threshold of 60% is defined in Art. 192 (2) of the Delegated Regulation 2015/35. This information is relevant to calculate the counterparty default risk with respect to the Hannover Re Group in the Solvency II standard formula.

S.02.01.02: Balance sheet

S.02.01.02: Balance sheet, page 1		Solvency II
Assets		**C0010**
Intangible assets	**R0030**	
Deferred tax assets	**R0040**	70,518
Pension benefit surplus	**R0050**	1,946
Property, plant & equipment held for own use	**R0060**	162,198
Investments (other than assets held for index-linked and unit-linked contracts)	**R0070**	59,211,532
Property (other than for own use)	**R0080**	3,033,259
Holdings in related undertakings, including participations	**R0090**	3,021,142
Equities	**R0100**	0
Equities - listed	**R0110**	
Equities - unlisted	**R0120**	0
Bonds	**R0130**	48,147,898
Government Bonds	**R0140**	27,300,529
Corporate Bonds	**R0150**	19,044,143
Structured notes	**R0160**	151,475
Collateralised securities	**R0170**	1,651,750
Collective Investments Undertakings	**R0180**	3,677,928
Derivatives	**R0190**	102,857
Deposits other than cash equivalents	**R0200**	1,176,809
Other investments	**R0210**	51,638
Assets held for index-linked and unit-linked contracts	**R0220**	
Loans and mortgages	**R0230**	1,009,530
Loans on policies	**R0240**	
Loans and mortgages to individuals	**R0250**	1,346
Other loans and mortgages	**R0260**	1,008,184
Reinsurance recoverables from:	**R0270**	1,556,090
Non-life and health similar to non-life	**R0280**	1,523,564
Non-life excluding health	**R0290**	1,513,861
Health similar to non-life	**R0300**	9,702
Life and health similar to life, excluding health and index-linked and unit-linked	**R0310**	-33,662
Health similar to life	**R0320**	207,977
Life excluding health and index-linked and unit-linked	**R0330**	-241,639
Life index-linked and unit-linked	**R0340**	66,188
Deposits to cedants	**R0350**	10,357,234
Insurance and intermediaries receivables	**R0360**	7,479,226
Reinsurance receivables	**R0370**	410,773
Receivables (trade, not insurance)	**R0380**	444,185
Own shares (held directly)	**R0390**	
Amounts due in respect of own fund items or initial fund called up but not yet paid in	**R0400**	
Cash and cash equivalents	**R0410**	1,054,517
Any other assets, not elsewhere shown	**R0420**	205,064
Total assets	**R0500**	**81,962,813**

S.02.01.02: Balance sheet, page 2		Solvency II
Liabilities		**C0010**
Technical provisions – non-life	**R0510**	42,299,221
Technical provisions – non-life (excluding health)	**R0520**	39,593,487
Technical provisions calculated as a whole	**R0530**	
Best Estimate	**R0540**	38,862,911
Risk margin	**R0550**	730,576
Technical provisions - health (similar to non-life)	**R0560**	2,705,734
Technical provisions calculated as a whole	**R0570**	
Best Estimate	**R0580**	2,621,256
Risk margin	**R0590**	84,478
Technical provisions - life (excluding index-linked and unit-linked)	**R0600**	5,626,062
Technical provisions - health (similar to life)	**R0610**	3,485,272
Technical provisions calculated as a whole	**R0620**	
Best Estimate	**R0630**	3,048,140
Risk margin	**R0640**	437,133
Technical provisions – life (excluding health and index-linked and unit-linked)	**R0650**	1,939,348
Technical provisions calculated as a whole	**R0660**	
Best Estimate	**R0670**	302,448
Risk margin	**R0680**	1,636,900
Technical provisions – index-linked and unit-linked	**R0690**	2,636,618
Technical provisions calculated as a whole	**R0700**	
Best Estimate	**R0710**	2,481,435
Risk margin	**R0720**	155,183
Contingent liabilities	**R0740**	
Provisions other than technical provisions	**R0750**	219,906
Pension benefit obligations	**R0760**	164,342
Deposits from reinsurers	**R0770**	302,028
Deferred tax liabilities	**R0780**	4,005,290
Derivatives	**R0790**	66,117
Debts owed to credit institutions	**R0800**	632,411
Financial liabilities other than debts owed to credit institutions	**R0810**	1,111,720
Insurance & intermediaries payables	**R0820**	2,018,582
Reinsurance payables	**R0830**	1,533,357
Payables (trade, not insurance)	**R0840**	624,179
Subordinated liabilities	**R0850**	3,046,574
Subordinated liabilities not in Basic Own Funds	**R0860**	0
Subordinated liabilities in Basic Own Funds	**R0870**	3,046,574
Any other liabilities, not elsewhere shown	**R0880**	425,105
Total liabilities	**R0900**	**64,510,071**
Excess of assets over liabilities	**R1000**	**17,452,742**

S.12.01.02: Life and Health SLT Technical Provisions

TP Life, page 1

		Insurance with profit participation	Index-linked and unit-linked insurance		
				Contracts without options and guarantees	Contracts with options or guarantees
		C0020	C0030	C0040	C0050
Technical provisions calculated as a whole	R0010				
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	R0020				
Technical provisions calculated as a sum of BE and RM					
Best Estimate					
Gross Best Estimate	R0030				
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080				
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090				
Risk Margin	R0100				
Technical provisions - total	R0200				

TP Life, page 2

		Other life insurance		
			Contracts without options and guarantees	Contracts with options or guarantees
		C0060	C0070	C0080
Technical provisions calculated as a whole	**R0010**			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	**R0020**			
Technical provisions calculated as a sum of BE and RM				
Best Estimate				
Gross Best Estimate	**R0030**			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0080**			
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	**R0090**			
Risk Margin	**R0100**			
Technical provisions - total	**R0200**			

TP Life, page 3

		Annuities stemming from non-life insurance contracts and relating to insurance obligation other than health insurance obligations	Accepted reinsurance	Total (Life other than health insurance, incl. Unit-Linked)
		C0090	C0100	C0150
Technical provisions calculated as a whole	R0010			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	R0020			
Technical provisions calculated as a sum of BE and RM				
Best Estimate				
Gross Best Estimate	R0030		2,783,883	2,783,883
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080		-175,451	-175,451
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090		2,959,334	2,959,334
Risk Margin	R0100		1,792,084	1,792,084
Technical provisions - total	R0200		4,575,966	4,575,966

TP Life, page 4

		Health insurance (direct business)		
			Contracts without options and guarantees	Contracts with options or guarantees
		C0160	C0170	C0180
Technical provisions calculated as a whole	**R0010**			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	**R0020**			
Technical provisions calculated as a sum of BE and RM				
Best Estimate				
Gross Best Estimate	**R0030**			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0080**			
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	**R0090**			
Risk Margin	**R0100**			
Technical provisions - total	**R0200**			

TP Life, page 5

		Annuities stemming from non-life insurance contracts and relating to health insurance obligations	Health reinsurance (reinsurance accepted)	Total (Health similar to life insurance)
		C0190	C0200	C0210
Technical provisions calculated as a whole	R0010			
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole	R0020			
Technical provisions calculated as a sum of BE and RM				
Best Estimate				
Gross Best Estimate	R0030		3,048,140	3,048,140
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080		207,977	207,977
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090		2,840,163	2,840,163
Risk Margin	R0100		437,133	437,133
Technical provisions - total	R0200		3,485,272	3,485,272

S.17.01.02: Non-life Technical Provisions

S.17.01.02: TP Non-Life, page 1

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compen-sation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
Technical provisions calculated as a whole	R0010									
Total Recoverables from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	R0050									
Technical provisions calculated as a sum of BE and RM										
Best estimate										
Premium provisions										
Gross	R0060	9,073	66,360	18,093	417,457	269,717	97,386	1,346,525	570,655	199,499
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0140		-2,509	-309	-340	-1,823	53	-46,992	159,372	-33,729
Net Best Estimate of Premium Provisions	R0150	9,073	68,868	18,402	417,797	271,540	97,333	1,393,516	411,283	233,228
Claims provisions										
Gross	R0160	167,406	698,279	109,319	2,524,980	1,112,365	1,070,563	7,380,068	4,311,851	1,415,335
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240		1,199	5,866	13,263	36,284	223,118	872,461	-130,387	19,540
Net Best Estimate of Claims Provisions	R0250	167,406	697,080	103,453	2,511,716	1,076,081	847,445	6,507,607	4,442,238	1,395,795
Total Best estimate - gross	R0260	176,479	764,639	127,412	2,942,437	1,382,082	1,167,949	8,726,593	4,882,506	1,614,834
Total Best estimate - net	R0270	176,479	765,948	121,855	2,929,513	1,347,622	944,778	7,901,123	4,853,521	1,629,023
Risk margin	R0280	2,082	20,124	10,646	37,712	31,384	19,685	172,413	100,136	35,386

S.17.01.02: TP Non-Life, page 2

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compen-sation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
Technical provisions - total										
Technical provisions - total	**R0320**	178,561	784,763	138,058	2,980,150	1,413,466	1,187,634	8,899,005	4,982,642	1,650,219
Recoverable from reinsurance contract / SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	**R0330**		-1,310	5,557	12,924	34,460	223,171	825,469	28,985	-14,189
Technical provisions minus recoverables from reinsurance / SPV and Finite Re - total	**R0340**	178,561	786,073	132,501	2,967,226	1,379,006	964,463	8,073,536	4,953,657	1,664,408

S.17.01.02: TP Non-Life,
page 3

		Direct business and accepted proportional reinsurance			Accepted non-proportional reinsurance				Total Non-Life obligation
		Legal expenses insurance	Assistance	Miscella-neous financial loss	Non-propor-tional health reinsu-rance	Non-propor-tional casualty reinsu-rance	Non-pro-portional marine, aviation and transport reinsu-rance	Non-propor-tional property reinsu-rance	
		C0110	C0120	C0130	C0140	C0150	C0160	C0170	C0180
Technical provisions calculated as a whole	**R0010**								
Total Recoverables from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	**R0050**								
Technical provisions calculated as a sum of BE and RM									
Best estimate									
Premium provisions									
Gross	**R0060**	5,146	19,314	31,981	84,958	578,990	79,999	608,909	**4,404,062**
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0140**		0	9	114	-27,739	-12,939	-49,807	**-16,638**
Net Best Estimate of Premium Provisions	**R0150**	5,146	19,314	31,972	84,844	606,729	92,938	658,716	**4,420,700**
Claims provisions									
Gross	**R0160**	88,158	26,703	243,632	1,467,769	8,648,684	967,125	6,847,868	**37,080,105**
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0240**		0	13,499	5,341	78,213	95,562	306,243	**1,540,202**
Net Best Estimate of Claims Provisions	**R0250**	88,158	26,703	230,132	1,462,428	8,570,472	871,563	6,541,626	**35,539,904**
Total Best Estimate - gross	**R0260**	93,304	46,018	275,613	1,552,727	9,227,674	1,047,124	7,456,777	**41,484,167**
Total Best Estimate - net	**R0270**	93,304	46,018	262,105	1,547,272	9,177,200	964,500	7,200,342	**39,960,604**
Risk margin	**R0280**	2,142	304	5,558	51,625	208,955	15,348	101,554	**815,054**

S.17.01.02: TP Non-Life, page 4

		Direct business and accepted proportional reinsurance			Accepted non-proportional reinsurance				Total Non-Life obligation
		Legal expenses insurance	Assistance	Miscella-neous financial loss	Non-propor-tional health reinsu-rance	Non-propor-tional casualty reinsu-rance	Non-pro-portional marine, aviation and transport reinsu-rance	Non-propor-tional property reinsu-rance	
		C0110	C0120	C0130	C0140	C0150	C0160	C0170	C0180
Technical provisions - total									
Technical provisions - total	**R0320**	95,446	46,321	281,171	1,604,352	9,436,629	1,062,472	7,558,331	**42,299,221**
Recoverable from reinsurance contract / SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	**R0330**		0	13,508	5,455	50,474	82,623	256,435	**1,523,564**
Technical provisions minus recoverables from reinsurance / SPV and Finite Re - total	**R0340**	95,446	46,321	267,663	1,598,897	9,386,155	979,848	7,301,896	**40,775,658**

S.22.01.22: Impact of long term guarantees measures and transitionals

S.22.01.22: Impact of long term guarantees measures and transitionals		Amount with Long Term Guarantee measures and transitionals	Impact of transitional on technical provisions	Impact of transitional on interest rate	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
		C0010	C0030	C0050	C0070	C0090
Technical provisions	R0010	50,360,460			560,336	
Basic own funds	R0020	18,951,902			-312,543	
Eligible own funds to meet Solvency Capital Requirement	R0050	18,951,902			-312,543	
Solvency Capital Requirement	R0090	**7,032,514**			**294,152**	

S.23.01.22: Own Funds

S.23.01.22: Own funds, page 1

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation (EU) 2015/35						
Ordinary share capital (gross of own shares)	R0010	120,597	120,597			
Non-available called but not paid in ordinary share capital to be deducted at group level	R0020					
Share premium account related to ordinary share capital	R0030	880,608	880,608			
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040					
Subordinated mutual member accounts	R0050					
Non-available subordinated mutual member accounts to be deducted at group level	R0060					
Surplus funds	R0070					
Non-available surplus funds to be deducted at group level	R0080					
Preference shares	R0090					
Non-available preference shares to be dedcuted at group level	R0100					
Share premium account related to preference shares	R0110					
Non-available share premium account related to preference shares at group level	R0120					
Reconciliation reserve	R0130	15,468,710	15,468,710			
Subordinated liabilities	R0140	3,046,574		496,435	2,550,139	
Non-available subordinated liabilities to be deducted at group level	R0150					
An amount equal to the value of net deferred tax assets	R0160	70,518				70,518
The amount equal to the value of net deferred tax assets not available to be deducted at the group level	R0170					
Other items approved by supervisory authority as basic own funds not specified above	R0180					
Non available own funds related to other own funds items approved by supervisory authority	R0190					
Minority interests	R0200					
Non-available minority interests to be deducted at group level	R0210	635,105	635,105			

S.23.01.22: Own funds, page 2

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220					
Deductions						
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	R0230					
whereof deducted according to art 228 of the Directive 2009/138/EC	R0240					
Deductions for participations where there is non-availability of information (Article 229)	R0250					
Deduction for participations included via Deduction and Aggregation method (D&A) when a combination of methods are used	R0260					
Total of non-available own fund items to be deducted	R0270	635,105	635,105			
Total deductions	R0280	**635,105**	635,105			
Total basic own funds after deductions	R0290	**18,951,902**	15,834,810	496,435	2,550,139	70,518
Ancillary own funds						
Unpaid and uncalled ordinary share capital callable on demand	R0300					
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand	R0310					
Unpaid and uncalled preference shares callable on demand	R0320					
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330					
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340					
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350					
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0360					
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370					
Non available ancillary own funds to be dedcuted at group level	R0380					
Other ancillary own funds	R0390					
Total ancillary own funds	R0400					

S.23.01.22: Own funds, page 3

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
Own funds of other financial sectors						
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies - total	R0410					
Institutions for occupational retirement provision	R0420					
Non regulated undertakings carrying out financial activities	R0430					
Total own funds of other financial sectors	R0440					
Own funds when using the D&A, exclusively or in combination with method 1						
Own funds aggregated when using the D&A and combination of method	R0450					
Own funds aggregated when using the D&A and combination of method net of IGT	R0460					
Total available own funds to meet the consolidated part of the group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	R0520	18,951,902	15,834,810	496,435	2,550,139	70,518
Total available own funds to meet the minimum consolidated group SCR	R0530	18,881,385	15,834,810	496,435	2,550,139	
Total eligible own funds to meet the consolidated part of the group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	R0560	18,951,902	15,834,810	496,435	2,550,139	70,518
Total eligible own funds to meet the minimum consolidated group SCR	R0570	17,299,483	15,834,810	496,435	968,237	
Minimum consolidated Group SCR [entspricht HRG Gruppen-MCR]	R0610	4,841,186				
Ratio of Eligible own funds to Minimum Consolidated Group SCR	R0650	3.5734				
Total eligible own funds to meet the total group SCR (including own funds from other financial sector and from the undertakings included via D&A)	R0660	18,951,902	15,834,810	496,435	2,550,139	70,518
Total Group SCR	R0680	7,032,514				
Ratio of Total Eligible own funds to Total group SCR - ratio including other financial sectors and the undertakings included via D&A	R0690	2.6949				

S.23.01.22: Own funds, page 4 / Reconciliation reserve

		C0060
Reconciliation reserve		
Excess of assets over liabilities	**R0700**	17,452,742
Own shares (held directly and indirectly)	**R0710**	
Foreseeable dividends, distributions and charges	**R0720**	912,310
Other basic own fund items	**R0730**	1,071,723
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	**R0740**	
Other non available own funds	**R0750**	
Reconciliation reserve	**R0760**	**15,468,710**
Expected profits		
Expected profits included in future premiums (EPIFP) - Life business	**R0770**	6,839,226
Expected profits included in future premiums (EPIFP) - Non- life business	**R0780**	
Total EPIFP	**R0790**	**6,839,226**

S.25.05.22 - Solvency Capital Requirement – for undertakings using an internal model (partial or full)

Component - specific information		Solvency Capital Requirement	Amout modelled	USP	Simplifi-cations
		C0010	C0070	C0090	C0120
Risk Type					
Total diversification	R0020	-8,531,655	-8,531,655		
Total diversified risk before tax	R0030	9,636,040	9,636,040		
Total diversified risk after tax	R0040	7,032,514	7,032,514		
Total market & credit risk	R0070	11,044,861	11,044,861		
Market & Credit risk - diversified	R0080	5,244,241	5,244,241		
Credit event risk not covered in market & credit risk	R0190	548,512	548,512		
Credit event risk not covered in market & credit risk - diversified	R0200	432,146	432,146		
Total Business risk	R0270				
Total Business risk - diversified	R0280				
Total Net Non-life underwriting risk	R0310	10,963,903	10,963,903		
Total Net Non-life underwriting risk - diversified	R0320	6,085,294	6,085,294		
Total Life & Health underwriting risk	R0400	7,197,615	7,197,615		
Total Life & Health underwriting risk - diversified	R0410	2,740,955	2,740,955		
Total Operational risk	R0480	653,621	653,621		
Total Operational risk - diversified	R0490	653,621	653,621		
Other risk	R0500				

Calculation of Solvency Capital Requirement		C0100
Total undiversified components	R0110	15,156,256
Diversification	R0060	-5,520,216
Adjustment due to RFF/MAP nSCR aggregation	R0120	
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	
Solvency Capital Requirement calculated on the basis of Art. 336 (a) of Delegated Regulation (EU) 2015/35, excluding capital add-on	R0200	**7,032,514**
Capital add-ons already set	R0210	
of which, Capital add-ons already set - Article 37 (1) Type a	R0211	
of which, Capital add-ons already set - Article 37 (1) Type b	R0212	
of which, Capital add-ons already set - Article 37 (1) Type c	R0213	
of which, Capital add-ons already set - Article 37 (1) Type d	R0214	
Consolidated Group SCR	R0220	**7,032,514**
Other information on SCR		
Amount/estimate of the overall loss-absorbing capacity of technical provisions	R0300	-272,111
Amount/estimate of the loss absorbing capacity for deferred taxes	R0310	-2,603,526
Capital requirement for duration-based equity risk sub-module	R0400	
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	
Total amount of Notional Solvency Capital Requirements for ring-fenced funds	R0420	
Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios	R0430	
Diversification effects due to RFF nSCR aggregation for article 304	R0440	
Minimum consolidated group solvency capital requirement	R0470	4,841,186
Information on other entities		
Capital requirement for other financial sectors (Non-insurance capital requirements)	R0500	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Credit institutions, investment firms and financial institutions, alternative investment funds managers, UCITS management companies	R0510	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Institutions for occupational retirement provisions	R0520	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Capital requirement for non-regulated undertakings carrying out financial activities	R0530	
Capital requirement for non-controlled participation	R0540	
Capital requirement for residual undertakings	R0550	
Capital requirement for collective investment undertakings or investments packaged as funds	R0555	
Overall SCR		
SCR for undertakings included via D&A method	R0560	
Total group solvency capital requirement	R0570	7,032,514

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