Group Annual Report 2023

Munich Re

Munich RE

Key figures (IFRS)[1]

Munich Re at a glance

		2023	2022	2021	2020	2019
Insurance revenue from insurance contracts issued	€m	57,884	55,385			
Claims expenses	€m	–41,481	–40,393			
Administration and acquisition costs	€m	–8,617	–7,807			
Total technical result	€m	7,545	7,070			
Operating result	€m	5,702	6,812	3,517	1,986	3,430
Taxes on income	€m	–936	–1,324	–552	–269	–483
Net result	€m	4,597	5,309	2,932	1,211	2,707
Earnings per share[2]	€	33.88	38.12	20.93	8.63	18.97
Return on equity (RoE)[3]	%	15.7	20.2	12.6	5.3	11.7
Return on investment (RoI)	%	2.5	1.3	2.8	3.0	3.2
Dividend per share[4]	€	15.00	11.60	11.00	9.80	9.80
Dividend payout[4]	€m	2,009	1,583	1,541	1,373	1,373
Share price at 31 December	€	375.10	304.00	260.50	242.80	263.00
Munich Reinsurance Company's market capitalisation at 31 December	€bn	51.2	42.6	36.5	34.0	38.0
Carrying amount per share	€	220.29	196.83	220.06	213.38	215.32
Investments	€m	218,462	207,965	240,300	232,950	228,764
Investments for unit-linked life insurance	€m	8,280	7,470	8,582	7,544	7,726
Equity	€m	29,772	27,245	30,945	29,994	30,576
Insurance contracts issued and reinsurance contracts held (net)	€m	203,383	195,454			
Balance sheet total	€m	273,793	269,391	312,405	297,946	287,553
Staff at 31 December		42,812	41,389	39,281	39,642	39,662

Reinsurance

		2023	2022	2021	2020	2019
Insurance revenue from insurance contracts issued	€m	37,786	36,489			
Investments	€m	90,387	84,615	99,617	91,248	91,069
Insurance contracts issued and reinsurance contracts held (net)	€m	69,575	66,100			
Major losses (net)	€m	–3,278	–3,741	–4,304	–4,689	–3,124
Natural catastrophe losses	€m	–2,335	–2,118	–3,139	–906	–2,053
Combined ratio property-casualty	%	85.2	83.2	99.6	105.6	100.2
Investment result	€m	2,432	1,309	3,422	3,193	3,318
Net result	€m	3,876	4,737	2,328	694	2,268
Thereof: Reinsurance – Life and health	€m	1,428	1,314	325	123	706
Thereof: Reinsurance – Property-casualty	€m	2,448	3,423	2,003	571	1,562
Return on equity (RoE)[5]	%	16.2	22.2	13.4	4.1	13.3

ERGO

		2023	2022	2021	2020	2019
Insurance revenue from insurance contracts issued	€m	20,098	18,896			
Investments (including Investments for unit-linked life insurance)	€m	136,355	130,820	149,265	149,245	145,421
Insurance contracts issued and reinsurance contracts held (net)	€m	133,808	129,354			
Combined ratio property-casualty Germany	%	88.9	90.3	92.4	92.4	92.3
Combined ratio International	%	90.1	95.5	92.9	92.7	94.3
Investment result	€m	2,942	1,674	3,734	4,206	4,504
Net result	€m	721	572	605	517	440
Thereof: Life and Health Germany	€m	183	307	164	130	187
Thereof: Property-casualty Germany	€m	252	173	234	157	148
Thereof: International	€m	286	92	207	230	105
Return on equity (RoE)[5]	%	13.5	11.6	10.1	8.8	7.4

1 You can download this information as an Excel file; please refer to the Financial Supplement at www.munichre.com/results-reports. For information about the calculation of the 2022 figures, please refer to the Combined management report > Business performance of the Group and overview of investment performance. The figures for 2019 to 2021 have not been adjusted in accordance with IFRS 9 and IFRS 17. Prior-year comparisons are therefore only possible to a limited extent.
2 Earnings per share for 2022 before adjustment of the value due to changes in accounting standards amounted to €24.63.
3 We changed the calculation of RoE in 2020.
4 Subject to approval by the Annual General Meeting.
5 Since the publication of the Munich Re Group Ambition 2025 in December 2020, RoE is a target figure for our fields of business.

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More detailed lists of contents are provided on the pages separating the individual sections.

Due to rounding, there may be minor deviations in summations and in the calculation of percentages in this report.

This document is a translation of the original German version and is intended to be used for informational purposes only. While every effort has been made to ensure the accuracy and completeness of the translation, please note that the German original is binding.

Dr. Joachim Wenning
Chair of Munich Reinsurance
Company's Board of Management

Dear shareholders,

Last year was very good for Munich Re. We managed to surpass our profit target for the third consecutive year. With a net result of €4.6bn, your company earned €600m more than we had initially planned for 2023.

We would like you to benefit accordingly from this success, as in years past. Subject to approval by the Annual General Meeting, the dividend will be significantly increased by €3.40 to €15 per share – raising the bar to a new level. We have also approved a new, larger share buy-back with a volume of €1.5bn.

The year 2023 thus marks the latest pinnacle in the creation of value on behalf of our shareholders. After all, we have returned €22.9bn of capital to our shareholders in the form of dividends and share buy-backs over the past ten years. That is an average of €2.29bn every year. Our balance sheet and capital position remain very strong. Hence all strategic and financial options with regard to growth, investments, and dividend payouts are open to us. Our solvency ratio of 267% remains above the optimum range.

We are just past the halfway point of our five-year Ambition 2025 strategic programme, which defines our medium-term financial targets for the financial years 2021–2025. While maintaining a sound capital base, by the end of 2025 we aim to achieve a return on equity of 14–16% and boost both earnings per share and the dividend by an average of at least 5% annually. Our return on equity in 2023 already amounted to 15.7%. Since 2021, earnings per share have grown annually by almost 20% on average. Our dividend has increased by an average of about 15% each year in the same period.

The capital markets have been rewarding our excellent performance. During the first three years of Ambition 2025, our share price rose by almost 60%. During that same period, the German stock market index (DAX) increased by only 22%. What's more, Munich Re's share price topped €400 for the first time ever in 2023, for a new historical high. In terms of total shareholder return, which comprises income from share price increases and dividends, we have further extended our lead over the competition over a span of several years. Of the eight leading reinsurers and primary insurers in Europe, none has created more value for shareholders in the 2020s than Munich Re.

Our Group is in excellent shape – but the world is not. Recent years have been marred by a multitude of simultaneous major crises, which have taken a toll on the insurance industry, too. Our planning phase for Ambition 2025 coincided with the first year of the COVID-19 pandemic, which subsequently impacted us heavily in 2021, the initial year of our five-year strategy programme. War then broke out in Ukraine in 2022, unleashing economic turbulence in the form of volatile capital markets, extreme rates of inflation and an abrupt rise in interest rates. These new and immediate threats nearly overshadowed climate change – despite devastating natural disasters plaguing the planet, such as the flooding in Germany's Ahr valley in summer 2021 and Hurricane Ian in the United States in autumn 2022.

The year 2023 was sadly no exception, particularly in the wake of the earthquake in Turkey and Syria. Some 74,000 people lost their lives in natural disasters last year, far exceeding the long-term average. While inflation eased considerably last year, it remains far above the target rate associated with price stability. Geopolitical tensions rose anew in 2023, with the escalation in the Middle East being the latest example. People in Ukraine have been enduring destruction and suffering for over two years. And then there is the perennial crisis regarding Taiwan between global superpowers China and the United States. Any one of these wars or conflicts could spread beyond its current boundaries, erupting into something with an unforeseeable outcome as well as massive humanitarian and economic consequences. There is a significant amount of uncertainty.

We have coped well with all of the above-mentioned external shocks so far. Atop a solid foundation, Munich Re reliably generates high income. By resolutely expanding lines of business with less volatile earnings profiles – including ERGO, life reinsurance and Global Specialty Insurance, our newest division – and buoyed by our unrelenting commitment to performance, we have made our Group robust against fluctuations in both property-casualty reinsurance and investments.

In 2023, the ERGO field of business achieved its annual target by generating a net result of around €720m. In international business, ERGO earned much more insurance revenue than in 2022 – chiefly due to growth in property-casualty insurance business in Poland and the good performance of health business in Belgium and Spain. In addition, the full consolidation of ERGO's property-casualty business in Thailand also helped boost insurance revenue. Insurance revenue likewise rose in the Property-casualty Germany segment, particularly on account of third-party liability and motor insurance business. In the ERGO Life and Health Germany segment, supplementary and travel insurance in particular contributed to renewed revenue growth. Moreover, demand remained high for biometric risk cover and capital-efficient investment solutions.

ERGO's altogether positive business development is reflected on the customer side, too. Regular surveys indicate that customer satisfaction has improved in recent years, and 2023 was no exception. Customers awarded ERGO the highest scores for the processing of insurance claims and policy benefits.

Our reinsurance field of business achieved a result of about €3.9bn in 2023. The property-casualty reinsurance segment was again impacted by high natural catastrophe losses. A relatively low-impact hurricane season notwithstanding, insured losses from natural catastrophes totalled US$ 95bn; the ten-year annual average amounts to US$ 90bn. Conversely, we benefitted from the ongoing hard market. Not only did we achieve higher margins; we also managed to further grow our business.

The new Global Specialty Insurance (GSI) division, established in 2023, helped to boost both our insurance revenue and net result. In addition, life and health reinsurance business continued to develop very favourably as regards both the assumption of biometric risks and financially motivated reinsurance solutions – particularly those that provide financing and capital relief for cedants. This segment's total technical result amounted to just over €1.4bn, far outperforming the initial guidance of €1.0bn.

Our reinsurance clients hold us in high esteem. We have performed better and better for years now on our net promoter score, which is an industry-wide gauge of client satisfaction that we calculate every two years as part of our worldwide client survey. In short, we excel thanks to our reliability, predictability, consistency in action, and our dependability in making solid capacity available.

The excellent business developments in (re)insurance have granted us additional investment flexibility. We deliberately realised losses on the disposal of fixed-interest securities in 2023 in order to benefit more quickly from higher interest rates upon reinvestment, thus boosting future investment income. As a result, the reinvestment yield rose from 2.8% in 2022 to 4.5% in 2023, with the return on investment improving from 2.1% to 2.5%.

In short, Munich Re is in an outstanding position to fully meet all its Ambition 2025 targets. Momentum remains positive this year, with the January 2024 renewals sustaining the years-long trend of gratifying treaty renewals. As a result, we managed to keep profitability levels high and prices stable overall. Premium growth amounted to 3.5%; we wrote more business only when we could tap into attractive opportunities. We also actively discontinued business that no longer met our expectations with regard to pricing or conditions.

In light of sustained good business performance, we want to further grow our net result. Our profit target for 2024 is €5bn. We expect the Group's insurance revenue to total €59bn and the return on investment to improve markedly, surpassing 2.8%.

In addition to the pursuit of financial success, fundamental components of our business activities include environmental, social and corporate governance (ESG) considerations. We strive to meet our ESG targets with the same determination with which we pursue our financial objectives. In this context, we devote ourselves to two matters in particular as part of our Ambition 2025 programme: increasing the percentage of women in management and decarbonising our investment and insurance portfolios.

Thanks to continual improvements over the past three years, we have nearly met the target we set ourselves for 2025, i.e. 40% of management positions within the Group being held by women. By the end of 2023, this figure had reached 39.5%. We also made considerable progress last year on decarbonisation. In our insurance business, greenhouse gas emissions from coal-fired power plants and from thermal coal production facilities have each decreased by 41% compared with the 2019 base year, while emissions from oil and gas production associated with our property insurance business have been reduced by as much as 80%. For our investments, the reduction remained high, at 47%. We once again expanded our investments in renewable energies, significantly boosting our investment volume from €2.4bn in 2022 to €3.1bn in 2023.

Simply put, the first three years of the five-year Ambition 2025 programme have been very encouraging in every regard. Our nearly 43,000 staff members worldwide will keep on working hard to ensure that Munich Re meets all its Ambition 2025 commitments by the end of next year. We are all optimistic that we will succeed.

I wish to thank you, dear shareholders, for the trust you place in our Group.

Yours sincerely,

Joachim Wenning

Combined management report

This report combines the management reports of
Munich Reinsurance Company and Munich Re.

Strategy

Munich Re operates an integrated business model that combines primary insurance and reinsurance. This model enables us to pool our industry-wide areas of expertise, share underlying know-how and data, and leverage synergies through risk diversification.

At the core of our business model, Munich Re is the risk carrier along the entire insurance value chain. We are happy to expand our primary insurance activities on the basis of their stable earnings and have a strategic interest in new business models. We prefer organic growth, but will engage in selected M&A activities in line with our strategic preferences. Our active, integrated capital management and risk management across the Group helps to create economic value for our shareholders, while safeguarding the fulfilment of our obligations towards clients and policyholders as well as protecting the reputation of Munich Re.

Our strategy follows the three guiding principles of Scale, Shape, and Succeed, which are key pillars of the Munich Re Group Ambition 2025.

Scale

Scale represents growth in the Group's core business. There are opportunities for organic growth, particularly in reinsurance and specialty primary insurance within reinsurance, owing to recent improvements in market conditions. In asset management, we want to enhance performance and further optimise our risk-return profile in a setting characterised by higher interest rates.

Shape

Shape stands for Munich Re's mission to develop new business models that are aligned with our core business throughout the value chain, in turn shaping markets. In this environment, innovative and digital solutions will give rise to additional business opportunities.

Succeed

Succeed symbolises the added value that Munich Re generates for all its stakeholders. For shareholders, this means the sustained financial success of their investments in Munich Re. Clients benefit from bespoke products. And for staff, Succeed connotes appealing long-term employment and good career prospects. A particular priority concerns women in management: by 2025, 40% of managers below the Board of Management are to be women. Last but not least, Succeed allows communities to benefit from, in particular, the Group's climate targets in its asset management, (re)insurance business and in its own business operations.

The success of the Munich Re Group Ambition 2025 is measured using the following financial and non-financial targets:

Our pledge to shareholders

Improved RoE, 2025	EPS growth[1]	DPS growth[1, 2]	Solvency II ratio in optimal range
14–16%	≥ 5%	≥ 5%	175–220%
	Decarbonisation targets for thermal coal, oil and natural gas		

1 Average annual growth rate 2023–2025 based on the outlook for 2023.
2 In addition: dividend floor of at least previous year's DPS.

We want to generate an attractive return on equity (RoE)[1] which, following the application of new IFRS reporting standards, should be between 14% and 16% by 2025. The higher RoE achieved in the course of the strategy period to 2025, compared to our previous financial targets and after taking into account the new IFRS standards, will result from increased profitability, growth, and an improved return on investment.

1 Further information about this indicator is provided in the Combined management report > Tools of corporate management and strategic financial objectives.

Continued earnings growth is poised to translate into higher earnings per share, with a targeted average annual rise of 5% or more by 2025.

The implicit dividend commitment of recent decades is now an explicit target of the Munich Re Group Ambition 2025: in "normal" years, the dividend per share is to rise by 5% or more on average, similarly to the increase in earnings per share. In years with unusually high claims expenditure, it is expected that the dividend per share will at least remain the same.

We consider the optimum range for the solvency ratio to be 175% to 220%.

As an environmentally conscientious business, Munich Re endeavours to play its part in meeting the targets of the Paris Agreement. The Group has therefore set itself medium- and long-term decarbonisation targets for its investments, its (re)insurance transactions and its own business operations. The description of our Climate Ambition provided here is a brief summary. All details are presented in the Combined management report > Combined non-financial statement.

Munich Re Group Ambition 2025 and beyond

2023	2025	Long term
Investments – Financed GHG emissions[1]	**Target**	**Target**
No direct investments in listed companies that generate > 15% revenue from thermal coal[2] > 10% revenue from oil sands	Thermal coal[7] –35% emissions	Thermal coal Full phase-out by 2040
Oil and gas companies[3] – No new direct investments in exclusively oil and gas companies[4] – Commitment to net zero by integrated oil and gas companies from 2025 required[5] – No direct illiquid investments in new oil and gas fields, midstream oil infrastructure or oil-fired power plants[6]	Oil and gas[7] –25% emissions Total[7] –25% to –29% emissions	Total Net-zero emissions by 2050
Insurance – Insurance-related GHG emissions[8]	**Target**	**Target**
Thermal coal No insurance of new coal mines, new power plants or related infrastructure[9]	Thermal coal –35% emissions[12]	Thermal coal Full phase-out by 2040 (including treaty business)
Oil and gas – Exploration and production – No insurance of new or existing oil sands sites or related infrastructure[10], Arctic exposure or infrastructure[11] – No insurance of new oil and gas fields, midstream oil infrastructure or oil-fired power plants[6]	Oil and gas –5% emissions[13]	Total Net-zero emissions by 2050

Own operations – GHG emissions from business operations[14]	Target	Target
Group headquarters in Munich GHG net zero (through GHG emissions removal certificates) All other recognised GHG emissions from the Group's business operations GHG-neutral (through GHG emissions reduction certificates)	Total −12% emissions per employee	Total Net-zero emissions by 2030

All greenhouse gas (GHG) emissions are measured in CO_2 equivalents (CO_2e). Base year for all target and achievement figures is 2019.
Exceptions to the guidelines can only be approved by Board of Management committees.

1 Scope 1 and 2.
2 Exceptions are possible in individual cases for companies with revenues in thermal coal between 15–30% on the basis of an active engagement dialogue.
3 Direct investments in equities or corporate bonds from listed oil and gas companies.
4 Publicly traded companies listed under the Global Industry Classification Standard (GICS) Oil & Gas sub-industries with the exception of Integrated Oil & Gas.
5 For companies with the highest relative and absolute emissions.
6 Applies to contracts/projects exclusively covering the planning, financing, construction or operation, which have not yet been under production (oil & gas fields) or construction or operation (infrastructure and facilities) as at 31 December 2022.
7 Listed equities, corporate bonds and – for total – direct real estate.
8 Applies to primary insurance, direct and facultative (re)insurance business.
9 For single-location stand-alone risks.
10 For single-location stand-alone risks; for mixed covers above a certain threshold.
11 For exclusive coverages also incl. treaty business; for mixed covers above a certain threshold.
12 Metric tonnes of thermal coal produced annually by insureds/installed operational capacity (in megawatts) of insured coal-fired power plants of insureds (used as an equivalent for an approximate development of the GHG emissions of our insureds' business).
13 Operational property covers, scope 1–3 life-cycle emissions.
14 Scope 1, 2 and 3 (business trips, paper, water, waste).

Our goal is to decarbonise our investment and (re)insurance portfolio, reaching net zero by 2050. We have committed to completely phase out the (re)insurance of thermal coal activities altogether in our primary insurance and facultative and direct (re)insurance business – and in our investment portfolio – by 2040. This includes reducing, in an intermediate step, our total scope 1 and 2 financed GHG emissions from listed equities, corporate bonds and direct real estate by 25% to 29% compared to the 2019 base year, by 2025.

In 2019, Munich Re stopped investing directly in listed companies that generate more than 30% of their earnings from thermal coal. Since 2021, companies that generate 15% to 30% of their earnings from thermal coal have also been excluded from our investment universe or, in individual cases, encouraged to reduce their greenhouse gases in the context of an engagement dialogue. Direct investments in listed companies that generate more than 10% of their earnings from oil sands are also excluded.

Munich Re set itself its own emissions-reduction targets in 2020 with respect to thermal coal and oil and gas production in our primary insurance and facultative and direct (re)insurance business. This also encompasses treaty-like business in the form of facultative facilities if it includes the option to decline individual risks. In an initial phase, we aim to reduce emissions from oil and gas production by 5% by 2025, compared to the base year 2019. Munich Re will also reduce its coal-related exposure in its direct and facultative insurance business by 35% Group-wide by 2025, compared to the base year 2019. Munich Re stopped insuring new coal-fired power plants and coal mines in 2018 – and oil sands sites in 2019.

Under the Munich Re Group Ambition 2025, we also set targets regarding our own GHG emissions from business operations. GHG emissions are to be reduced by 12% per employee between the base year 2019 and 2025. Five years later, in 2030, our target is to achieve GHG net zero for the remaining GHG emissions from our own operations. We will endeavour to offset these GHG emissions by purchasing certificates for projects that aim to remove GHGs from the atmosphere (GHG net zero).

Reinsurance

Munich Re's strategic aim is to expand its position as a leading global reinsurer and, by means of Global Specialty Insurance, to further consolidate our success in specialty primary insurance business through our special underwriting expertise.

Our reinsurance strategy likewise relies on the three pillars of Scale, Shape, Succeed – which define measures for achieving overarching objectives.

In traditional reinsurance, Munich Re is participating in the marked expansion of significant markets. Growth areas in our core business include the expansion of the market position in developed markets in North America, Europe, Asia and Australia – with a focus on risk expertise and underwriting quality. In the emerging markets of Asia, the Middle East and South America, Munich Re focuses on targeted growth, in particular by offering bespoke services and products for cedants.

With regard to specialty primary insurance business within reinsurance, Munich Re focuses on North America, the United Kingdom and Europe, and has set itself the goal of being one of the world's leading specialty insurers by 2025. The bundling of activities in the division Global Specialty Insurance aims to bring about a stringent market and broker strategy, as well as the consistent management of units that previously operated independently, such as American Modern Insurance Group Inc. (American Modern), the Hartford Steam Boiler Inspection and Insurance Company (HSB), Munich Re Specialty Insurance (MRSI), Munich Re Syndicate and Aerospace, and Great Lakes Insurance SE (GLISE). In this regard, Munich Re's goals are to create synergies in underwriting, sales and digitalisation, while also more effectively addressing the increased regulatory requirements for primary insurance business through its new positioning.

Munich Re's long-term competitiveness in traditional reinsurance and speciality primary insurance is particularly sustained by excellence in operations, the development of new product solutions, and the pursuit of new strategic options in our business activities.

The focus of the excellence initiatives is on first-class underwriting and risk management at the highest level, practised client orientation and outstanding client management, agile and efficient processes, and the exploitation of synergies within the Group – both in partnerships in product and market development, and in the use of service functions.

Both traditional reinsurance and Global Specialty Insurance are constantly defining new topic areas and solutions to further develop the business. For example, Munich Re is driving forward product innovations for cyber, flooding, parametric covers, credit insurance and financially motivated reinsurance by offering data-driven solutions and services under third-party brands, alongside its own reinsurance covers.

Data and AI are playing an increasingly important role in both specialty primary insurance and traditional reinsurance, principally in the form of AI-supported decision-making in reinsurance – especially in underwriting – and in terms of process automation and efficiency gains. Generative AI in particular opens up new opportunities to harness the potential of external data using pre-trained models and enables the quality of internal data to be improved through AI-supported data management. In reinsurance, our AI approach is complemented by our data strategy, which enables data products to be provided in line with the needs of our business units.

Along with investing in innovation and digitalisation projects, the reinsurance field of business also operates as a venture capitalist. Beyond the objective of generating especially profitable returns on investment, the reinsurance field of business deploys venture capital to ensure the closest possible proximity to new technologies and emerging business models.

ERGO

ERGO's strategic aim is to continue growing profitably through 2025 and, as regards return on equity (RoE), to become one of the top primary insurers in Europe. To this end, ERGO's portfolio of strategic measures likewise relies on the three pillars of Scale – Shape – Succeed, which define steps for achieving overarching objectives.

One of ERGO's aims is to further improve its market position and profitability in Germany, with a focus on further developing its underwriting capabilities and resolutely driving forward end-to-end process excellence, while generating strong growth with partners in multi-level sales (B2B2C) and through purely direct offers, as well as reducing IT, sales and operating costs. In international business, ERGO concentrates on Europe and Asia, where high-growth markets such as India, China and Thailand offer particularly promising opportunities.

The ever-increasing changes in markets caused by digital transformation and new patterns of customer behaviour demand flexibility in both services and products. In this context, ERGO is focusing consistently on the needs of its customers, who are increasingly using traditional and digital channels in parallel when seeking advice and purchasing insurance products.

The ongoing modernisation of IT infrastructures continues to play a key role here. In addition, ERGO is seeking a leading role in digitalisation by consistently driving forward traditional and generative AI, metaverse technology, robotics and voice technology, with an eye to continually enhancing customer experience. ERGO aims at further increasing its competitive strength by transferring technology-based solutions and enhancing cross-border synergies. ERGO will continue to rely on external and internal resources in generating innovative business ideas to further expand the business model along the entire insurance value chain and unlock growth potential in the digital world.

Tools of corporate management and strategic financial objectives

Munich Re's management philosophy – Based on value creation

The aim of Munich Re's entrepreneurial thinking and activity is to analyse risks from every conceivable angle and to assess and diversify them, creating lasting value for shareholders, clients, and staff in relation to the risks assumed. This is the aim of our active capital management and the consistent application of value- and risk-based management systems.

The framework for any business activity is our risk strategy, from which we derive various limitations and reporting thresholds. Our economic capital resources, which we determine in accordance with the Solvency II supervisory regime, are a key element. We monitor a range of important additional conditions. These include national accounting regulations, tax aspects, liquidity requirements, supervisory parameters, and rating agency requirements.

Our value-based management is characterised by the following aspects:

- Risk capital, i.e. the capital required to cover the risks, is the basis of our value- and risk-based management. The capital requirement corresponds to the solvency capital requirement under Solvency II, as determined on the basis of our certified internal risk model. Information on the internal model is provided in the Risk report > Risk governance and risk management system > Risks depicted in the internal model.

- Consequently, business activities are assessed not only according to their earnings potential, but also relative to the extent of the risks assumed. Only the risk-return relationship reveals how beneficial an activity is from the point of view of our shareholders.

- With value-based corporate management tools, we ensure an economic valuation and the comparability of alternative initiatives.

Contrasting aspects have to be evaluated when selecting suitable target figures. On the one hand, the often-complex economic environment should be reflected as realistically as possible in order to emphasise added value as the Group's overriding guiding principle. On the other hand, targets should be straightforward and understandable for investors, staff, and the public.

The Group's corporate management tools

Our key corporate management tools at Group level are economic earnings and the IFRS net result. Together with the other performance indicators, they constitute the most important financial indicators of relevance for us. With the introduction of IFRS 9 and IFRS 17, the Group's IFRS accounting provides a more accurate reflection of economic earnings, and therefore, greater transparency for our stakeholders.

The Group's corporate management tools

Economic earnings

IFRS net result

Other performance indicators

- Insurance revenue
- Combined ratio
- Total technical result for life and health reinsurance
- Return on investment (RoI)

Economic earnings

The starting point for value-based management is the economic value added, which we determine based on the key corporate management tool of economic earnings. These earnings correspond with the change in eligible own funds under Solvency II, adjusted for items that do not represent economic value added – such as capital measures, and the change in regulatory restrictions.

In particular, economic earnings comprise the contribution to profits from our new business, and changes in the value of in-force business against the previous year's assessment on account of technical factors. The development of eligible own funds is also considered because of the effect of capital market parameters on the assets and liabilities sides of the solvency balance sheet.

With respect to the management of economic value added, we use conceptually consistent value-based and risk-capital-based measurement approaches that are individually geared to the characteristics of each respective field of business. Our approach for property-casualty reinsurance is based on the adjusted result, which comprises the anticipated discounted cash flows of underwriting and an adjustment for major claims. In life and health reinsurance, we apply value added by new business and the change in value of in-force business, which are based on the solvency balance sheet. As part of our asset-liability management, we consider the excess return from our investment operations in reinsurance. The management tool of economic earnings is used directly for ERGO.

IFRS net result

We use the IFRS net result as a standardised, accounting-based benchmark for the Group and its fields of business. The standardised approach of the IFRS net result makes it easier for outsiders to understand and interpret the information in it; as such, it is a pivotal part of our financial reporting in capital markets.

Other performance indicators

Insurance revenue from insurance contracts issued (insurance revenue)

Insurance revenue is a key indicator for corporate growth, both at Group level and for the individual fields of business. However, increases in this performance metric are not an inherently meaningful target for our Group, as we must always consider revenue growth as it relates to the profitability of the business we write.

Combined ratio

The combined ratio is regularly posted for property-casualty business. Calculated as the percentage ratio of insurance service expenses and insurance revenue (both of which are net, i.e. after reinsurance cessions), the combined ratio is the sum of the loss ratio and the expense ratio. A combined ratio of 100% means that insurance revenue was sufficient to cover claims and costs.[1] Given that the combined ratio takes into account the time value of money and the uncertainty of future cash flows, it can also be used to assess economic profitability. It is only of limited suitability for comparing the financial performance of competitors owing to differing calculation methods and portfolio mixes. Generally, we aim to keep the combined ratio as low as possible by means of good underwriting and claims management.

Total technical result for life and health reinsurance

Owing to the long-term nature of business in life and health reinsurance, the combined ratio used in property-casualty insurance is only of limited use in this segment. We therefore track and post the total technical result under IFRS 9 and IFRS 17 for life and health reinsurance. It consistently combines underwriting business with insurance-related financial instruments and, with effect from this reporting year, supersedes the “technical result including the result from reinsurance contracts with non-significant risk transfer” under IFRS 4.

Return on investment (RoI)

This is a key indicator of investment performance for Munich Re, on the basis of external reporting. It is derived from the investment result and the average market value of our investment portfolio – including off-balance-sheet unrealised gains and losses.[2]

Strategic financial objectives as part of the Munich Re Group Ambition 2025

Munich Re publishes further performance indicators within the framework of its multi-year result ambition. Given the longer time horizon of several years and the correspondingly greater uncertainties, the result targets published for these performance indicators take the form of anticipated corridors or minimum targets only. You can find details of the objectives for the key indicators given here for the Munich Re Group Ambition 2025 under “Strategy”.[3]

1 Details on determining the combined ratio can be found in the Notes to the consolidated financial statements > Explanatory information > Segment disclosures > 7 Alternative performance measures.

2 The calculation of the RoI is described in the investment result table under Business performance > Business performance of the Group and overview of investment performance.

3 Information on the non-financial targets of the Munich Re Group Ambition 2025 can also be found in the Combined management report > Strategy.

Strategic financial objectives as part of the Munich Re Group Ambition 2025

Return on equity (RoE)

Earnings per share

Dividend per share

Solvency ratio under Solvency II

Return on equity (RoE)

The RoE is an important profitability KPI, which is of relevance in particular in the medium term. It is calculated on the basis of the IFRS result in relation to the average IFRS equity at the beginning and end of the year. IFRS equity is adjusted in particular for the fair value reserve, the foreign currency translation reserve, the insurance finance reserve (from the measurement of insurance contracts) and the reserve from hedging relationships. Further adjustments are made to eliminate distortions attributable to intra-Group transactions.

The RoE is significantly influenced by the IFRS result. IFRS equity is affected by profits as well as by capital measures such as dividend payments and share buy-backs, in particular. The RoE is recognised for the Group and for the reinsurance and ERGO fields of business.

The calculation of the return on equity and the adjustments applied to average equity remain unaffected by the introduction of IFRS 9 and IFRS 17.

Earnings per share

The earnings per share figure reflects the IFRS net result for a year in relation to the average number of outstanding shares at the beginning and end of the year. The earnings per share is primarily influenced by the IFRS net result. The number of outstanding shares can change as a result of share buy-backs or other capital measures. Further information on the earnings per share is available in the Notes to the consolidated financial statements > Explanatory information > Other information > 66 Earnings per share.

Dividend per share

The dividend per share reflects the dividends paid for one year in relation to the number of dividend-bearing shares. The number of shares can change as a result of share buy-backs or other capital measures.

Solvency ratio under Solvency II

The solvency ratio under Solvency II is the ratio of the eligible own funds to the solvency capital requirement. Information on solvency capital requirements and eligible own funds is available in the Risk report.

Macroeconomic and industry environment

Global economic growth weakened slightly in 2023, owing mainly to high inflation and restrictive monetary policy. Economic momentum waned considerably, particularly in Europe. By contrast, the US economy remained surprisingly strong, and China's economy grew faster year on year following the lifting of COVID-19 restrictions. Rates of inflation fell thanks to lower energy prices, but average inflation rates for the year were still significantly above the long-term average in many countries.

Capital markets

In response to persistently high inflation, key central banks further tightened monetary policy in 2023. Over the course of the year, the Federal Reserve in the United States raised its policy rate by 100 basis points, with the target range for the federal funds rate at 5.25% to 5.5% in December 2023. In addition, it further reduced its securities holdings. The European Central Bank raised its interest rate on the main refinancing operations from 2.5% to 4.5%. It also began reducing its securities holdings, a product of the asset purchasing programme it launched in 2014. Yields on ten-year government bonds in the United States and Germany reached their highest levels in years in 2023. Growing expectations that central banks would soon cut rates, however, contributed to a drop in yields in Q4. By the end of December, yields on US bonds had returned to the same level as at the beginning of the year, while those on German bonds were down slightly.

Yields on ten-year government bonds

%	31.12.2023	31.12.2022
USA	3.9	3.9
Germany	2.0	2.6

In the reporting year, international financial markets were generally less volatile than in the previous year, with the exception of a brief period of increased volatility in March caused by problems in the US banking sector. Important equity indices rose significantly in 2023, including the US Dow Jones Industrial Average and the EURO STOXX 50.

Equity markets

	31.12.2023	31.12.2022
EURO STOXX 50	4,522	3,794
Dow Jones Industrial Average	37,690	33,122

On the currency markets, fluctuations were also less pronounced in 2023 than in the previous year. At the end of December, the US dollar and Canadian dollar were somewhat lower against the euro, while the Japanese yen was significantly lower. The pound sterling was up against the euro. The annual average values against the euro, however, were lower in 2023 than in 2022 for the above-mentioned currencies. At €0.92, the average value of the US dollar in the reporting year was slightly lower than in the previous year (€0.95).

Insurance industry

According to current extrapolations, premium income in the German insurance sector saw only weak growth in 2023. While premium income growth in property-casualty insurance was above the long-term average, life insurance premiums decreased due to a further slump in single premiums.

On a global level, a number of major property-casualty primary insurance markets experienced strong growth in 2023 – resulting in a substantial increase in global premium income, even when adjusted for high inflation. Overall, the trend toward higher prices continued in the renewal rounds for property-casualty reinsurance contracts. However, this trend varied significantly among regions and classes of business – depending on claims experience, loss expectations and the individual market situation.

Munich Re Group

Munich Re is one of the world's leading risk carriers and provides both insurance and reinsurance under one roof. This enables the Group to cover large stretches of the value chain in the risk market. Almost all reinsurance units operate under the uniform brand of Munich Re. The ERGO Group (ERGO) is active in nearly all lines of life, health and property-casualty insurance. The majority of Munich Re's investments are managed by MEAG, which also offers its expertise to private and institutional investors outside the Group. For up-to-date information about Munich Re, visit www.munichre.com.

Group structure

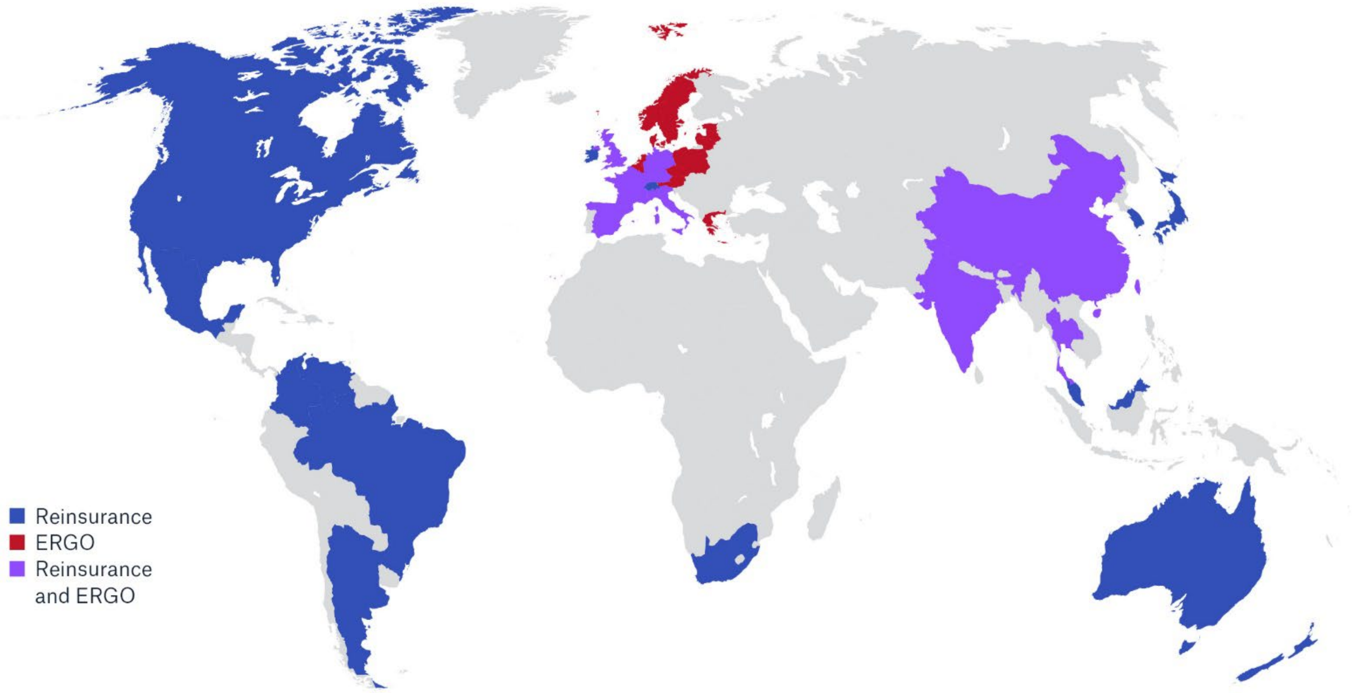
The reinsurance companies of the Group operate globally and in virtually all classes of business. Munich Re offers a full range of products, from traditional reinsurance to innovative solutions for risk assumption. Our companies conduct their business from their respective headquarters and via a large number of branches, subsidiaries and affiliated companies. Additionally, the reinsurance group includes specialty primary insurers, whose business requires special competence in finding appropriate solutions.

In ERGO, we combine Munich Re's primary insurance activities. Some 67% of ERGO's insurance revenue derives from Germany, and 33% from international business – mainly from central and eastern European countries. ERGO also operates in Asian markets, particularly in India, China, and Thailand.

MEAG comprises MEAG MUNICH ERGO AssetManagement GmbH – which manages financial and property portfolios and provides investment consultancy exclusively for Munich Re Group companies – and MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH, which manages segregated and retail funds with varying investment focuses and renders bespoke investment management services for non-Group institutional investors outside the USA.

Overview

	Munich Re Group				
Fields of business	Reinsurance		ERGO		
Segments	Life and health	Property-casualty	Life and Health Germany	Property-casualty Germany	International
Divisional units, markets and divisions	– Asia Pacific, Middle East, Africa – North America – Europe and Latin America – Markets	– Global Clients and North America – Europe and Latin America – Asia Pacific and Africa – Global Specialty Insurance	– Life Germany – Health Germany – Digital Ventures	– ERGO Versicherung Aktiengesellschaft, Düsseldorf, offering property-casualty insurance for retail, commercial and industrial customers	– Life insurance – Property-casualty insurance – Health insurance



Locations in which Munich Re conducts (re)insurance business via business units[1]. (As at 31 December 2023):

Africa
South Africa

Asia
Bahrain
Greater China
India
Japan
Malaysia
Singapore
South Korea
Thailand

Australia and New Zealand

Europe
Austria
Belgium
Czech Republic
Denmark
Estonia
France
Germany
Greece
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Spain
Sweden
Switzerland
United Kingdom

Latin America
Argentina
Brazil
Colombia
Mexico
Venezuela

North America
Canada
USA

1 Including affiliated companies, associates, joint ventures and branches of (re)insurance companies of Munich Re.

Munich Reinsurance Company and ERGO Group AG are under unified control within the meaning of the German Stock Corporation Act (AktG). The relevant statutory regulations, control agreements and Group directives govern the distribution of responsibilities and competences for key decisions between Group management and ERGO. Control and profit-transfer agreements are in place with many Group companies, especially between ERGO Group AG and its subsidiaries.

Reinsurance

In reinsurance, we operate in life, health and property-casualty business. Under reinsurance, we include not only specialised primary insurance activities that are handled by the reinsurance organisation but also business from managing general agents. Organisationally, we have pooled worldwide IoT activities into the divisional unit Global IoT.

As reinsurers, we write our business in direct collaboration with primary insurers, via brokers and within the framework of strategic partnerships. In addition to traditional reinsurance business, we further operate as a primary insurer, participating in insurance pools, public-private partnerships and business in specialist niche segments. We furthermore offer our clients a wide range of special products as well as customised insurance solutions and services, which we manage from within our reinsurance organisation. Our clients thus have direct access to the expertise, innovative strength and capacity of a leading global risk carrier. Thanks to our capital management know-how, we are in demand as a partner for products geared to our clients' balance-sheet, solvency and rating-capital requirements, as well as their risk models.

Focus of life and health reinsurance operations

We bundle our life and health reinsurance business worldwide in the life and health segment. This is split into three geographical regions, and an international unit (Markets) that offers specialised solutions for hedging capital market risks.

This division focuses on traditional reinsurance solutions primarily geared to the transfer of insurance risks, mortality risk accounting for the largest share of this. Moreover, we are active in the market for living benefits products. These include insurance products for occupational disability, long-term care, and critical illness. We also provide capacity for longevity risks.

In addition, we support our customers with a wide range of services along large stretches of the value chain. These include the development of new insurance products as well as digital and automated solutions for risk assessment and claims handling.

Alongside conventional solutions for the coverage of insurance risks, we also offer our clients efficient and tailor-made structured concepts to optimise their capitalisation, liquidity, or other key performance indicators.

Our Markets unit combines our global expertise and range of services for capital market risks, which are often a component of savings products. We provide our clients with comprehensive advice on product design while offering hedging for embedded options and guarantees linked to the capital markets. Our own exposure is transferred back to the capital markets.

In order to ensure proximity to our clients, we are represented in many markets with local subsidiaries and branches. We service the extremely important North American market via our Canadian branch and our subsidiary in the USA. In Europe, we have operations in Germany, the United Kingdom, Switzerland, Spain, Italy and Malta. We also operate subsidiaries in Australia and South Africa, and have a local presence in the key markets of South America, the Middle East and Asia. Asian business activities are centrally managed by a dedicated branch in Singapore, which underlines the strategic importance of this region for life and health reinsurance.

The property-casualty reinsurance divisions

The Global Clients and North America division handles our accounts with major international insurance groups, globally operating Lloyd's syndicates and Bermuda companies. It also pools our reinsurance know-how in the North American market for property-casualty business – in particular that of our Munich Reinsurance America Inc. subsidiary domiciled there – and for global large-risk business, which is pooled in our Facultative & Corporate unit.

Our Europe and Latin America division is responsible for property-casualty business with our clients from Europe, Latin America and the Caribbean. Business units – for example, in London, Madrid, Paris and Milan – afford us market proximity and regional competence. In the Latin American markets, our Brazilian subsidiary Munich Re do Brasil Resseguradora S.A., which is headquartered in São Paulo, and our representative offices in Bogotá and Mexico City help to ensure client proximity. Our Europe and Latin America division also includes the credit business – where Munich Re operates as a reinsurer and primary insurer – and New Reinsurance Company Ltd., which is domiciled in Zurich.

The Asia Pacific and Africa division conducts property-casualty reinsurance business with our clients in Africa, Asia, Australia, New Zealand and the Pacific Islands. Branches in Mumbai, Beijing, Seoul, Singapore, and Tokyo, along with representative offices in Bangkok and Taipei, as well as a subsidiary in Sydney, allow us to take full advantage of opportunities in the rapidly growing Asia-Pacific insurance market. In the African market, we are represented by our subsidiary Munich Reinsurance Company of Africa Ltd., headquartered in Johannesburg. These units and other representative offices guarantee our competitiveness in these key markets.

The Global Specialty Insurance (GSI) division comprises worldwide special-lines business, such as marine, cyber, aviation and space, along with specialty property-casualty business. The two large subsidiaries domiciled in the USA and operating in the field of specialised insurance activities – HSB and American Modern – are allocated to this division, as are Munich Re Specialty Insurance (MRSI), and Munich Re Specialty Group (MRSG). The GSI units specialise in products for which – like in reinsurance – risk understanding as well as insightful claims handling are paramount. American Modern offers specialty personal lines products in the USA. MRSI offers various specialty commercial insurance products in the North American market. HSB is a leading provider of products that depend on expertise in engineering, loss control and risk management. MRSG, in turn, through use of the Munich Re Syndicate and other subsidiaries, is a leading provider of marine insurance and insurance solutions for the aviation industry.

ERGO

Munich Re's second pillar is primary insurance business.

Three separate units operate under the umbrella of ERGO Group AG: ERGO Deutschland AG, ERGO International AG, and ERGO Technology & Services Management AG. German business is concentrated in ERGO Deutschland AG. ERGO International AG manages the ERGO Group's international business. ERGO Technology & Services Management AG has a transnational mandate as a global technology and service provider for the entire ERGO Group.

Since the start of 2024, a new division within ERGO Group AG has been responsible for Group marketing, global sales partnerships and all strategic digitalisation initiatives, which were until recently handled by ERGO Digital Ventures AG.

ERGO offers products in all the main classes of insurance: life insurance, health insurance, and in nearly all lines of property-casualty insurance, including travel insurance and legal protection insurance. With these products – in combination with the provision of assistance, other services and individual consultancy – ERGO covers the needs of retail and corporate clients. ERGO serves some 39 million mostly retail customers in over 20 countries, with the focus on Europe and Asia. The latest information on ERGO can be found at www.ergo.com.

In Germany, the focus is on sustainable and profitable growth. ERGO Versicherung AG is one of the largest providers of property-casualty insurance across nearly all classes of business, offering a wide range of products for retail, commercial and industrial clients. ERGO Vorsorge Lebensversicherung AG is ERGO's life insurer for capital-market-linked and biometric products. It offers solutions for all three types of old-age provision, mainly based on innovative and flexible unit-linked insurance products. ERGO Lebensversicherung AG and Victoria Lebensversicherung AG are concentrating on running off their traditional life insurance portfolios. DKV Deutsche Krankenversicherung AG offers an extensive portfolio in the healthcare sector: comprehensive private health insurance, products designed to supplement statutory health cover, and company health insurance. ERGO Krankenversicherung AG focuses on products that supplement statutory health insurance, especially supplementary dental plans. The specialist travel insurer ERGO Reiseversicherung AG is a market leader internationally as well as in Germany.

In Germany, ERGO's tied agents (agency sales) and ERGO Pro (structured sales force) are bundled under one roof in ERGO Beratung und Vertrieb AG. The latter is managed by ERGO Deutschland AG together with direct sales. ERGO Deutschland AG manages its broker and partner sales in its Property-casualty, Health Germany and Life Germany divisions, depending on class of business.

We developed all of our German sales organisations further in 2023 – in particular with regard to digitalisation and implementation of the "hybrid customer" business model, which offers customers an essentially identical range of products via all online and offline channels. ERGO is thus making integrated use of various channels – such as face-to-face consultation, internet, online chat, email, telephone or even video consultation – to leverage new potential.

ERGO International AG coordinates and manages ERGO's international operations. The focus is on profitable organic growth in European core markets and selected growth markets in Asia. In the reporting year, ERGO International AG further advanced its business in core markets in Europe by growing in new fields of business and using new distribution models, thus maintaining its good position in the respective markets. ERGO International AG has operations in Asia, including in India, China and Thailand. In Thailand, ERGO's focus in 2023 was on the property insurance market, which is not only the largest in Southeast Asia but also shows good growth potential. By taking on a majority shareholding in ThaiSri Insurance Public Co. Ltd. and acquiring Nam Seng Insurance Public Co. Ltd. at the beginning of January 2023, ERGO achieved an important milestone on its path towards expanding its market position in Thailand. In the course of the acquisition of a majority stake, ThaiSri Insurance Public Co. Ltd. was renamed ERGO Insurance (Thailand) Public Co. Ltd. This rebranding is intended to give the ERGO marque greater visibility in this Southeast Asian country. The Indian joint venture HDFC ERGO General Insurance Company Ltd. performed strongly in the past year too, and improved its market position overall; it now ranks second in the private non-life insurance market. In China, ERGO increased its shareholding in the Chinese life insurance joint venture ERGO China Life Insurance Co., Ltd. to 65%. This step emphasises the Group's ambition to establish itself in this strategically important market for the long term and to exploit its growing potential. In the Chinese property insurance market, ERGO is striving for further growth and a simultaneous boost in profitability through its stake in Taishan Property & Casualty Insurance Co., Ltd.

ERGO Technology & Services Management AG is a dedicated arm of ERGO Group AG in charge of providing digital platforms, solutions and services. It has a global remit and supports ERGO in designing optimum insurance products and fostering the most effective customer channels. It consists of ITERGO GmbH in Germany, ERGO Technology & Services S.A. in Poland, and ERGO Technology & Services Private Limited in India.

From 2024, a newly created Board member division is responsible for ERGO's digital transformation within the ERGO Group. This also includes the coordination of established technologies such as robotics, artificial intelligence, voicebots, process mining and virtual reality, and the Embedded Insurance field of business, in which we collaborate with partners like Amazon and Coolblue. From 2024, ERGO Deutschland AG is responsible for controlling the operational business of the digital insurer nexible, ERGO Reiseversicherung AG and the ERGO Mobility Solutions division, for which ERGO Digital Ventures AG was previously responsible.

Our brands

Munich Re Group

- The Hartford Steam Boiler Inspection and Insurance Company
- New Reinsurance Company Ltd.
- American Modern Insurance Group, Inc.
- Digital Partners
- Bell & Clements Ltd.
- Groves, John & Westrup Ltd.
- MedNet Holding GmbH
- NMU Specialty Ltd.
- Parachute Digital Solutions, Inc.
- Relayr Inc.
- Roanoke Insurance Group Inc.

- German and international insurance companies
- German and international travel insurance companies
- German and international health insurance companies
- D.A.S. Rechtsschutz-versicherung International
- Nexible

- MEAG MUNICH ERGO AssetManagement GmbH
- MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH

The detailed breakdown of participations can be seen in the Notes to the consolidated financial statements > List of shareholdings as at 31 December 2023 pursuant to Section 313(2) of the German Commercial Code (HGB).

Combined non-financial statement

Munich Re pursues a sustainability strategy that is uniform across the Group. In our endeavours to contribute to a sustainable tomorrow, we regard economic prosperity, resilience and technological progress as factors that are intrinsic to the creation of a just and sustainable society. Munich Re's commitment to acting responsibly continues to serve as a cornerstone of our value-creation activities. As such, it is outlined in our Ambition 2025. To uphold this commitment, we utilise our collective experience and expertise, and work together with our external stakeholders to help drive an effective transformation.

The main focus of our strategy is the further decarbonisation of our investments, our (re)insurance activities, and our own business operations.

You will find a complete description of our Group strategy and the required disclosures under Section 289c(3) and 315c(1) and (2) of the German Commercial Code (HGB), as well as further details about our Munich Re Group Ambition 2025, under "Strategy".

In the following statement we report on those sustainability issues which – based on the materiality analysis performed – are particularly relevant for Munich Re and its stakeholders, and we explain the corresponding goals, concepts and results in detail. Details about the materiality analysis can be found at the end of the combined non-financial statement.

Sustainability in investment and insurance

Investment

Strategy and objectives

As global investors, Munich Re is aware of its responsibility to conduct its activities sustainably, and we integrate ESG criteria into our investment policy. In addition, we have committed to moving our portfolio towards a net-zero climate target by 2050. When choosing asset managers, we take their level of experience in ESG and integrating ESG aspects into account. All of our measures are aimed at identifying ESG-related risks and opportunities, and including them in our investment decisions.

Munich Re was one of the first signatories of the Principles for Responsible Investment (PRI) and joined the Net-Zero Asset Owner Alliance (NZAOA) in 2022. Based on these two programmes, we have introduced our Responsible Investment Guideline, which covers the PRI, NZAOA and the sustainability criteria that we apply to our investment management. Moreover, Munich Re is a member of the Taskforce on Nature-related Financial Disclosures (TNFD), whose recommendations we take into account in our investment activities and in our insurance business.

As outlined in further detail under "Governance", our strategic decisions on sustainability in investment are taken by the Board of Management's ESG Committee, supported by the ESG Management Team. In addition, the ESG Investment Committee specifically focuses on implementing the ESG strategy with regard to our investments; our Reputational Risk Committee supports our efforts to holistically handle sustainability risks by analysing and assessing reputational risks in our investment activities.

The Chief Investment Officer (CIO) is the Board member responsible for the Group's investment management. Group Investment Management (GIM), which reports to the CIO, is responsible for the sustainability of the Group's investment strategy as the asset owner, and has set up its own ESG team for this purpose. ESG multipliers throughout GIM support the ESG team in establishing sustainability as an important consideration throughout the entire value chain.

This structure is also reflected in asset management at MEAG, which handles the majority of our investments. MEAG ensures targeted implementation of the ESG strategy through its membership on GIM's ESG Investment Committee, ongoing coordination among the ESG teams, and the ESG multipliers in the various portfolio-management teams. Regular training is offered to increase and improve awareness of ESG issues, for example on regulatory topics or ESG trends. The MEAG ESG Committee at Board level and the MEAG ESG Management Team have key roles in this regard.

Our investments are managed based on four pillars: systematic integration of ESG criteria in GIM and MEAG's investment processes, fulfilment of our responsibility in our role as an asset owner (stewardship), defined exclusion criteria, and ESG-focused investment areas such as renewable energy and green bonds. In addition, we demand that all of our asset managers apply ESG criteria when handling their portfolios.

Our goal is to decarbonise our investment portfolio, reaching net zero by 2050. In that context, we have committed to divest from thermal coal by 2040. Furthermore, we have adopted the Munich Re Group Ambition 2025, a climate strategy for our investments that provides clear targets for our contribution to climate change mitigation. It includes reducing, in an intermediate step, our total scope 1 and 2 financed GHG emissions[1] from listed equities, corporate bonds and direct real estate by 25–29% compared to the 2019 base year, by 2025. In addition, we have set specific sector targets for listed equities and corporate bonds: we intend to reduce financed GHG emissions from investments in thermal coal – in particular mining and/or power generation – by more than 35% by 2025, and for investments in oil and gas – in particular drilling and production, refining and distribution – by more than 25%, respectively compared to the 2019 base year.

In a further step towards reaching our net-zero target, in October 2022 we updated our guidelines for the oil and gas sector and added new restrictions.

According to the Intergovernmental Panel on Climate Change (IPCC)[2], there is a close correlation between climate change and biodiversity. To avoid harming environmentally sensitive areas or those with great biodiversity, we take into account the UNESCO list of Word Heritage Sites (UN WHS) of natural or mixed cultural and natural heritage in our Responsible Investment Guideline for direct alternative investments in critical sectors. Any new investments we make in affected areas are subjected to review processes accordingly.

We continue to make a concerted effort to hold a share of ESG-focused investments in our asset portfolio. In 2023, we achieved our goal of increasing our renewable energy holdings to €3bn ahead of the 2025 target.

Measures

In 2019, Munich Re stopped investing directly in listed companies that generate more than 30% of their earnings from thermal coal. Since 2021, companies that generate 15% to 30% of their earnings from thermal coal have also been excluded from our investment universe or, in individual cases, encouraged to reduce their greenhouse gases in the context of an engagement dialogue as part of the investor-led Climate Action 100+ (CA100+) initiative. In 2023, this was the case at nine companies associated with two business groups. The total sum invested in the companies in question as at 31 December 2023 amounted to approximately €172m. MEAG continued its collaborative engagement dialogues as part of CA100+ and discusses the content to be addressed in the dialogues, and the progress made, with GIM. In 2023, MEAG joined 12 further engagement groups, resulting in a total number of 22 contributions. One of these engagements came to an end in 2023, after CA100+ established that the company concerned was no longer part of its target group. Given that we focus on the largest GHG emitters, our dialogues are predominantly conducted with companies in the energy and industry sector. We also exercise our voting rights with regard to ESG aspects.

When making direct alternative investments, we have – as of 1 April 2023 – stopped investing in projects specifically for new oil or gas fields, new oil-fired power plants, or midstream oil infrastructure. This applies to oil and gas fields that were not already producing, and to power plants or infrastructure that were not under construction or already operating, as at the deadline of 31 December 2022.

In addition, since 1 April 2023 we have no longer directly invested in equities or corporate bonds from listed oil and gas companies whose business model specialises in oil and gas. We define such specialised oil and gas companies in this respect as publicly traded companies listed under the Global Industry Classification Standard (GICS) Oil and Gas sub-sectors, with the exception of Integrated Oil & Gas.

Direct investment in listed companies that generate more than 10% of their earnings from oil sands are also excluded. Furthermore, we exclude the following from our direct investment universe:

- Investment in companies that manufacture controversial weapons (including but not limited to the weapon categories anti-personnel mines and cluster munition)
- Government bonds (including the sub-sovereign level) and notes from government-related institutions in countries with an MSCI ESG rating of CCC
- Trade and investment in food-related commodities (e.g. grains/oilseeds, dairy products).

In our efforts to help mitigate human rights violations, we exclude countries and companies that significantly breach human rights from our investment universe on the basis of exclusion lists (see “Human rights” for more details).

1 Scope 1 GHG emissions: Direct emissions from primary energy consumption (natural gas, heating oil, emergency generators, fuel for company cars);
Scope 2 GHG emissions: Indirect emissions from procured energy (purchase of electricity, district heating and district cooling).
2 www.ipcc.ch/publication/climate-change-and-biodiversity-2/

Our ESG-focused investments are strategic investments in assets that align with our long-term ESG strategy. They include investments in renewable energy, innovative transport solutions, sustainably managed forests, organic farming, certified buildings and green bonds.

In this context, renewable energy refers to investments in energy production facilities that use renewable energy sources such as the sun, wind, geothermal energy or hydroelectric power. It includes the associated infrastructure for producing electricity and heat, as well as for storage and transportation.

Our standard for sustainable forest investment is a certificate from the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC), or an equivalent certification.

Direct real estate is deemed certified if it features a recognised certification from, for example, the Building Research Establishment Environmental Assessment Method (BREEAM), Leadership in Energy and Environmental Design (LEED), or the German Sustainable Building Council (DGNB).

The classification of our green bond holdings is based on an assessment of the emissions documentation from WM Datenservice.

By issuing the Munich Re subordinated green bonds, our goal is to support the drive towards a climate-friendly transformation of the economy. Munich Re uses the capital received from the subordinated green bonds to finance or refinance suitable projects, in accordance with our Green Bond Framework. Projects include investments of equity and debt in renewable energy, energy efficiency, clean transportation, green buildings, sustainable water management, the eco-efficient and/or circular economy, and the environmentally sustainable management of resources and land.

Furthermore, integrating ESG criteria is a key component of our investment strategy. As a result, MEAG takes ESG risks and specifically determined ESG criteria into account in its investment decisions in the following asset classes:

ESG criteria as an important component of our investment strategy

	Equities and bonds		Alternative investments		
Asset classes	Equities and corporate bonds	Government bonds	Infrastructure (incl. renewable energy) and forestry	Direct real estate	Private equity, private debt and infrastructure funds
ESG criteria	– Defined exclusion criteria – Availability of MSCI ESG ratings – Impact through engagement dialogues and proxy voting	– Defined exclusion criteria – Availability of MSCI ESG country ratings	Assessment of ESG aspects (prior to submission of a binding offer)	For new investments, consideration of: – Energy efficiency – Certificates – Carbon Risk Real Estate Monitor (CRREM) – ESG investment costs (ESG CapEx)	PRI commitment by funds manager or adherence to ESG principles and guidelines (required for the majority of new investments), if possible inclusion of additional restrictions in agreements

In addition to our ESG targets, we also report on our ESG-focused investments and the rating coverage of liquid asset classes. The MSCI ESG rating coverage of the liquid asset classes equity, corporate and government bonds, and covered bonds is over 80%.

As part of our PRI membership, Munich Re builds on its sustainability strategy by engaging in regular dialogue with the PRI managers. PRI carried out a further assessment process in 2023 in which Munich Re participated.

Metrics

In order to meet our environmental objectives, we determine metrics based on the goals of the Munich Re Group Ambition 2025. The defined metrics are all shown compared to the 2019 base year. Any additional metrics are shown in comparison to the previous year.

The following table illustrates the development of scope 1 and 2 financed GHG emissions from listed equities, corporate bonds and direct real estate. We use data from the external provider ISS ESG to measure the financed GHG emissions from listed equities and corporate bonds. To measure GHG emissions for our direct real estate portfolio, we continue to record energy consumption data, which is subsequently converted using emission factors.

Absolute financed GHG emissions (scope 1 and 2)[1]

t CO_2e	31.12.2023	Prev. year
Listed equities, corporate bonds and direct real estate	3,016,864	3,113,093
Thereof: listed equities and corporate bonds from companies in the thermal coal segment – in particular mining and/or power generation	234,194	269,179
Thereof: listed equities and corporate bonds from companies in the oil & gas segment – in particular drilling and production, refining and distribution	463,260	734,197

1 For listed equities, corporate bonds based on the available CO_2e emissions from the data provider ISS ESG (usually CO_2e emissions from the previous year). For direct real estate, CO_2e emissions for the 2023 reporting year are approximated due to a lack of available data at the time of publication. They are based on available CO_2e emissions from the previous year and CO_2e-emission reductions as a result of implemented energy-saving measures, provided they can be verified and measured.

Development of GHG emissions (scope 1 and 2) compared to the 2019 base year (Munich Re Group Ambition 2025)[1]

%	31.12.2023	Prev. year
Listed equities, corporate bonds and direct real estate	–47.3	–45.7
Thereof: listed equities and corporate bonds from companies in the thermal coal segment – in particular mining and/or power generation	–54.3	–47.5
Thereof: listed equities and corporate bonds from companies in the oil & gas segment – in particular drilling and production, refining and distribution	–55.1	–28.9

1 For listed equities, corporate bonds based on the available CO_2e emissions from the data provider ISS ESG (usually CO_2e emissions from the previous year). For direct real estate, CO_2e emissions for the 2023 reporting year are approximated due to a lack of available data at the time of publication. They are based on available CO_2e emissions from the previous year and CO_2e-emission reductions as a result of implemented energy-saving measures, provided they can be verified and measured.

Regarding the total absolute financed GHG emissions, +0.2 (+0.5) percentage points of the year-on-year change were attributable to updated emissions data that we received from our data provider.

Interest-rate changes on the markets lead to an adjustment in the market value of debt instruments and thus in total absolute financed GHG emissions. If we were to use the nominal value instead of the market value for debt instruments, the reduction would have been 42.7% (instead of 47.3%) relative to the 2019 base year.

A further metric for assessing our targets with regard to listed equities, corporate bonds and direct real estate is the relative CO_2e footprint (t CO_2e/€m invested). The financed GHG emissions from this portfolio are shown in proportion to the market value of our investments. The amount was 75 (t CO_2e/€m invested) on 31 December 2022; as at 31 December 2023, it was 68 (t CO_2e/€m invested). The metric's denominator takes into account all market values of the investments that fall under the scope of the Munich Re Group Ambition 2025. This also includes market values of investments for which no CO_2e data is available to us. Data availability therefore also influences this metric in addition to the actual progression of the portfolio's CO_2e footprint. In the reporting year, CO_2e data was available to us for 93.6% (93.0%) of the investments in the scope of the denominator.

In addition to decarbonisation targets, the financing of sustainable business activities plays an important role, particularly for the financial services industry. We provide information on our issued volume of green bonds in this context.

Green bonds

	31.12.2023	Prev. year	Change
			%
Volumes of green bonds issued in €m	2,250	2,250	0.0
Volumes of green bonds issued in US$ m	1,250	1,250	0.0

The following table provides an overview of our ESG-focused investments. They are each shown with the sum of their market values in the respective asset class.

ESG-focused investments

	31.12.2023	Prev. year	Change
€m			%
Green bonds	3,633	2,326	56.2
Renewables	3,130	2,368	32.2
Certified real estate	2,565	2,633	−2.6
Certified forestry management	1,928	1,537	25.4

As an indicator of the availability of ESG ratings, and to analyse ESG risks and opportunities, we calculate the share of the liquid asset classes equities, corporate bonds, covered bonds and government bonds covered by MSCI ESG ratings, compared to the total volume of such liquid assets, on the basis of market values.

Rating coverage of liquid asset classes

%	31.12.2023	Prev. year
Rating coverage of liquid asset classes	95.3	95.4

To provide a standardised and transparent overview of the sectors that Munich Re invests in, in accordance with the Global Industry Classification Standard (GICS) we report the market values of the various asset classes for each industry sector.

Investments by asset class and sector

€m		31.12.2023	Prev. year	Change
Sector acc. to GICS per asset class				%
Equity				
Energy	10	175	252	−30.6
Materials	15	514	572	−10.1
Industrials	20	1,522	1,210	25.8
Consumer discretionary	25	1,073	664	61.6
Consumer staples	30	812	1,169	−30.6
Healthcare	35	1,157	1,094	5.7
Financials	40	2,531	2,174	16.4
Information technology	45	1,305	1,037	25.9
Communication services	50	527	439	20.1
Utilities	55	564	529	6.5
Real estate	60	248	135	83.3
Corporate bonds				
Energy	10	1,471	2,042	−28.0
Materials	15	1,194	1,131	5.6
Industrials	20	2,935	2,782	5.5
Consumer discretionary	25	2,250	1,978	13.8
Consumer staples	30	1,923	2,202	−12.7
Healthcare	35	2,200	1,790	22.9
Financials	40	41,693	38,692	7.8
Information technology	45	1,217	1,272	−4.3
Communication services	50	2,867	2,501	14.6
Utilities	55	3,833	3,091	24.0
Real estate	60	866	808	7.2
Derivatives				
Financials	40	2,981	4,962	−39.9
Mortgage loans				
Real estate	60	8,454	7,561	11.8
Real estate				
Real estate[1]	60	9,384	8,719	7.6

1 Measured at book values.

EU Taxonomy Regulation

We report on the share of our taxonomy-eligible and taxonomy-aligned economic activities in investment and insurance, as per EU Regulation 2020/852 (EU Taxonomy Regulation) in conjunction with the Commission Delegated Regulation (EU) 2021/2178. On 21 December 2023, the European Commission published a new FAQ document (Draft Commission Notice) on the interpretation and implementation of certain legal provisions of the Commission Delegated Regulation (EU) 2021/2178 on the taxonomy-related information to be disclosed by financial undertakings. We have reviewed our disclosures on this basis and changed them accordingly, provided that the interpretation was clear and, in light of the late publication of the notice, that implementation was feasible. Information that is not clear or contradicts previous FAQs, however, must first be checked by us. The EU Taxonomy Regulation sets out a standardised system for classifying which economic activities can be qualified as environmentally sustainable, and under which conditions.

For the year 2023, reporting requirements on the four non-climate-related environmental objectives – sustainable use and protection of water and marine resources; transition to a circular economy; pollution prevention and control; and protection and restoration of biodiversity and ecosystems – had to be applied for the first time. The taxonomy criteria applicable to date for the climate-related environmental objectives climate change mitigation (CCM) and climate change adaptation (CCA) have been updated with changes to the technical screening criteria, and additional economic activities have been added. For any economic activity disclosed for the first time or modified in 2023, a two-year transition period applies during which it is only necessary to report on the taxonomy-eligibility of that activity.

For the 2023 reporting year, we are reporting for the first time not only on the share of our taxonomy-eligible assets, but also on the share of our assets with which we finance economic activities that are taxonomy-aligned with the climate-related environmental objectives. Our focus with regard to the taxonomy is to calculate the metrics required by regulation. There are no broader strategic implications at present.

At the time of publication, no information on the four non-climate-related environmental objectives for the reporting year was available from our investee companies. However, we examined our direct real estate used by third parties, and other investments in non-financial assets, for the first time to determine their taxonomy-eligibility and thus their contribution to the newly applicable environmental objectives. In this process, we also took into account the new economic activities with respect to the climate-related environmental objectives.

All assets that are theoretically able to finance economic activities fall within the scope of the taxonomy KPIs. This predominantly includes the balance sheet items “Investments”, “Investments for unit-linked life insurance” and “Insurance-related financial instruments”. It does not include intangible assets, owner-occupied property or further property, plant and equipment that are not held for the purpose of financing economic activities. Insurance and reinsurance contracts that are classified as assets for accounting purposes, and cash resources such as cash at banks, cheques and cash in hand are also excluded. Furthermore, Investments in governments, central banks and supranational issuers fall outside the scope of the taxonomy KPIs. Investments in governments also include investments in German federal states (*Bundesländer*), regions, municipalities, cities and communities. Issuers with EU state guarantees are subject to an assessment to determine their taxonomy-eligibility and -alignment.

The total investments – the basis for calculating the coverage ratio – predominantly include the balance sheet items “Cash and cash equivalents” and “Other assets”, in addition to the investments in the scope of the taxonomy KPIs.

The following table shows the scope of the taxonomy KPIs based on the IFRS carrying amounts, and the coverage ratio, i.e. the assets covered by the KPIs relative to the total investments considered. It presents a full breakdown of the investments that fall within the scope of the taxonomy KPIs. In order to fulfil the requirement in Article 6 of the Commission Delegated Regulation (EU) 2021/2178, we also disclose the templates set out in Annex X of that regulation under “EU Taxonomy Regulation templates”.

In this section of the report, many of the disclosure requirements for the current reporting year are being presented for the first time. For that reason, comparative information will only be available as of the 2024 reporting year.

Scope of application of the taxonomy KPIs as per Art. 8 of the EU Taxonomy Regulation

	31.12.2023	
	€m	%
Total investments	**246,566**	**100.0**
Thereof assets covered by the KPIs, absolute and relative to total investments (Coverage ratio)	**156,093**	**63.3**
Thereof other than investments for unit-linked life insurance contracts, absolute and relative to assets covered by the KPIs	148,160	94.9
Thereof exposure to other counterparties, absolute and relative to total assets covered by the KPIs	42,889	27.5
Assets covered by the KPIs in scope of the numerator, absolute and relative to assets covered by the KPIs	**61,400**	**39.3**
Assets funding economic activities from financial undertakings subject to NFRD	11,261	7.2
Assets funding economic activities from non-financial undertakings subject to NFRD	7,381	4.7
Exposure to other counterparties in scope of the numerator	42,758	27.4
Assets covered by the KPI not in scope of the numerator, absolute and relative to assets covered by the KPI	**94,693**	**60.7**
Assets funding economic activities from financial undertakings not subject to NFRD	57,012	36.5
Assets funding economic activities from non-EU financial undertakings not subject to NFRD	28,917	18.5
Assets funding economic activities from EU financial undertakings not subject to NFRD	28,095	18.0
Assets funding economic activities from non-financial undertakings not subject to NFRD	34,374	22.0
Assets funding economic activities from non-EU non-financial undertakings not subject to NFRD	24,415	15.6
Assets funding economic activities from EU non-financial undertakings not subject to NFRD	9,958	6.4
Derivatives	3,176	2.0
Exposure to other counterparties not in scope of the numerator	131	0.1

A company's economic activities are taxonomy-eligible if they are listed in the Delegated Regulation (EU) 2021/2139 (Commission Delegated Regulation 2021/2139), supplementing the EU Taxonomy Regulation. Taxonomy-eligible activities are activities that are deemed to be generally suitable for making a positive contribution to the respective environmental objective.

In accordance with Article 3 of the EU Taxonomy Regulation, economic activities are taxonomy-aligned if they actually contribute substantially to one or more of the environmental objectives, without causing significant harm to one of the others (principle of "do no significant harm" or DNSH). Both are determined by using technical screening criteria. To qualify as taxonomy-aligned, the company carrying out the economic activity must also ensure it does so in compliance with minimum safeguards.

Our disclosures on taxonomy-alignment are based particularly on reports from non-financial undertakings, which published information on their taxonomy-alignment regarding the climate change mitigation and climate change adaptation environmental objectives for the first time for the 2022 reporting year. Regarding our investments in other financial undertakings, however, no published information about their taxonomy-alignment was available to us at the time of publication. For that reason, we disclose these under "Assets funding taxonomy-eligible economic activities where alignment has not yet been assessed".

In cases where the taxonomy-alignment data is inconsistent or incomplete, we disclose the investments under "Assets funding taxonomy-eligible but not taxonomy-aligned economic activities".

For the portion of our portfolio that represents an investment in the activities of companies that are obliged to publish a non-financial statement, we disclose the shares of the taxonomy-eligible and the taxonomy-aligned turnover and of the taxonomy-eligible and taxonomy-aligned capital expenditure, respectively, that we finance through our investments at the reporting companies. We base this on information from a data provider and only use actual reported data. The denominator accordingly constitutes the total assets covered by the taxonomy KPIs.

We have undertaken our own classification to determine the taxonomy-eligibility and -alignment of our real estate used by third parties, mortgage loans and other investments in non-financial assets. The same applies to our infrastructure investments held via holdings or special-purpose vehicles (SPVs) and for which we performed a look-through.

We also looked through our unconsolidated funds to the assets contained therein, to determine the taxonomy-eligibility and -alignment of the former.

With regard to our investments in renewable energy and forestry, the most relevant economic activities are 4.1. Electricity generation using solar photovoltaic technology, 4.3. Electricity generation from wind power and 1.3. Forest management. For this reporting year, we were able to report only a small share of our investments in renewable energy, and none of our investments in forestry, as taxonomy-aligned. This is because fulfilment of the DNSH criteria for the two climate-related environmental objectives cannot yet be fully documented. We are reliant on the operating companies to support us with the remaining documentation requirements. Through continuous dialogue and further engagement, we are working towards obtaining the missing documentation from the companies in question. We expect an increase in the alignment ratio for the above-mentioned asset classes for the coming reporting year.

Due to the fact that economic activities connected with real estate are generally taxonomy-eligible and real estate collateral is available for every mortgage loan, the share of real estate and mortgage loans that are taxonomy-eligible is 100%.

Mortgage loans to private individuals and companies as well as direct and indirect real estate used by third parties have made the greatest contribution to our taxonomy-alignment. These economic activities primarily fall under the category 7.7. Acquisition and ownership of buildings and have been allocated exclusively to the environmental objective climate change mitigation. We were not able to report any taxonomy-alignment for the activities classified under 7.1. Construction of new buildings or 7.2. Renovation of existing buildings in the reporting year. This is due to the fact that adequate evidence that the DNSH criteria have been met cannot yet be provided in full. In the case of loans, the buildings that serve as collateral for the mortgage loans were used as the basis for assessing taxonomy-eligibility and -alignment.

As part of this taxonomy assessment, we checked the energy status of the buildings. Their energy efficiency was determined on the basis of energy performance certificates or energy-efficiency data obtained by external service providers. Due to a lack of availability of energy performance certificates for the majority of residential buildings in Germany serving as collateral for mortgage loans, an energy-efficiency-class screening was carried out by Sprengnetter Property Valuation Finance GmbH based on comparable buildings. For economic activity categorised under 7.7., a building built before 31 December 2020 can make a significant contribution to the environmental objective of climate change mitigation, as an alternative to having an energy-efficiency class of at least A, when it is within the top 15% of the national or regional building stock in terms of its energy efficiency. Due to a lack of public data, determination of the top 15% was based on relevant studies. For residential buildings in Germany, a study by the Association of German Pfandbrief Banks and Drees & Sommer, updated in August 2023, was used. For commercial buildings in Germany and abroad, the basis was data from the Institut de l'Epargne Immobilière et Foncière (IEIF) in collaboration with software provider Deepki, supported by the German Sustainable Building Council (DGNB) and the Royal Institution of Chartered Surveyors (RICS).

In assessing the DNSH criterion for climate change adaptation, an analysis of current and future, material, physical climate risks that could affect buildings was performed using Munich Re Service GmbH's climate-risk analysis tool ("Risk Suite").

Derivatives classified as assets for the balance sheet, as well as investments in companies which are themselves not obliged to publish a non-financial statement (for example companies whose registered seat is outside the EU) are not included in the assessment of taxonomy-eligibility and -alignment. We mainly use data from the provider ISS ESG to identify such companies. In addition, we perform a consistency check based on relevant data from Bloomberg.

Our investments in asset-backed securities (ABS) are reported under "Assets not in scope of the numerator". Based on the regional distribution of our ABS portfolio as well as random samples of originators known to us, we came to the conclusion that the majority consisted of companies that are not subject to the reporting obligations. Because insufficient data was available, we were also unable to look through to the ultimate beneficiaries for a large portion of our investments in ABS.

Our investments in private equity funds are reported in the same way as funds not managed by MEAG where it was not possible to perform a look-through despite sufficient efforts, i.e. under "Assets funding taxonomy-non-eligible economic activities".

In accordance with the provisions of Article 8 of the EU Taxonomy Regulation, in combination with Delegated Regulation (EU) 2021/2178 (Commission Delegated Regulation 2021/2178), in the following we report metrics concerning the share of our taxonomy-eligible and taxonomy-aligned assets. The table provides a full breakdown of the assets included in the assessment of taxonomy-eligibility and -alignment. In order to fulfil the requirement in Article 6 of the Commission Delegated Regulation (EU) 2021/2178, we also disclose the templates set out in Annex X of that regulation under "EU Taxonomy Regulation templates".

Overview of taxonomy-eligibility and -alignment of assets (details on the numerator); absolute and relative to total assets covered by the KPIs[1,2]

	31.12.2023		31.12.2023	
	Turnover-based		CapEx-based	
	€m	%	€m	%
Assets covered by the KPIs in scope of the numerator, absolute and relative to total assets covered by the KPIs	**61,400**	**39.3**	**61,400**	**39.3**
Assets funding taxonomy-eligible economic activities	**32,197**	**20.6**	**31,800**	**20.4**
Assets funding taxonomy-aligned economic activities	**3,488**	**2.2**	**3,861**	**2.5**
Assets funding taxonomy-aligned economic activities from non-financial undertakings	466	0.3	825	0.5
Assets funding taxonomy-aligned economic activities from other counterparties[3]	3,022	1.9	3,037	1.9
Thereof assets funding taxonomy-aligned activities other than investments for unit-linked life insurance contracts	3,468	2.2	3,829	2.5
Assets funding taxonomy-eligible but not taxonomy-aligned economic activities	**25,876**	**16.6**	**26,491**	**17.0**
Assets funding taxonomy-eligible economic activities where alignment has not yet been assessed	**2,833**	**1.8**	**1,447**	**0.9**
Assets funding economic activities that are not taxonomy-eligible	**24,646**	**15.8**	**22,465**	**14.4**
Assets from financial investee undertakings not used to assess taxonomy-eligibility[4]	**4,558**	**2.9**	**7,136**	**4.6**

1 This table includes an assessment for the environmental objectives of climate change mitigation and climate change adaptation. With regard to environmental objectives 3–6, eligibility was assessed only for direct investments in non-financial assets. For our liquid investments in other undertakings, no reported data on environmental objectives 3–6 was available at the time of publication. Moreover, alignment figures are included only from non-financial investee undertakings, as reported alignment data from financial undertakings is not yet available.
2 With regard to investments in primary insurers and reinsurers, the share of taxonomy-eligible and non-taxonomy-eligible insurance activities is considered as a turnover-based share, and the share of taxonomy-eligible and non-taxonomy-eligible investments is allocated to the CapEx-based share accordingly.
3 Thereof 0.8 percentage points are attributable to mortgage loans for which the taxonomy-alignment was assessed using an energy-efficiency-class screening on the basis of comparable objects.
4 Comprised of our investee undertakings' investments in derivatives and in undertakings that are not obliged to publish a non-financial statement. Both are excluded from the eligibility assessment performed by our investee undertakings.

Financial undertakings are obliged as a matter of principle to base their taxonomy-alignment calculations on adjusted key performance indicators from the non-financial undertakings in which they invest. Non-financial undertakings are obliged to adjust their share of taxonomy-aligned economic activities if they have financed taxonomy-aligned turnover and/or capital expenditure using proceeds from green bonds they have issued. Due to incomplete disclosures from our investee companies, we were not able to make such an adjustment for the reporting year.

For the 2022 reporting year, our investee companies have taken into account the Complementary Climate Delegated Act with regard to the climate change mitigation and climate change adaptation environmental objectives. Accordingly, information on the taxonomy-eligible and taxonomy-aligned nuclear energy and fossil gas related activities of those companies subject to disclosure obligations was made available to us for the first time for the 2023 reporting year.

In the following, we provide an overview of our investment activities in fossil gas and nuclear energy generation as well as the share of our assets that fund the associated taxonomy-eligible and taxonomy-aligned economic activities (4.26–4.31). In addition, under "EU Taxonomy Regulation templates" we present the standard templates set out in Annex XII, as stipulated in Article 8, paragraph 8 of the Commission Delegated Regulation (EU) 2022/1214. This concerns the disclosure requirements in accordance with Article 8, paragraphs 6 and 7 regarding fossil gas and nuclear energy generation activities.

Nuclear and fossil gas related activities[1]

Nuclear energy related activities		Turn-over-based	CapEx-based
4.26	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No	No
4.27	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No	No
4.28	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No	No
Fossil gas related activities			
4.29	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes	Yes
4.30	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	Yes	No
4.31	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No	No

1 With respect to taxonomy-eligibility and -alignment, the contribution of liquid assets in nuclear and gas is immaterial. As a consequence, these assets are not taken into account.

Overview of assets funding nuclear energy and fossil gas related activities

Assets funding taxonomy-aligned nuclear energy and fossil gas related activities, absolute and relative to total assets covered by the KPIs[1, 2]

	31.12.2023						31.12.2023					
	Turnover-based						CapEx-based					
	Total (CCM+CCA)		CCM		CCA		Total (CCM+CCA)		CCM		CCA	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
Assets funding taxonomy-aligned economic activities in 4.29	**0**	**0.0**	0	0.0	0	0.0	**0**	**0.0**	0	0.0	0	0.0
Assets funding taxonomy-aligned economic activities in 4.30	**0**	**0.0**	0	0.0	0	0.0	**0**	**0.0**	0	0.0	0	0.0
Assets funding taxonomy-aligned economic activities other than nuclear energy and fossil gas related activities	**3,488**	**2.2**	3,488	2.2	0	0.0	**3,861**	**2.5**	3,861	2.5	1	0.0
Total	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 With respect to taxonomy-eligibility and -alignment, the contribution of liquid assets in nuclear and gas is immaterial. As a consequence, these assets are not taken into account.

Assets funding taxonomy-aligned nuclear energy and fossil gas related activities, absolute and relative to total taxonomy-aligned economic activities[1, 2]

	31.12.2023 Turnover-based						31.12.2023 CapEx-based					
	Total (CCM+CCA)		CCM		CCA		Total (CCM+CCA)		CCM		CCA	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
Assets funding taxonomy-aligned economic activities in 4.29	**0**	**0.0**	0	0.0	0	0.0	**0**	**0.0**	0	0.0	0	0.0
Assets funding taxonomy-aligned economic activities in 4.30	**0**	**0.0**	0	0.0	0	0.0	**0**	**0.0**	0	0.0	0	0.0
Assets funding taxonomy-aligned economic activities other than nuclear energy and fossil gas related activities	**3,488**	**100.0**	3,488	100.0	0	0.0	**3,861**	**100.0**	3,861	100.0	1	0.0
Total	**3,488**	**100.0**	**3,488**	**100.0**	**0**	**0.0**	**3,861**	**100.0**	**3,861**	**100.0**	**1**	**0.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 With respect to taxonomy-eligibility and -alignment, the contribution of liquid assets in nuclear and gas is immaterial. As a consequence, these assets are not taken into account.

Assets funding nuclear energy and fossil gas related activities that are taxonomy-eligible but not taxonomy-aligned, absolute and relative to total assets covered by the KPIs[1]

	31.12.2023 Turnover-based						31.12.2023 CapEx-based					
	Total (CCM+CCA)		CCM		CCA		Total (CCM+CCA)		CCM		CCA	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
Assets funding taxonomy-eligible but not taxonomy-aligned economic activities in 4.29	**480**	**0.3**	480	0.3	0	0.0	**480**	**0.3**	480	0.3	0	0.0
Assets funding taxonomy-eligible but not taxonomy-aligned economic activities in 4.30	**0**	**0.0**	0	0.0	0	0.0	**0**	**0.0**	0	0.0	0	0.0
Assets funding taxonomy-eligible but not taxonomy-aligned economic activities other than nuclear energy and fossil gas related activities	**25,395**	**16.3**	–	–	–	–	**26,011**	**16.7**	–	–	–	–
Total	**25,876**	**16.6**	**–**	**–**	**–**	**–**	**26,491**	**17.0**	**–**	**–**	**–**	**–**

1 With respect to taxonomy-eligibility and -alignment, the contribution of liquid assets in nuclear and gas is immaterial. As a consequence, these assets are not taken into account.

Assets funding taxonomy-non-eligible nuclear energy and fossil gas related activities, absolute and relative to total assets covered by the KPIs[1]

	31.12.2023		31.12.2023	
	Turnover-based		CapEx-based	
	€m	%	€m	%
Assets funding taxonomy-non-eligible economic activities in 4.29	0	0.0	0	0.0
Assets funding taxonomy-non-eligible economic activities in 4.30	0	0.0	0	0.0
Assets funding taxonomy-non-eligible economic activities other than nuclear energy and fossil gas related activities	24,646	15.8	22,465	14.4
Total	**24,646**	**15.8**	**22,465**	**14.4**

1 With respect to taxonomy-eligibility and -alignment, the contribution of liquid assets in nuclear and gas is immaterial. As a consequence, these assets are not taken into account.

Overview of taxonomy-aligned activities per environmental objective relative to total taxonomy-aligned activities[1]

	31.12.2023				31.12.2023			
	Turnover-based				CapEx-based			
	Transitional[2]	Enabling	Other	Total	Transitional[2]	Enabling	Other	Total
	%	%	%	%	%	%	%	%
Climate change mitigation	1.1	11.8	87.1	**100.0**	2.2	15.3	82.6	**100.0**
Climate change adaptation	–	0.0	0.0	**0.0**	–	0.0	0.0	**0.0**
Total	**1.1**	**11.8**	**87.1**	**100.0**	**2.2**	**15.3**	**82.6**	**100.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available. There is also no reported data available for the environmental objectives sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems.
2 Transitional activities only contribute to the environmental objective of climate change mitigation.

Overall, we expect the availability of data to continually improve. In the case of alternative investments, we have initiated a dialogue with the operators of the assets to address the criteria in the taxonomy screening process that have not been met. Moreover, the range of economic activities defined as taxonomy-eligible and the scope of companies required to publish taxonomy-alignment data will both be expanded in the future.

Insurance activities

Strategy and objectives

The main pillar of our corporate responsibility is the taking and diversification of risks in primary insurance and in reinsurance. Our objective – to create sustainable economic value – is enshrined in the key principles of our Group-wide corporate strategy, in our Munich Re Group Ambition 2025 and in our sustainability strategy.

Our dedication to conducting our business responsibly is underlined by our commitment to key industry initiatives such as the Principles for Sustainable Insurance (PSI), and by signing the UN Global Compact.

Strategic sustainability targets are decided at Group level in the ESG Committee. Implementation of these targets and monitoring of the Group-wide ESG strategy lie within the responsibility of the ESG Management Team. In our relevant fields of business we have specific committees or bodies in place to address the possible risks and opportunities our operations may have for society and environment. This is also reflected in our Code of Conduct.

In insurance business, we also take reputational risks into account, in addition to climate- and non-climate-related ESG aspects.

We then also apply the implications of our findings when developing new products. In addition to defining exclusion criteria and duties of care in mandatory guidelines, we aim to help mitigate climate change by insuring new, climate-friendly technologies. Our insurance solutions also aim to make those technologies more attractive and financially viable for investors. In addition, the insurance products we offer increase our clients' resilience to the economic consequences of natural catastrophes.

To help meet the Paris climate targets, we have committed to decarbonisation goals in our Group Ambition 2025. We have been pursuing these goals since 2020 and have adjusted our business accordingly. We are maintaining our commitment to net zero by 2050, also after discontinuing our membership in the Net-Zero Insurance Alliance (NZIA) on 31 March 2023. In Munich Re's opinion, the possibilities for jointly pursuing decarbonisation targets together with multiple insurers worldwide – without exposing ourselves to significant antitrust risks – are so limited that it is more effective to pursue our climate targets for reducing global warming individually.

As part of our Munich Re Group Ambition 2025, in 2020 we already set ourselves our own emissions-reduction targets with respect to thermal coal and oil and gas production in our primary insurance and facultative and direct (re)insurance business. This also encompasses treaty-like business in the form of facultative facilities if it includes the option to decline individual risks.

Moreover, we have committed to completely phase out the (re)insurance of thermal coal activities altogether in our primary insurance and facultative and direct (re)insurance business by 2040. We aim to reduce the GHG emissions from insured activities related to our insureds' thermal coal production (mines) and coal-fired power plants by 35% by 2025, relative to the base year of 2019.

We explain the metrics used to estimate the development of the GHG emissions as part of our metric reporting.

In addition, Munich Re has also committed to phase out insuring thermal coal in its reinsurance treaty business by 2040.

With respect to quantitative decarbonisation targets, we have also set ourselves targets – in both our primary insurance and facultative and direct (re)insurance business – for our operational property business covering oil and gas production. In addition to our long-term objective of net zero by 2050, we have committed to short-term emission reductions, to lower our self-calculated GHG emissions associated with our business by 5% by 2025 relative to the base year of 2019.

We want to make a positive contribution to our strategic decarbonisation targets by also applying underwriting restrictions on fossil fuels.

Measures

We have implemented guidelines, processes and tools to take ESG aspects into account in our insurance business. They include ESG criteria applicable across the Group, which we apply throughout our insurance activities. Specific binding ESG guidelines, with a focus on climate- and non-climate related ESG risks, govern the handling of certain business activities. These include rules on thermal coal activities in connection with new thermal coal mines, power plants or infrastructure, oil and gas activities in connection with new oil and gas fields and/or new oil infrastructure and oil-fired power plants, oil sands, controversial weapons, Arctic oil and gas activities, as well as rules on protecting biodiversity and respecting human rights. Our stance on other sensitive topics, such as mining and fracking, is determined by Group-wide position papers.

A special ESG tool helps our underwriters in the facultative and direct (re)insurance business to factor ESG criteria into their risk assessment. This is especially relevant in the industrial sector, which is subject to particular exposure and duties of care. In addition, for ESG risk assessment we also make use of the expertise contained in renowned external ESG databases.

Our processes provide that individual transactions which are potentially critical from an ESG-related or other perspective be submitted to Reputational Risk Committees, which are in place for every field of business (at ERGO, handled by the Reputation and Integrity Committee). These committees review whether a planned transaction is appropriate. Their role is to ensure that we do not make any decisions that harbour material reputational risks (see "Risk management" for details). We also hold information sessions and training courses as part of our responsible approach to handling ESG aspects. In the 2023 financial year, we again conducted seminars and client events to provide business partners and staff with information about current climate and sustainability topics. In addition, dedicated sustainability teams in the primary insurance and reinsurance fields of business support the operating divisions by providing tailored ESG advice.

Specific underwriting guidelines restrict writing business in fossil fuels. In facultative and direct (re)insurance, we already committed in September 2018 to no longer insure single-location stand-alone risks in the planning, financing, construction or operation of new thermal coal mines, coal-fired power plants and the related infrastructure where construction, preparatory work for coal production or operation began after 1 September 2018. Multi-location covers are treated like single-location risks if the majority of the locations or insured risks qualify as "new". We also ceased insuring related single risks in primary insurance in 2018. A complete ban on underwriting new coal-related risks has applied at ERGO since 2021.

For oil and natural gas production, we have put exclusions in place for the insurance of oil-sand extraction and the related infrastructure. In primary insurance and facultative and direct (re)insurance business, it has been prohibited since 2019 to cover new or existing oil-sand sites, or new or existing oil-sand-related infrastructure. Our guidelines apply to single locations and stand-alone risks. The exclusion also applies to mixed policies with exposure above a set threshold of 20% of the sum insured or revenue.

In December 2021, we reinforced our guidelines on Arctic oil and gas drilling, including directly related infrastructure, for all Group entities that underwrite business of this kind. We no longer accept any corresponding single-risk stand-alone covers. This also applies to mixed covers and treaty reinsurance business, where the exposure is above a defined single-digit percentage threshold. The new guidelines apply to renewals of existing reinsurance treaty business with commencement dates of 2023 or later. The definition of the Arctic in this regard is based on the internationally recognised definition by the Arctic Monitoring and

Assessment Programme (AMAP), with a few exceptions in the Norwegian region below the Arctic circle, since Arctic conditions do not prevail there.

In addition, our measures are designed to no longer support contracts and projects on a single-risk, single-location basis which exclusively insure new oil and gas fields, new oil-fired power plants or new so-called midstream oil infrastructure, and the associated planning, financing, construction or operation. This applies to our primary insurance business and our facultative and direct (re)insurance business, effective 1 April 2023. Our rules prohibit the above-mentioned measures and activities, unless the oil and gas fields were already producing, or construction on or operation of the corresponding power plants or infrastructure had already begun, as at 31 December 2022. The same applies where such risks or projects are contained or bundled in one cover together with other risks (e.g. existing oil or gas fields), where the cover is mainly designed to insure one or more of such new risks.

In autumn of 2023, in addition to strengthening our underwriting guidelines to improve human rights protection (see “Human rights” for details), we also integrated a stricter due diligence process for protecting biodiversity.

Any exceptions to the mandatory guidelines mentioned above must be approved by the respective Board Committee.

In the context of our decarbonisation targets, we remain committed to reaching the defined milestones by implementing dedicated action plans in the business units concerned, and by regularly monitoring progress. Reductions in GHG emissions can be achieved through activities undertaken by our clients first-hand, as well as through our own portfolio management measures (including discontinuation of business). To support the necessary transition as best we can, we initiate dialogue with our clients.

Also with regard to our treaty reinsurance business, we remain actively engaged in dialogue with our clients to obtain transparency about the extent of the insured activities in the thermal coal and oil and gas (fossil fuel) segments, and to gain better insights into the insurers’ own potential decarbonisation strategies.

To make a positive contribution to decarbonisation and support investment in low-emission technologies, we offer dedicated green tech solutions. In the context of these insurance solutions, we assume a share of the technology-specific risks in order to support the development of renewables and low-carbon technology. Our focus in that regard is on photovoltaics, wind power, battery storage systems and hydrogen technologies. We also offer innovative risk-transfer solutions for e-mobility, circular economy, carbon capture and storage, as well as for the exploration risks of geothermic drilling.

A concrete example of low-emission technology is green hydrogen, which can replace fossil fuels in the energy, industrial, transport and heating sectors. Our Green Tech Solutions unit has developed a guarantee cover for hydrogen production facilities accordingly. With innovative risk-transfer solutions of this kind, we shift the boundaries of insurability. For example, by offering long-term performance covers for green technologies, we reduce both the business risk for manufacturers and the risk for energy-project investors and operators. In collaboration with the European Commission, the “Kreditanstalt für Wiederaufbau” (KfW), and the European Investment Bank (EIB), we work with African Trade Investment and Development Insurance (ATIDI) to address political risks in Sub-Saharan Africa through the African Energy Guarantee Facility (AEGF). This facility covers political risks, reducing the insurance gap for renewable energy projects. The AEGF encourages private investment, offering tailored insurance solutions for renewable energy projects.

Our products and services in primary insurance are also promoting the energy transition, supporting customers who act sustainably, and developing solutions for new risks. The latter include the challenges of climate change, and losses caused by natural catastrophes. By offering special covers, for example against the failure to meet projected annual energy output targets, ERGO promotes solar power generation among its commercial customers. To satisfy the requirements specific to e-mobility, ERGO offers insurance add-ons for electric and hybrid vehicles, to cover, for example, battery damage and peripherals such as the client’s battery-charging station. In addition, ERGO’s homeowners’ insurance in Germany supports environmentally friendly rebuilding, and offers insurance cover for renewable energy facilities (photovoltaics, heat pumps, wallboxes or charging stations). ERGO’s homeowners’ insurance also rewards loss prevention and modernisation.

In addition, by providing insurance against natural catastrophes, we increase the resilience of vulnerable groups. An example is the expertise and reinsurance capacity Munich Re provides to support the Southeast Asia Disaster Risk Insurance Facility (SEADRIF). SEADRIF is an insurance institution headquartered in Singapore and supported by the World Bank and the Monetary Authority of Singapore (MAS). SEADRIF helps protect Laos against catastrophic flood events. If a catastrophic event occurs, funds from the insurance facility are used to finance disaster relief operations for the affected populations. The objective set by those countries and donors supporting SEADRIF is to successively expand the insurance programme to other countries in Southeast Asia.

Metrics

At Munich Re we attach great importance to transparency for our stakeholders. In the following, we therefore provide information about how our most important sustainability-related metrics are progressing in our (re)insurance business.

We assess risks as part of our Group-wide risk management. A key figure in this respect is the loss to our insurance portfolio from climate-related natural catastrophes for a 200-year return period, which we calculate on the basis of natural catastrophe modelling in our internal risk model. In the following table, we illustrate the value at risk of the economic profit and loss distribution over a one-year time horizon with a confidence level of 99.5%. The net perspective after external retrocession is shown for Munich Re's largest climate-related natural catastrophe exposures:

Value at risk

€m	2023	Prev. year	Change
Natural catastrophes – scenario (net)			%
Atlantic Hurricane (North America)	8,513	10,035	–15.2
Winter Storm (Europe)	5,827	5,497	6.0
Flood (Germany)	2,980	2,948	1.1
Severe Thunderstorm (USA)	1,250–2,250	1,250–2,250	
Wildfire (USA)	750–1,750	750–1,750	

We explain how we manage climate risks in the risk report.

The actual loss from natural catastrophes in the 2023 full year mostly came from property business and amounted to €2,335m (€2,118m)[1] for the reinsurance business after external retrocession. This corresponds to 9.0% (8.7%)[1] of net insurance revenue. and takes into account major losses exceeding €30m.

In accordance with the EU Taxonomy Regulation, we comprehensively report on the economic activities deemed environmentally sustainable for (re)insurers. The European classification system stipulates that non-life (re)insurance activities can make a substantial contribution to the environmental objective of climate change adaptation. Our focus with regard to the taxonomy is to calculate the metrics required by regulation. There are no broader strategic implications at present.

We are reporting on our taxonomy-aligned (re)insurance activities under the EU Taxonomy Regulation for the first time for the 2023 financial year. An insurance or reinsurance activity can be classified as taxonomy-aligned if it meets the technical screening criteria for substantially contributing to climate change adaptation and doing no significant harm (DNSH) under the EU Delegated Taxonomy Regulation 2021/2139, and complies with the minimum safeguards of the EU Taxonomy Regulation. The technical screening criteria for determining substantial contributions to climate change adaptation are: leadership in the modelling and pricing of climate risks, product design and/or support of the development and provision of appropriate non-life insurance products, innovative (re)insurance coverage solutions, data sharing, and a high level of service in post-disaster situations. Taxonomy-aligned (re)insurance activities in this regard are based particularly on modelling techniques and product-design processes that comply with the requirements of the EU Taxonomy Regulation. In addition, for taxonomy-aligned activities no significant harm to the environmental objective of climate change mitigation as defined in the EU Taxonomy Regulation was identified. The activities do not include either (re)insurance of the extraction, storage, transport or manufacture of fossil fuels, or (re)insurance of vehicles, property or other assets

1 The figure is only comparable to a limited extent with the same period last year, as the major-loss threshold was raised to €30m with effect from 1 January 2023 (previous years: €10m).

dedicated to such purposes. Taxonomy-aligned (re)insurance activities do not include the (re)insurance of fossil-fuelled power plants, among others. In addition, when conducting the taxonomy-aligned (re)insurance activities, the minimum safeguards set out in the EU Taxonomy Regulation are maintained. These include compliance with minimum safeguards regarding human rights, anti-corruption, taxation and unfair competition (see also “Human rights” and “Compliance”).

The taxonomy-alignment metrics show the absolute IFRS insurance revenue that has been deemed taxonomy-aligned, and its share of total non-life (re)insurance revenue (“alignment ratio”). In this regard, only the share of insurance revenue that covers climate-related events is considered to be taxonomy-aligned (“climate-related share”). Determining taxonomy-alignment is based first on the data underlying the pricing, which forms the basis for deriving the taxonomy-aligned IFRS insurance revenue. The disclosure overall, as well as the extents to which taxonomy-aligned insurance activities have been ceded to a reinsurer or are deemed reinsurance activities, are consistent with IFRS segment reporting.

The assessment of insurance revenue according to the “do no significant harm” (DNSH) criteria is based on information made available to us from our clients. Where the data is not sufficiently granular, we mainly use sector classifications for approximation. Insurance activities that do significant harm to climate change mitigation are, on this basis, classified as non-taxonomy-aligned as a whole, and pro-rata non-taxonomy-aligned for the reinsurance business. Our taxonomy-aligned (re)insurance activities listed below make a substantial contribution, as enabling activities, to climate change adaptation. A contribution to taxonomy-aligned business activity has been identified for all lines of business classified as taxonomy-eligible, i.e. other motor insurance, marine, aviation and transport insurance, and fire and other damage to property insurance. Due to its only minor contribution to the environmental objective of climate change adaptation, workers’ compensation insurance has not been classified as taxonomy-eligible as of 2023.

The taxonomy-aligned share of taxonomy-eligible non-life insurance and reinsurance business constitutes 14.1%. This is due to the fact that, contrary to the case for assessing taxonomy-alignment and consistently with last year, calculating taxonomy-eligibility uses the sum of IFRS insurance revenue associated with covering climate-related perils. It encompasses the total insurance revenue of those regulatory lines of insurance business (LoBs) that are listed in the EU Delegated Taxonomy Regulation 2021/2139 and which contain products that cover climate-related perils.

If one were to use only the climate-related share of the insurance revenue of the products when calculating taxonomy-eligibility, similarly to the approach for calculating taxonomy-alignment, the share of taxonomy-eligible (re)insurance activities would be 9.3%. This is based on those re(insurance) activities for which specific data on the climate-related share of the insurance revenue is available.

Accordingly, the remaining IFRS insurance revenue from non-life insurance business is classified as non-taxonomy-eligible. The remainder is either attributable to an unlisted regulatory line of non-life primary or reinsurance business, or comes from an LoB which does not contain any product that explicitly prices climate risks or covers climate risks in the insurance terms and conditions.

Overall, insurance revenue from our (re)insurance activities can be broken down as follows with regard to its environmental sustainability under the EU Taxonomy Regulation and its corresponding share of total non-life insurance business. Our reporting in accordance with the regulatory template in the EU Taxonomy Delegated Regulation 2023/2486 can be found under “EU Taxonomy Regulation templates”.

(Re)insurance KPIs as per Art. 8 of the EU Taxonomy Regulation

	Substantial contribution to climate change adaptation		
	Absolute insurance revenue	Proportion of insurance revenue	Proportion of insurance revenue
		2023	Prev. year[1]
Non-life insurance and reinsurance underwriting activities	€m	%	%
Taxonomy-aligned (environmentally sustainable)	2,931	7.9	
Thereof: Reinsured	160	0.4	
Thereof: Stemming from reinsurance activity	2,673	7.2	54.9
Thereof: Reinsured (retrocession)	160	0.4	
Taxonomy-eligible but not environmentally sustainable (not taxonomy-aligned)	17,797	48.1	
Taxonomy-non-eligible	16,243	43.9	45.1
Total	**36,971**	**100.0**	**100.0**

1 Minor differences to the previous year's reported values are due to the adjustment of the calculation basis from gross premium to IFRS insurance revenue, analogous to financial reporting.

The metrics exclusively reflect contributions to the environmental objective of climate change adaptation, as per the EU Taxonomy Regulation. As insurers, we contribute both to the adaptation to climate change risks and to the mitigation of climate risks. The EU rules do not classify insurance activities that mitigate climate change, such as insurance products for renewables, as taxonomy-eligible, and such activities are therefore not included in the above figure. As a result, our efforts in the renewable energy sector are not reflected in the illustrated share of our taxonomy-eligible (re)insurance activities. As at 31 December 2023, our Green Tech Solutions unit alone insured renewable energy in around 1,400 (900) projects, and manufacturers from around 90 (80) countries, for a total nominal output of over 75 (over 55) gigawatts. Our products consist of newly developed insurance solutions that particularly address performance, longevity and financing risks.

We measure the achievement of our climate targets in primary insurance and facultative and direct (re)insurance in the Munich Re Group Ambition 2025, which does not include treaty reinsurance business, based on the following metrics.

In the thermal coal sector, the quantitative emissions-reduction targets are derived from the following key metrics as the basis for evaluating the development of GHG emissions associated with the insured business of our clients: annual tonnes of thermal coal produced from mines and installed operational capacity in megawatts of our clients' thermal coal power plants. The base year is 2019; for all active risks as at 31 December 2019. Given that the reduction targets are applicable across all non-life lines of insurance, and that our goal is to completely discontinue insuring these business activities by 2040, our clients' GHG emissions associated with our insured business are – as described above – fully taken into account regardless of the specific type and amount of our (re)insurance participation. As a result, the metrics for the base year and the reporting year, which are calculated to measure the reduction as at the given reporting date, are always based on 100 percent figures at client level across the relevant insurance lines. The figures therefore refer to our clients' production of thermal coal or their power plant capacity, while avoiding double counting at the client level across the various relevant lines of insurance.

Development of approximated GHG emissions at client level in primary insurance and facultative and direct (re)insurance business, relative to the 2019 base year (Munich Re Group Ambition 2025)[1]

%	31.12.2023	Prev. year
Thermal coal mining[2]	–40.8	–37.3
Coal-fired power plants[3]	–40.6	–28.6

1 The figures do not include treaty reinsurance business.
2 The development of the metric tonnes of insured thermal coal produced each year by insureds is used as an equivalent for an approximate development of the GHG emissions. These are based on the reported actual data of the insured.
3 The development of the installed operational capacity (in megawatts) of the insured coal-fired power plants of our insureds is used as an equivalent for an approximate development of GHG emissions. These are based on the latest available data from an external data provider.

As in the previous year, the reductions are mainly due to active portfolio management measures, including discontinuation of business. External changes on our clients' side, including possible transformational effects, have so far had a lesser impact on the overall development.

In the area of (conventional and unconventional) oil and gas production, the quantitative emissions-reduction target refers directly to our self-calculated GHG emissions of the insured oil and gas production of our clients that are associated with our property insurance business. We calculate the figure by first determining our clients' scope 1–3[1] life-cycle GHG emissions associated with the produced amounts of oil and gas. For these calculations, we use the expertise of our subsidiary HSB Solomon Associates LLC, who themselves use the integrated open-source tool The Oil Climate Index + Gas. We associate these emissions with our (re)insurance policies in the amount that the (re)insurance capacity provided by Munich Re contributes

1 Scope 3 GHG emissions: other indirect emissions from activities in the value chain.

to the total insurance ceiling (client's deductible + total insurance capacity) known to us. The base year is 2019; for all active risks as at 31 December 2019.

Development of self-calculated scope 1, 2 and 3 life-cycle GHG emissions (CO_2e) associated with our operational property business in primary insurance and facultative and direct (re)insurance, relative to the 2019 base year (Munich Re Group Ambition 2025)[1, 2]

%	31.12.2023	Prev. year
Oil and gas production	–79.8	–40.2

1 The figure does not include treaty reinsurance business.
2 The oil and gas production volumes used in the calculation are based on the latest available data from an external data provider.

The strong reduction is mainly due to portfolio measures. Besides the application of underwriting restrictions, especially regarding sanctions, oil-sand sites or Arctic exposures, the discontinuation of business driven by strategic decisions of the Munich Re Syndicate significantly contributed to the development.

Customer orientation and satisfaction

Strategy and objectives

Maintaining a close relationship of trust with our clients is a key element towards the success of our business. That is why we want to understand our clients' needs and develop the best possible solutions for them, in a joint dialogue.

We apply a differentiated management approach under our business model, which applies both to our reinsurance clients and to our primary insurance customers and reflects their different demands and needs accordingly. Responsibilities lie with the respective Board members and/or executives, as well as within the various international companies. Just how important our clients are to us is demonstrated by the fact that client satisfaction is an integral part of the Munich Re Group Ambition 2025.

At Munich Re, we manage the dialogue with our clients, and the solutions we correspondingly offer, on the basis of our clients' needs and growth ambitions. The process includes an analysis of the market and the most important players, as well as the implementation of tailored insurance solutions, products and services for our clients. Client managers in reinsurance are supported by a central sales unit that ensures transparency in our Group-wide product and service palette. This unit is also responsible for two event formats that take place annually as a platform for in-depth dialogue with representatives of our key clients: the "cDays" conference and "Advance", an exclusive five-week programme aimed at expanding participants' expertise and leadership skills, and at further developing the industry. In addition, we offer our reinsurance clients an extensive seminar programme on insurance-related topics, based on our leading expertise. ERGO particularly supports its independent sales partners with various offers, for example advisory tools and concepts, and professional development training. The local companies individually tailor these offers to their respective needs.

Measures

At Munich Re, we have defined numerous monitoring processes to measure our performance in terms of customer satisfaction and orientation.

Customer satisfaction is measured in both primary insurance and reinsurance.

Every two years, we undertake a global customer-satisfaction survey among all of our reinsurance clients. The survey measures the NPS and customer satisfaction in various aspects of the business relationship. We publish the NPS and selected results of the survey on our website. Our goal is to maintain a stable, positive NPS in reinsurance.

Our last global satisfaction survey of reinsurance clients was conducted in May 2022.

Customer satisfaction in primary insurance is measured continuously throughout the year. Since Q4 2023, we have also measured overall customer satisfaction in addition to using the NPS. This customer satisfaction is a new key performance indicator for ERGO and allows for more focused management and greater transparency in the development of measures. The result shows the percentage of satisfied customers across important core markets, currently in Belgium, Germany, Estonia, Greece, India, Latvia, Lithuania, Austria, Poland and Spain. ERGO's objective is to achieve a high percentage of satisfied customers.

The results of our monitoring identify any potential for both improvement and differentiation in the specific divisions, platforms, services, products and customer groups. In the form of initiatives, this information then becomes part of our strategy to meet our Munich Re Group Ambition 2025, i.e. to remain a long-term partner for our clients.

In addition to our regular client satisfaction surveys, in reinsurance we have implemented a number of measures aimed at consolidating our client relationships. And our operational units regularly request feedback from their clients to complement the centrally organised survey.
In order to better respond to our clients' suggestions for improvement, we offer a comprehensive training programme to all staff who have direct contact with clients. The aim is for them to develop an understanding of our clients' strategies and needs so that we can develop solutions together.

In primary insurance, our advice to our independent sales partners' customers in Germany is provided using a standardised approach (ERGO Kompass) to ensure that quality is consistently high. ERGO also uses a variety of tools to obtain direct feedback about new products and services, but also about overarching strategic issues. The main focus is its in-house market research panel (ERGO Kundenwerkstatt) of around 7,500 customers. In 2023 alone, ERGO conducted 30 projects and/or surveys among the panel members. This feedback from our customers is very important to us. Among other things, we use it in product development and to improve our services for them. Besides customer feedback, we also record and assess customer complaints. This input is used as a basis for improvements in the various areas.

ERGO's goal is to become one of the leading digital insurers by 2025 – both in Germany and in its core international markets. This reflects our customers' desire to purchase insurance and receive customer service digitally. ERGO is driving topics such as robotics, artificial intelligence and voice technology in Germany and internationally, and is expanding its digital business models and ecosystems, as well as its annex business.

It has already established numerous customer-oriented services and digital processes that help customers contact ERGO, and more are planned. ERGO is also constantly working on modernising its offerings with simple and intuitive products for both its private and commercial customers.

Metrics

Our most recent NPS of 60 for reinsurance in 2022 is very high – higher again than the 2020 figure of 56. The NPS is measured on a scale of −100 to +100. High levels of customer satisfaction are evident in primary insurance, too. Some 94% of customers gave ERGO or its local companies in the core markets a rating of "good" or higher in 2023. Satisfaction can be rated overall on a range from "poor" to "adequate", "good", "very good" or "excellent".

Environmental management in own operations

Strategy and objectives

Munich Re has adopted a holistic approach with its Munich Re Group Ambition 2025, and also takes the direct climate-related impacts of the GHG emissions from its own operations into account, in addition to selected indirect effects from investments and (re)insurance products. This also includes the monitoring of our Group-wide activities to mitigate the impacts of our own GHG emissions on the environment and the climate, and our corresponding reduction and decarbonisation targets. Our goal is to make a positive contribution toward meeting the requirements set out in the Paris Agreement.

Our targets and actions to lower our GHG emissions focus on reducing our consumption of energy and other resources such as water and paper, avoiding waste, and making our business travel more environmentally friendly. To this end, we promote awareness of green behaviour among our staff.

Under the Munich Re Group Ambition 2025, we have set targets regarding our own GHG emissions from business operations. As a result, we intend to reduce our own GHG emissions per staff member by 12% by 2025, as compared to the base year 2019.

In terms of unavoided GHG emissions from our own direct and indirect energy consumption (scope 1 and 2), as well as selected scope 3 emissions from our consumption of paper and water, waste, and business travel, we intend to successively transition Munich Re from GHG neutrality to GHG net zero by 2030. This means that we endeavour to offset unavoided GHG emissions by purchasing certificates for projects that aim to reduce GHG emissions ("GHG-neutral") or to remove GHGs from the atmosphere ("GHG net zero"). When selecting the certificates, we place value on internationally recognised certification standards such as the Gold Standard. For 2023, all of the Group's recognised GHG emissions from business activities were made GHG-neutral, and those at Group headquarters in Munich were brought to GHG net zero.

The responsibility for our Group-wide environmental and climate strategy, the targets under the Munich Re Group Ambition 2025, and the associated measures, lies with the Board of Management or the corresponding committees with ESG duties. Implementing the strategy and target-achievement measures takes place at Group level, in the respective divisional units, and locally.

Measures

We focus on measures that, in our opinion, provide good leverage in reducing our GHG emissions. Our key metric is the change in GHG emissions in terms of our GHG footprint per employee. Improving energy efficiency in the operation of our buildings and replacing fossil fuels with renewable energy are important action items for us. In 2023, 91% of our purchased electricity for all companies and sites included in qualitative reporting (86% of staff) was generated from renewable sources. Our goal is to purchase 100% green electricity for those companies and sites by 2025. This target for green electricity was made more specific in the reporting year to account for market practice. Electricity consumption by those companies not included in reporting was extrapolated, and the resulting GHG emissions calculated and made GHG-neutral. When undertaking business travel, we also exercise the option of using more environmentally friendly rail travel, or hybrid and electric vehicles.

We are working locally to save resources such as water and paper at our various locations, as well as to reduce waste. We aim to promote sustainable consumer materials for example by using reusable containers in our food and drink service for staff.

In order to support climate action, Munich Re is involved in national initiatives such as the Development and Climate Alliance in Germany, among other projects. In 2023, 52% (49%) of Munich Re staff were involved in a DIN ISO 14001- or Eco-Management and Audit Scheme (EMAS)-certified environmental management system that systematically monitors and assesses the implementation of applicable environmental criteria in operations and product development.

Metrics

We calculate the GHG footprint per employee from our business activities by measuring the annual GHG emissions resulting from our consumption of energy, paper and water, waste, and business travel. Any consumption data that was not available by the reporting date has been estimated. Measured consumption figures were extrapolated to 100% of Group staff with employment contracts at fully consolidated companies as at 31 December 2023. The resulting GHG emissions were calculated using internationally recognised methods and conversion factors, for example those of the Greenhouse Gas Protocol and the International Energy Agency, as guides. In 2023, we collected data for 86% (76%) of staff.

We have been able to achieve reductions in our own GHG emissions per employee of 34% (22%) since 2019. Energy consumption was down 20% compared to the previous year; our energy-saving measures with regard to gas, electricity and district heating having mainly contributed here. Our kilometres travelled for business rose by 24%. At the same time, the ensuing rise in GHG emissions was disproportionally smaller (only 13%), as a result of the increase in train travel and the larger share of hybrid and electric vehicles in our fleet.

A detailed breakdown of the relevant metrics are provided in the following tables.

GHG emissions

Scope	Source of emission	2023 t CO_2e	Prev. year t CO_2e	Change %
Scope 1	GHG emissions from direct energy consumption	33,093	43,664	–24.2
	Thereof from business trips with company cars	10,841	12,330	–12.1
Scope 2	GHG emissions from indirect energy consumption (market-based)[1]	14,249	18,310	–22.2
Scope 3	Other indirect GHG emissions	3,039,435	3,130,824	–2.9
	GHG emissions from upstream activities	22,571	17,731	27.3
	Thereof business trips (excluding those with company cars that are reported within scope 1)	19,466	14,479	34.4
	Thereof from paper	1,020	1,014	0.6
	Thereof from waste	1,781	1,903	–6.4
	Thereof from water	304	335	–9.3
	GHG emissions from downstream activities	3,016,864	3,113,093	–3.1
	Thereof financed GHG emissions[2]	3,016,864	3,113,093	–3.1
Scope 1–3 – Own operations	**Total GHG emissions, scope 1–3 own operations, scope 2 market-based**	**69,913**	**79,705**	**–12.3**
Scope 1–3 – Total	**Total GHG emissions, scope 1–3, scope 2 market-based**	**3,086,777**	**3,192,798**	**–3.3**

1 GHG emissions from indirect energy consumption (location-based) in metric tonnes of CO_2e: 38,157 (previous year: 41,770).
2 See Investment > Listed equities, corporate bonds and direct real estate.

GHG intensity

		GHG emissions/Employee					GHG emissions/Insurance revenue		
Scope	Source of emission	2023 t CO_2e/ Headcount	Prev. year t CO_2e/ Headcount	Change %	Base year 2019 t CO_2e/ Headcount	Change %	2023 t CO_2e/€m	Prev. year t CO_2e/€m	Change %
Scope 1	GHG emissions from direct energy consumption	0.77	1.05	–26.4	1.11	–30.4	0.57	0.79	–27.5
	Thereof from business trips with company cars	0.25	0.30	–15.7	0.29	–12.8	0.19	0.22	–15.9
Scope 2	GHG emissions from indirect energy consumption (market-based)	0.33	0.44	–24.3	0.69	–51.7	0.25	0.33	–25.5
Scope 3	GHG emissions from upstream activities	0.53	0.43	22.8	0.68	–22.6	0.39	0.32	21.8
	Thereof business trips (excluding those with company cars that are reported within scope 1)	0.46	0.35	30.0	0.57	–20.2	0.34	0.26	28.6
	Thereof from paper	0.02	0.02	20.0	0.03	–20.0	0.02	0.02	–3.7
	Thereof from waste	0.04	0.05	–16.0	0.07	–40.0	0.03	0.03	–10.5
	Thereof from water	0.01	0.01	–30.0	0.01	–41.7	0.01	0.01	–13.2
Scope 1–3 – Own operations	**Total GHG emissions, scope 1–3 own operations, scope 2 market-based**	**1.63**	**1.93**	**–15.3**	**2.48**	**–34.2**	**1.21**	**1.44**	**–16.1**

Water consumption

		2023	Prev. year	Change
				%
Water used	m³	432,730	476,997	–9.3
Water used/Employee	m³/Headcount	10	12	–12.2
Water intensity	m³/€m insurance revenue	7	9	–13.2

Energy consumption (excluding own production)

	Energy consumption			Percentage of energy consumption		Energy intensity		
	2023	Prev. year	Change	2023	Prev. year	2023	Prev. year	Change
	MWh	MWh	%	%	%	MWh/ Headcount	MWh/ Headcount	%
Natural gas	108,722	153,307	–29.1	43.3	48.9	2.5	3.7	–31.4
Thereof natural gas for cogeneration	95,188	126,293	–24.6	37.9	40.3	2.2	3.1	–27.1
Electricity	95,108	102,313	–7.0	37.9	32.6	2.2	2.5	–10.1
Thereof electricity from renewable sources[1]	86,870	92,518	–6.1	34.6	29.5	2.0	2.2	–9.2
District heating	41,931	51,638	–18.8	16.7	16.5	1.0	1.2	–21.5
District cooling	4,283	5,371	–20.3	1.7	1.7	0.1	0.1	–22.9
Liquid fuel for emergency power	872	1,069	–18.4	0.3	0.3	0.0	0.0	–22.6
Total	**250,916**	**313,698**	**–20.0**	**100.0**	**100.0**	**5.9**	**7.6**	**–22.7**

1 Actually purchased electricity from renewable sources, in MWh: 72,474 (previous year: 70,543).

Human rights

Strategy and objectives

Respect for human rights is a part of our management approach to include economic, environmental and social challenges in our definition of success. The Board of Management has accordingly issued a declaration to respect and protect human rights, which we have published on the Munich Re website at www.munichre.com/sustainability/download. This statement underscores Munich Re's commitment to human rights, as defined in the UN Guiding Principles on Business and Human Rights, in the International Bill of Human Rights and in the ILO's Declaration on Fundamental Principles and Rights.

In accordance with international rules, we have published a statement signed by the Board of Management on the UK Modern Slavery Act every year since 2017, and since 2021 we have issued a declaration under the Australian Modern Slavery Act as well.

Munich Re has undertaken to apply its respective due diligence and to respect internationally recognised human rights. By signing the UN Global Compact in 2007, we have committed ourselves to the following principles:

- Promoting and protecting internationally recognised human rights within our scope of activity
- Taking precautionary measures designed to prevent Munich Re from contributing to human rights violations, for example human trafficking
- Upholding the freedom of association and the effective recognition of the right to collective bargaining
- Supporting the elimination of any kind of forced or child labour
- Helping to put an end to discrimination in hiring and employment

These principles are also enshrined in our Code of Conduct, compliance with which is mandatory for all Munich Re staff. This reflects our Group-wide, shared understanding of the value of respecting human rights.

In late 2022, we began work on introducing a Group policy that addresses the requirements of the German Supply Chain Due Diligence Act (LkSG), including the requisite processes, measures and responsibilities. The policy was rolled out in the 2023 reporting year and implemented by all units affected by the statutory requirements. It creates a framework for our suppliers and employees that defines our expectations with respect to upholding human rights and complying with environmental standards.

Munich Re's management is committed to preventing its business from having any potentially negative impact on human rights. In order to systematically monitor any such effects, the following four aspects have been defined: staff, procurement, our core business of reinsurance and primary insurance, and investments. We have introduced instruments for each of these aspects, which allow us to manage our respective decision-making processes in terms of human rights. This enables us to minimise risks regarding human rights violations as far as possible. In addition, Munich Re has developed a human-rights-based strategy for using artificial intelligence in compliance with European Commission guidelines, which covers data protection, monitoring, discrimination, bias, unintended consequences and intentional abuse.

We also strive to improve the guarantees of fundamental rights, which also include human rights. We do this, among other ways, by offering tailor-made insurance products. For example, we provide risk solutions to ensure that underinsured people in Asia have the basics needed to live. Special financial solutions aim to close the coverage gap for populations and companies at risk, and to guarantee swift and targeted payments. Fundamental rights and guarantees are also the focus of many of our fundraising and sponsorship projects.

Further information can be found in our Sustainability Report, our annual Communication on Progress to the UN Global Compact, and our annual reports on the PSI and the PRI.

Measures

The processes we developed in 2018 to comply with human rights due diligence obligations are continuously revised and expanded for the Munich Re Group. We have defined the following processes, which are reviewed annually:

- Commitment by management to comply with human rights
- Appointment of a Human Rights Officer for the Group and for the ERGO Group
- Structured identification and assessment of risks with regard to human rights violations
- Implementation and monitoring measures
- Annual reporting and communication
- Support and grievance mechanism

Staff and non-staff can use Munich Re and ERGO's whistleblowing portals to report possible or actual human rights violations. If a human rights violation is reported, or we otherwise learn of one, Munich Re's dedicated Compliance units will investigate. Every potential case is investigated in accordance with a procedure set out in internal guidelines. Every potential case of misconduct will be investigated and resolved. If we learn of substantial human rights violations in an existing contractual relationship, we decide on appropriate and effective remedial action in dialogue with the responsible parties.

Moreover, we endeavour to decline any business relationship with, and exclude investments in, companies that have been involved in confirmed and substantial violations of humans rights. For this purpose, a list of companies with which we want to exclude business has been developed in a multi-stage process based on information from external data providers. This list is regularly reviewed, updated and adopted as part of our ESG governance. We began applying these policies to our investments, to procurement and to single-risk business in primary insurance and facultative reinsurance in the course of 2023.

Staff

As an employer, we undertake to comply with international standards of human rights and to provide adequate working conditions for our staff.

An annual risk analysis and assessment serves to identify human rights risks within our workforce. We assess potential risks and, if necessary, take action to prevent them.

Our Code of Conduct explicitly states that Munich Re does not tolerate any discrimination. In Germany, we have set up an official department for complaints as provided for in Section 13 of the General Equal Treatment Act (AGG).

Procurement

Our goal in procurement, when making decisions and taking action, is to adhere to our compliance principles and thus assume corporate responsibility along the supply chain. Avoiding ESG risks is pivotal in our procurement of goods and services. We had previously required our suppliers to accept the principles of the UN Global Compact. And now we have made our requirements in terms of respecting human rights even clearer by adopting a Group-wide Code of Conduct for suppliers, which came into effect on 1 January 2023. Accordingly, the vast majority of procurement contracts within reinsurance will include a corporate responsibility clause. This serves, among other things, to formalise the Munich Re Group's human-rights-related requirements for suppliers and, if necessary, to have audit and special termination rights in the event of a breach.

A similar clause is currently being implemented for MEAG and the ERGO Group. The structured and continuous risk analysis process that we are currently introducing will allow us to even better identify potential human rights violations in future, and to mitigate or avoid them accordingly. Substantial cases are discussed in dialogue with the responsible parties and remedial measures are taken if necessary.

Insurance activities
In addition to taking into consideration the above exclusion list of companies that have been involved in confirmed and substantial violations of human rights, we updated our underwriting guidelines for our single-risk business in primary insurance and facultative reinsurance in the 2023 reporting year to include an enhanced risk analysis for certain large commercial business clients. The focus here is on client groups for which – given their geography and sector – structural factors contribute to an increased risk of human rights violations.

Should in this context significant reputational or human rights risks be identified in the underwriting process, the underwriting guidelines stipulate an extended review process, and risks may need to be presented to the respective Reputational Risk Committee prior to acceptance.

Investments
As part of a sustainable investment, government bonds (including the sub-sovereign level) and notes from government-related institutions rated CCC under the MSCI ESG Rating scale are excluded due to high risks related to socio-economic or political factors. Such MSCI ESG Ratings also take human rights into account. Our Responsible Investment Guideline has been updated to include human rights standards, among others. Exclusions also apply to these asset classes if, on the basis of a specific country rating for human rights, their risk exposure is extreme. If the risk exposure is high, the portfolios of assets in question are monitored.

The list of companies we exclude due to their significant human rights violations is also used in our investment business, where application of the exclusion lists is mandatory for our asset managers.

We have integrated human rights into our due diligence process for our alternative investment activities, particularly for the asset classes of infrastructure, direct investments in forestry and farming, and direct real estate.

As a responsible investor, we also support the international conventions addressing controversial weapons (including but not limited to the weapon categories anti-personnel mines and cluster munition), and exclude any direct investment in equities or bonds from companies active in those sectors.

Employee matters

For Munich Re as a knowledge-based Group, talented and high-performing staff with their expertise form the basis for our success. Attracting, developing and retaining staff is one of the two key objectives of our human resources policy. The second key objective is to promote diversity, equity and inclusion (DEI) as a strategic success factor for Munich Re. Thus, again in 2023, employer attractiveness, staff development, and DEI were identified as material topics for Munich Re in the area of employee matters.

Strategic approaches are first developed by dedicated functions in HR with Group-wide responsibility, in cooperation with the Group’s strategy department, and then incorporated into the human resources strategies of reinsurance, ERGO and MEAG via policies (for example the Code of Conduct) or interlinked projects.

As part of the Munich Re Group Ambition 2025, we have embedded employee matters in our business strategy. In this respect, Munich Re is pursuing the goal of significantly increasing the proportion of women in management positions. At the same time, Munich Re is committed to positioning itself as an employer of choice offering attractive, long-term jobs and excellent development opportunities. Moreover, we continue to place great emphasis on the topic “Driving Digital Culture”.

We aim to implement our business strategies in the Group as well as possible in the respective client, competitor and staff environments that reinsurance, ERGO and MEAG face. Our operational human resources management is closely linked to the specific needs of the respective business models and is thus explicitly decentralised. In this regard, adjustments to central requirements and individual solutions regarding employee matters can be made for the fields of business where appropriate.

Employer attractiveness

Strategy and objectives

Munich Re’s human resources work is guided by the goal of being and remaining an attractive, fair and responsible employer. Attracting, developing and retaining employees with substantial expertise and broad experience worldwide are key elements in this regard. We encourage a future-focused and appreciative work culture, in which cooperation in our global organisation and external knowledge networks leads to the best solutions for our clients.

Corresponding frameworks are in place in all fields of business to set out rules for the various HR topics. In Germany, these are complemented by internal company agreements.

Measures

We aim to remain attractive to our employees by offering secure jobs, transparent remuneration conditions, a broad corporate health-management system with a variety of health benefits, comprehensive employee-assistance programmes, DEI-related measures, as well as flexible working conditions and working-time models.

With a focus on occupational health management, a Health, Safety and Wellbeing Statement was developed and communicated Group-wide in 2022. This statement covers four topic areas: mental health, physical health, social connectedness and work environment.

A range of "New Work" concepts, developed and tested in reinsurance and at ERGO and MEAG in 2022, were adapted based on the test results and rolled out in 2023. The concepts include new workplace designs and frameworks for hybrid working.

In addition to the aforementioned topics, another focus was on Munich Re's positioning in the labour market. In this context, reinsurance applies the employer value proposition "Push boundaries. With us." It presents reinsurance as an employer that provides talented staff with the creative space they need to achieve more together, while supporting and encouraging them in the process. Munich Re is always on the lookout for staff who will go the extra mile with us, who want to continue developing themselves personally and professionally, and who are driven to make a contribution to the multi-faceted working environment of reinsurance. Since 2022, ERGO has been positioning itself on the external labour market with the employer value proposition "ERGO. Grow together." This motto embodies both ERGO's strengths and its ambition: to achieve even more in the future and meet the increasing demands in the market with confidence. At ERGO, we focus on growing as a team while offering room for individual development. To achieve this, we are looking for employees who want to contribute to our development and grow together with us. We have been successively rolling our employer value proposition out to the international units since mid-2023.

In addition to the needs-based recruiting of experts and managers, Munich Re is constantly looking for junior staff such as students, graduates and young professionals. Excellent university graduates are offered the opportunity to start a career at Munich Re by joining the Group's "EXPLORE" trainee programme, the International Graduate Trainee Programme in reinsurance, MEAG's "Futures", or ERGO's "RISE" programme. The goal of the programmes is to systematically develop participants' professional, social and personal skills to prepare them for the various challenges within the Group. As at 31 December 2023, there were 10 (10) candidates participating in the Group trainee programme, 65 (63) in reinsurance, 9 (10) at ERGO and 9 (12) at MEAG.

Metrics

Munich Re is characterised by high staff retention, a long average length of company service, and low rates of voluntary turnover and absenteeism. The voluntary turnover rate fell compared to the previous year. We continue to offer our staff a broad range of fringe benefits, such as access to company healthcare, mobile working options, and flexible working hours. The percentage of employees with permanent contracts increased slightly again this year. The decrease in the average length of service at Munich Reinsurance Company is mainly driven by the large number of new hires in 2023.

Employer attractiveness

		2023	Prev. year	Change
Munich Re				%
Average length of company service (as at 31.12.)	Years	13.3	13.5	–1.5
Voluntary turnover rate	%	4.8	6.3	
Sickness rate	%	4.2	4.5	
Employees with the option of sabbaticals or (un)paid leave (as at 31.12.)	%	69.6	67.0	
Employees with access to medical care via company doctor or private health insurance (as at 31.12.)	%	95.9	95.8	
Employees with the option of mobile working (as at 31.12.)	%	97.0	97.3	
Employees with flexible working hours (as at 31.12.)	%	82.0	82.0	
Permanent employees (as at 31.12.)	%	96.4	96.2	
Munich Reinsurance Company				
Average length of company service (as at 31.12.)	Years	12.7	13.9	–8.6
Voluntary turnover rate	%	2.4	2.7	

Staff development

Strategy and objectives

Our learning and development objectives and content are based on the core skills that are relevant for our employees across the Group. The curriculum is also regularly updated to meet current and future demands. The development of digital skills is significantly changing many aspects of the way our employees work worldwide.

The HR units of the individual fields of business are primarily responsible for training measures to improve social, methodological, management and language skills. Content for training measures and e-learning formats on topics such as compliance, data protection and information security are in the remit of the respective departments.

In all fields of business, talent programmes systematically support employees in their careers, and prepare them for future challenges. Moreover, a Group function steers the strategic management development and succession planning for the top management level. Continuous talent development is key in achieving the strategic goals of the Munich Re Group Ambition 2025.

An objective of the Munich Re Group Ambition 2025 is to build and enhance the digital expertise of our employees. To this end, we are continuously expanding our digital training curricula, so that our staff master the tools and methods required to drive the digital transformation in our respective fields of business.

Measures

Munich Re offers a comprehensive range of training measures for the development of our employees.

Providing development opportunities for outstanding employees is of major importance for the long-term success of our Company. We develop the professional and personal skills of particularly talented employees through various business-field-specific and Group-wide development programmes. At the Group level, our Group Management Platform is primarily aimed at networking our management and providing further training on current leadership topics. Thereby, we also lay a foundation for succession planning at this level. In 2023, 100 (137) employees took part in the programme. In reinsurance, two programmes identify and promote talent. “Hydrogen” is a three-year programme that prepared 74 (88) participants for a more advanced global role in 2023. “Oxygen” prepares candidates for an initial leadership role at the regional level within one to two years, with 205 (195) participants in 2023. The “ERGO Grow” talent-management process is aimed at employees who aspire to an initial or more advanced leadership or project-management role at ERGO. 149 (166) employees were identified and supported as part of that programme in 2023. The “ERGO Leadership Programme” is a talent programme for senior managers at ERGO. In the first half of 2023, 23 highly talented candidates attended two modules on the topics of leadership, management and strategy at the London Business School. Together with a change to its remuneration system, MEAG launched a new approach to performance management and staff development in 2023 called “OneGrowth@MEAG”, which aims to help identify and develop (top) talent at MEAG. MEAG also offers the “Leading@MEAG” format, a concrete programme for managers at the beginning of their management careers, with 17 participants in 2023. It aims to improve networking among participants and introduce them to modern management models and tools.

In addition to these talent programmes, we have various centralised training offerings for all employees, with a focus on promoting digital competencies. In reinsurance, these include “LinkedIn Learning”, “get Abstract”, and the “Digital School”, a platform with a wide range of learning content and formats, which are available globally and enable self-directed knowledge building. LinkedIn Learning, in particular, is used extensively around the world because of its flexibility and wide range of digital topics. This is reflected not only by over 8,600 (7,500) activated licences, but also by more than 164,000 (172,000) completed learning videos. The over 6,300 (2,090) visits to the Digital School in 2023 underline the relevance and attractiveness of the offering. ERGO also offers support measures to accompany employees in the digital transformation and build up their relevant skills. With the digital learning platform “e-campus”, ERGO provides self-learning opportunities in video and audio formats. In addition, relevant training topics such as resilience, collaboration or change management are addressed in-depth in monthly themes, and communicated to staff in user-friendly formats such as podcasts, short webinars or articles. The “digital morning”, a monthly hybrid event for all ERGO employees, is also firmly established. With the recently implemented “MEAG Academy”, MEAG offers a comprehensive and even more future-oriented learning programme: based on the needs of the business, training content in the areas of management-, staff- and expert development and future trends is offered to staff in modern, user-friendly formats (digital, hybrid, in-person) and continually developed. “LinkedIn Learning” has constituted a key new component in this regard since Q4 2023, as well as a curriculum that caters explicitly to the demands of asset management.

Metrics

We measure the success of our efforts through employee surveys and the metrics presented below. This also provides guidance to our management.

In 2022, we began applying a Group-wide approach for measuring sustainable employee engagement, based on nine core questions. Our Employee Engagement Index covers more than 35,000 employees in reinsurance and at ERGO and MEAG, and achieved a response rate of 75% (72%) in 2023. In total, 78% (79%) of our Group-wide employees who participated in the survey are actively engaged. The survey results were further analysed by gender and age categories. In addition to the nine core questions to measure long-term employee engagement, each business field concentrated on selected business and specific people topics within their global employee surveys.

Our success in developing internal talent is primarily reflected in the number of management positions filled internally. In 2023, the percentage was 74.4% (77.7%) in Germany and 60.7% (53.6%) worldwide. Moreover, we continue to supplement our management with external recruits. Across all hierarchical levels, 34.1% (34.6%) of vacancies worldwide were filled with internal candidates in 2023. When it comes to external recruitment, it is important for us to keep bringing new perspectives into the Company.

Compared to the previous year, we can report a notable increase in the number of employees with at least one (virtual) training, and in our training costs per employee. The decrease in training days per employee reflects the clear trend towards shorter training formats. At the same time, training sessions were increasingly conducted as in-person events.

Staff development

		2023	Prev. year	Change
				%
Employees completing at least one training[1]	%	94.2	89.5	
Employees completing at least one virtual training[1]	%	90.8	85.8	
Training days per employee[1]	Days	2.5	2.6	–3.8
Virtual training days per employee[1]	Days	1.1	1.4	–21.4
Average training costs per employee[1]	€	920	858	7.2

1 Only includes centrally managed training programmes. Department-specific training measures organised by a particular department are not included.

Diversity, equity and inclusion (DEI)

Strategy and objectives

We are convinced that the diversity of our employees' mentalities, ideas, ways of thinking, experiences and knowledge is a key success factor for Munich Re, and have anchored its development as a strategic focus in the Munich Re Group Ambition 2025. Today, Munich Re already employs more than 100 different nationalities at over 50 locations worldwide. Since 2012, Munich Re has been a signatory to the Diversity Charter. Employee characteristics such as gender, age and internationality – as well as other criteria such as religion, disability, culture, social origin and sexual orientation – play a special role in our activities.

The strategic management of DEI is carried out by a Group-wide function. The HR departments of the business fields are responsible for the initiatives and the operational implementation in the respective locations and business units. Moreover, Munich Re implemented Group-wide DEI governance in 2023. All activities are coordinated Group-wide by the DEI Management Team, consisting of the Labour Relations Directors from reinsurance, ERGO and MEAG. This Management Team is supported by a DEI task force, which plays an active role in developing and implementing our DEI initiatives at the international level.

At the global level, we have set ourselves a target of achieving 40% female representation at all management levels worldwide by 2025. We have also set targets specific to Germany, in order to meet the statutory requirements.

Moreover, we also intend to focus globally on the diversity dimension of "generations" in future.

Beyond these global challenges, we also address local challenges in the DEI context with specific measures.

Measures

Munich Re takes a clear stand against racism, inequality and discrimination of any kind. Our Group-wide Code of Conduct, which is binding for all employees, prohibits discrimination, social misconduct and harassment. In Germany, employees receive regular mandatory training on the German Equal Treatment Act (AGG) and the Code of Conduct, to promote understanding and compliance. Should cases of discrimination arise, there is a clearly defined escalation process for reporting such incidents, and complaints offices have been established.

The following measures are intended to increase the proportion of women in management positions: candidate lists and selection committees must be diverse Group-wide, senior appointments are closely monitored by the Board of Management, an even stronger focus on equality in talent development is aimed for, and our progress in gender diversity is monitored Group-wide. These key figures are integrated into the quarterly Group-wide reporting process for our business figures.

To achieve this goal, Munich Re has created a supportive environment and implemented numerous measures to promote the personal development of all employees. Established support measures were continued in 2023. These include mentoring programmes, coaching, networks for different employee groups and individual part-time and parental leave models. Several family support services in the areas of childcare, caring for family members, and career counselling complement these offerings. In addition, new and innovative programmes are regularly developed and introduced in the various regions in which our fields of business operate.

Other measures to support gender diversity include participation in the “break the bias” campaign, and panel discussions on International Women’s Day. Moreover, the fields of business feature their own women’s networking initiatives, such as Women at Munich Re (formerly EFEU) and the Women’s Inclusion Network (WIN) in reinsurance, as well as win@m at MEAG and women@ergo at ERGO. In addition to the “Succeed – Women in Leadership” initiative, ERGO also offers a mentoring programme for ambitious women. MEAG sponsors the Fondsfrauen professional network.

Our 15 (10) women’s networks had a total of 2,920 (2,073) members in 2023. A total of 5,529 (2,567) participants attended events during the reporting year.

Beyond the gender initiatives, many other campaigns took place. The following activities reflect the strong commitment of Munich Re employees to DEI topics in 2023:

In January the reinsurance business in Munich, together with MEAG, organised a day dedicated to staff with disabilities. In collaboration with the myAbility social enterprise, an awareness session was organised, featuring educational material, testimonials about people’s experiences at work, as well as a segment on the topic of “Language creates reality”. In December, ERGO participated in the International Day of Persons with Disabilities, and visibly supported the #PurpleLightUp campaign with lighting effects.

In 2023 the “Global Village” staff network was founded, whose mission is to strengthen our inclusive community for international employees.

A total of 17 (16) events were held worldwide in the 4 (4) networks of the LGBTQIA+ community.

Reinsurance and ERGO continued their collaboration with Prout at Work. During Pride Month in June, MEAG and Munich reinsurance’s joint Pride Network established an LGBTQIA+ advisory service point. This safe space for personal advice and support has remained available to all staff and managers ever since. The network also collaborated with Prout at Work in November to host a “togathering” on the topic of “Visibility & the Power of Authenticity”, to which members of the wider LGBTQIA+ community at other companies were invited as well. In addition, a range of learning programmes are provided through LinkedIn Learning and the Catalyst learning resource, and they are open to all employees globally. These offerings were promoted on World Cultural Diversity Day and during Pride Month – the awareness month for the LGBTQIA+ community – in June. For the second year in a row, ERGO had its own float in the Christopher Street Day parade in Cologne.

ERGO in Germany organised a Diversity Day in May 2023, to keep staff informed of the ongoing DEI measures and initiatives at ERGO and to encourage dialogue. On the eve of Diversity Day, ERGO hosted the festivities to celebrate the 10th anniversary of the Rhine-Ruhr Diversity Network. In addition, October was Diversity, Equity & Inclusion Month at ERGO, offering employees 13 different formats to participate in. Moreover, Munich Re continues to emphasise balance and diversity in our various talent programmes, particularly with regard to gender. Finally, we also take additional dimensions into account, such as nationality and age.

Metrics

The share of women in management positions worldwide reached 39.5% by the end of 2023, having continued to grow compared to 2022 and leaving only 0.5 percentage points for us to meet our target.

We achieved the following percentages of women in our talent programmes: 44% (41%) in the Group Management Platform, 46% (42%) in Hydrogen/reinsurance, 50% (49%) in Oxygen/reinsurance, 50% (50%) at ERGO Grow. In addition, we achieved the following shares of women in our trainee programmes: 50% (60%) in EXPLORE/Group, 60% (54%) in the International Graduate Trainee Programme in reinsurance, 56% (60%) in RISE/ERGO and 33% (33%) in Futures/MEAG.

Further information on women in management positions (targets and status) for the 2023 reporting year is provided in the Corporate Governance Statement pursuant to Sections 289f and 315d of the German Commercial Code, under “Equal participation of women and men in management positions”.

The internationality of our talent programmes, as measured by the distribution of participants between Germany and abroad, remained at a stable level. We would like to particularly point out the following results: Group Management Platform/Group 65% (58%) staff abroad, Hydrogen/reinsurance 76% (76%), Oxygen/reinsurance 76% (78%).

Diversity, equity and inclusion (DEI)

		31.12.2023	Prev. year	Change
Munich Re				%
Women in the workforce	%	52.8	52.5	
Women in management positions, Management Levels 1–4	%	39.5	38.5	
Women in management positions, Management Level 1	%	31.9	32.0	
Women in management positions, Management Level 2	%	35.2	34.5	
Nationalities	Number	131	123	6.5
Women's networks	Number	15	10	50.0
LGBTQIA+ networks	Number	4	4	0.0
International participants in talent programmes	%	50.6	49.9	
Munich Reinsurance Company				
Women in the workforce	%	46.6	45.8	
Women in management positions, Management Level 1	%	13.2	16.7	
Women in management positions, Management Level 2	%	28.6	26.5	

In summary, progress was again achieved on the reporting topics in 2023, and strategic decisions were made that set the direction and ambition for the coming years. In this regard, we will continue to provide Group-wide impulses for certain topics, and establish a variety of operational measures within the Group to optimally support the respective business model and the respective employee structure.

Governance

In this section, we report on the topics of compliance as well as responsible digital transformation, data protection and information security.

Compliance

Strategy and objectives

How Munich Re is perceived by the public and our business partners depends on each and every member of our staff. Our actions are guided by the principles and values detailed in our Code of Conduct, and we strive to maintain our stakeholders' trust and protect Munich Re's reputation. Appropriate conduct plays an important role in this regard. Accordingly, Munich Re's objective is to comply with all applicable statutory, supervisory and other external rules and standards, particularly those related to the insurance and investment business, and with all internal regulations on avoiding material compliance risks in all of our business activities.

Compliance is the responsibility of every member of staff. Based on our Code of Conduct and other commitments to responsible conduct (e.g. the UN Global Compact), all staff have undertaken to act honestly and dependably. They are to make business decisions in accordance with the law, statutes and internal regulations, and avoid any conduct that could be detrimental to Munich Re. Our Board of Management and managers bear a particular responsibility for implementing compliance as an integral part of our business processes. Our managers are role models for our staff and have a duty to ensure that business within their sphere of responsibility is conducted in accordance with the law, statutes and internal regulations.

We understand compliance, in its broadest sense, to mean acting in accordance with the law, statutes and internal regulations, such as the Code of Conduct, which apply to the operation of an insurance and investment business. Compliance is thus a key element of our business processes, allowing us to fulfil our responsibilities and to embody integrity.

Providing quality advice to our clients and customers is a top priority at Munich Re. At ERGO this is reflected, for example, in its accession in 2012 to the Code of Conduct issued by the German Insurance Association (GDV) for the sale of insurance products. This Code obliges the signatory insurers and their brokers to not only comply with high standards of advice and brokerage, but to also have this compliance regularly checked by independent auditors. In 2023, for the fifth time, KPMG confirmed that ERGO was implementing the provisions of the Code effectively.

A further objective is to continually improve our Compliance Management System, detect and eliminate any violations, and regularly report to the appropriate parties.

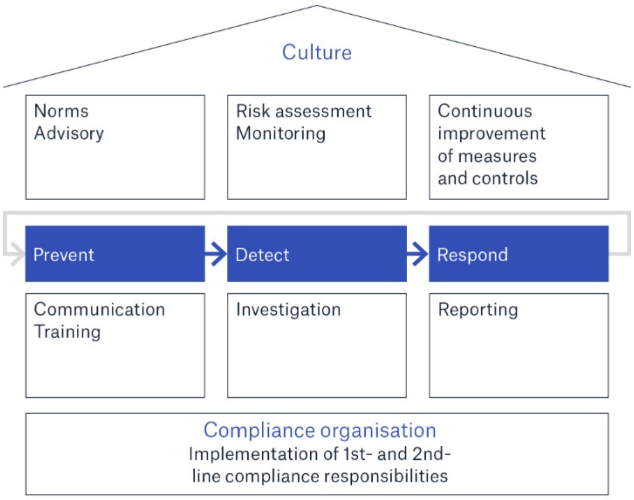
In order to meet these objectives, we define, among other things, Group-wide standards and monitor compliance risks. In particular, these include a zero-tolerance policy towards corruption and bribery at Munich Re; money-laundering provisions and antitrust law; product sales and design (sales compliance) that allow a relationship of trust and fairness with our clients; and data protection provisions to ensure that data entrusted to us is handled securely. Complying with financial sanctions, constantly keeping up with the most recent geopolitical developments, and continuous monitoring of such matters were also a key focus in 2023. Another important aspect of our compliance activities was reviewing and implementing current regulatory requirements pertaining to ESG, such as the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz – LkSG). The latest regulatory standards are constantly monitored and their requirements integrated into Company processes.

Measures

Compliance Management System (CMS)

To ensure the aforementioned objectives are met, Munich Re has put a Compliance Management System in place to foster a culture of adherence to rules and standards by Munich Re, its management and its staff, and to monitor compliance using appropriate measures. Our CMS was developed on the basis of the external compliance standards ISO 19600 and IDW PS 980 from the German Institute of Certified Accountants (IDW) – and carefully tailored to meet Munich Re's needs. It is regularly reviewed and continually improved. The CMS constitutes the methodological framework for the structured implementation of the early-warning, risk-control, advising and monitoring functions.

Munich Re's CMS is geared to the aforementioned goals and is designed as follows:



The scope and means of implementing compliance activities with regard to the above-mentioned CMS elements are guided by the risk profile of the respective Group company, though the implementation of minimum standards that apply throughout the Group is mandatory for all entities. Material compliance risks are identified and managed using Group-wide methodology; established framework concepts and controls are monitored; and potential violations that may occur despite these measures are investigated.

Compliance culture

Our business activities are embedded in a compliance culture based on our ethical principles. These principles are particularly reflected in the Munich Re Code of Conduct, our main standard outlining our expectations of all staff to act responsibly and to respect the rules and regulations. We completely revised our Code of Conduct in 2023. In addition to our basic standards for fair and responsible conduct, covering topics such as dealing correctly with conflicts of interest, preventing corruption, ensuring compliance with antitrust law, observing economic sanctions, preventing money laundering, and complying with tax regulations, in our new Code of Conduct we have now placed a stronger focus on topics such as sustainability, human rights, responsible leadership, fostering a culture of trust and transparency (speak-up culture), and whistleblower protection.

Compliance organisation involves designing the structure of the compliance function, which includes determining the tasks, responsibilities and processes with regard to compliance measures and interfaces. Our compliance unit manages compliance activities through Group-wide standards and a network of regional and local compliance officers.

Prevention

We have set ourselves the goal of enabling our staff to conduct themselves ethically and compliantly through a defined reference framework, including a Group-wide Code of Conduct, guidelines and standards. Training, advice for managers and staff, and proper communication of relevant content also play important roles in this regard.

The compliance norms specify principles and minimum standards for avoiding and managing material compliance risks.

The advisory function responds to compliance-related questions from staff, provides advice on specific cases, issues general recommendations, and shows senior management, managers and staff how to assess and avoid compliance risks, but also how to avoid potential external and internal breaches and respond accordingly.

Our Group-wide communication and training courses are aimed at increasing awareness of compliance risks and dealing with them effectively. Both are aimed at and tailored to the needs of the various German and international Group companies and their respective business models. Staff and management are required to regularly attend training – either in the classroom or via IT-supported programs – on the Code of Conduct and selected compliance topics, such as preventing corruption, ensuring compliance with antitrust law, and data protection. Mandatory tests help participants grasp and internalise the content, especially in the case of online material.

Detection

Assessing compliance risks includes the systematic identification, analysis and mitigation of such risks. The process is based on Group-wide methodology to identify, assess and document risks. Munich Re's main compliance risks and the corresponding mitigation measures are analysed and reported to management at least once a year. The main risk areas include data protection, financial sanctions, antitrust law, use of external staff, money laundering, sales compliance, corruption, and ESG. The management of changes to the law is part of our risk assessment, allowing us to evaluate in good time any possible effects of changes in the legal environment. A particular focus in this regard in 2023 was assessing and implementing new ESG-related requirements, such as the German Supply Chain Due Diligence Act (LkSG).

Monitoring consists of evaluating whether the implemented measures for mitigating material compliance risks are appropriate and effective. It also includes reviewing the defined frameworks and assessing the design and effectiveness of the controls implemented.

If there are any suspicions or allegations of illegal activity and/or misconduct within the company, internal investigations are conducted by the compliance function. We have set up a comprehensive whistleblower system for reporting suspicious activity.

Response

Continuous improvement means regularly reviewing our CMS and compliance measures on the basis of risk assessments, monitoring and other relevant information from the various departments (audit reports, legal changes, organisational changes, etc.), and making adjustments if necessary. In this regard, the maturity of the CMS is reassessed annually using quantitative and qualitative checks and metrics. These include checking completion rates of mandatory online tests, for example on anti-corruption, antitrust law, data protection and the Code of Conduct. The same applies to the number of whistleblower tips and other allegations received, as well as to the number, type and severity of compliance violations identified.

Compliance reports are submitted to the Board of Management and the Audit Committee ad hoc when required and, that notwithstanding, every six months to the Board of Management and annually to the Audit Committee. Reporting includes, but is not limited to, information on significant compliance risks and mitigating measures, compliance-related violations and statements regarding the maturity of the CMS, as well as an overview of the adequacy and effectiveness of the procedures implemented to comply with external requirements. Reporting also involves regularly communicating with supervisory authorities such as the Federal Financial Supervisory Authority (BaFin).

Selected compliance programmes

We have set up dedicated compliance programmes as minimum standards for compliance risks of Group-wide relevance, for example corruption and bribery, financial sanctions, money laundering and antitrust law, sales compliance and data protection. Monitoring the implementation of these programmes is the responsibility of the respective local compliance organisation.

Due to its international activities, Munich Re is also subject to foreign corruption-prevention laws such as the UK Bribery Act and the US Foreign Corrupt Practices Act. Accordingly, we have adopted Group-wide minimum standards on appropriate conduct regarding invitations, gifts, donations and sponsorships, as well as on interacting with public officials. Fighting corruption is a zero-tolerance compliance programme at Munich Re.

Munich Re is also committed to the fight against money laundering and terrorist financing. The companies that are subject to the German Money Laundering Act (GWG) have been set up accordingly; officers responsible for money laundering issues, and their deputies, have been appointed where mandated by the GWG. ERGO and MEAG have, through in-house anti-money-laundering policies, set up fundamental standards for their staff in the relevant companies to prevent money laundering and terrorist financing. Duly identifying our customers, service providers and suppliers is part of the know-your-customer principle and the process is integrated into corresponding due-diligence reviews.

Whistleblowing portal

We maintain a Group-wide reporting system for violations of the law and other regulations. Staff can report potential violations to Group Compliance & Legal or their line manager. In addition, they have the option to contact an external, independent ombudsman. The compliance whistleblowing portal is available to all staff and external parties for reporting violations. This setup allows allegations to be reported securely, anonymously and confidentially. Any reports received are forwarded to Group Compliance & Legal or the relevant local compliance organisation. The platform can be used to report potential violations relating to financial crime (corruption, financial sanctions, fraud), regulatory requirements, money laundering, tax law, antitrust law, insider trading, sales compliance, data protection, human rights (and other ESG matters), gender discrimination, sexual harassment, diversity and violations of equal-treatment provisions. The function protecting whistleblower anonymity in Munich Re's compliance whistleblowing portal has been externally certified under ISO 27001.

Munich Re's whistleblowing portal complies with the legal requirements, as amended, of the EU Whistleblowing Directive 2019/1937.

Metrics

Munich Re records any violation of purely internal policies as well as statutory or regulatory rules, supervisory requirements, or other external rules or standards (hereinafter: “external requirements”), as a compliance incident. Such incidents constitute an essential component of our reporting to the Boards of Management and Supervisory Board Audit Committees of Munich Re companies.

In 2023, 497 (443) allegations of potential misconduct were received through the various reporting channels at Munich Re. All allegations were carefully and impartially investigated, while protecting the whistleblower and maintaining their anonymity, when requested. Neither violations with a material financial impact nor any systematic vulnerabilities were identified.

Details about the allegations and violations appear in the following tables. Information about allegations and violations concerning data protection can be found under “Responsible digital transformation, data protection and information security”.

Allegations of possible misconduct and violations

	Number		Share		
	2023	Prev. year	2023	Prev. year	Change
					%
Non-confirmed violations	170	109	34.2	24.6	56.0
Ongoing investigations	156	202	31.4	45.6	–22.8
Confirmed violations	171	132	34.4	29.8	29.5
Thereof violations of purely internal requirements	55	39	32.2	29.5	41.0
Thereof violations of external requirements	116	93	67.8	70.5	24.7
Total	**497**	**443**	**100.0**	**100.0**	**12.2**

The violations of external requirements fall into the following categories:

Confirmed violations of external requirements

	Number		Share		
	2023	Prev. year	2023	Prev. year	Change
					%
Regulatory requirements	46	15	39.7	16.1	206.7
Tax law	7	6	6.0	6.5	16.7
Offences to the detriment of third parties or the company	29	29	25.0	31.2	0.0
Sales- or product-related requirements	29	36	25.0	38.7	–19.4
Human resources	5	6	4.3	6.5	–16.7
Unfair competition and antitrust law	0	1	0.0	1.1	–100.0
Money laundering	0	0	0.0	0.0	–
Financial sanctions	0	0	0.0	0.0	–
Human rights or other ESG aspects	0	0	0.0	0.0	–
Insider trading and market manipulation	0	0	0.0	0.0	–
Corruption	0	0	0.0	0.0	–
Total	**116**	**93**	**100.0**	**100.0**	**24.7**

Of the total of 116 (93) confirmed violations of external requirements, a total of 35 (19) were sanctioned with disciplinary action.

The findings from our investigations of suspected and actual compliance violations are used to continually improve the CMS.

Responsible digital transformation, data protection and information security

Strategy and objectives

The relevance of digitalisation and the challenges it entails with regard to data protection, information security and the responsible use of artificial intelligence (AI) continue to rise. Transformation efforts towards digital and data-driven processes have significantly accelerated in many insurance companies as well. It is of crucial importance for Munich Re to ensure that digital data and technologies are used responsibly, and to remain a trusted partner on the market by striving to offer innovative solutions for our clients. Against this backdrop, we have made responsible and ethical digitalisation an essential component of our business strategy, and are making targeted investments in technology and staff.

Due to the nature of its business, Munich Re comes into contact with a large amount of data. Protecting this data is important to us, especially given the fact that increasing digitalisation means that many business processes involve handling personally identifiable information. Compliance with data protection regulations is also a significant element of maintaining Munich Re's reputation and the trust of our business partners. In the area of data protection, compliance with national and international regulatory requirements such as the EU General Data Protection Regulation (GDPR) is one of the main drivers for the development of our management approach. Moreover, in the various fields of business, data protection management systems have been implemented to systematically monitor and control how we handle personally identifiable information.

At the same time, we consistently apply the three pillars of protection to information security: confidentiality, availability and integrity of our information. The requirements in this regard are driven by statutory and supervisory regulations, and are an integral component of Munich Re's corporate strategy. Accomplishing these protection objectives constitutes a key factor in our business success. Our goal in this regard is to tailor the levels of protection of our data and information to the respective risk, in the context of the increasing digitalisation of our business processes. When defining our level of ambition, we took both the findings from our review of supervisory requirements, for example the "Supervisory Requirements for IT in Insurance Undertakings" (VAIT), as well as benchmark comparisons into account.

Munich Re's Code of Conduct and various business-field-specific standards include mandatory rules for all staff and are intended to ensure that data protection and information security are dealt with consistently in these areas.

For Group companies situated within the European Union and the European Economic Area (EU/EEA), the rules regarding data protection refer primarily to the GDPR. Based on the GDPR, Munich Reinsurance Company, ERGO and MEAG have each adopted a data protection policy covering their activities in the EU/EEA in order to ensure a consistent, mandatory level of protection across these fields of business. In our reinsurance business and at MEAG, binding corporate rules on data protection apply for our intra-Group data sharing with companies situated outside the EU/EEA, thus ensuring an appropriate level of data protection at our locations worldwide. In 2023, we implemented an updated version of these data protection regulations approved by the competent data protection supervisory authority.

Where necessary, data protection officers have been appointed to handle data protection in reinsurance, at ERGO and at MEAG. The Group's data protection organisation is centrally coordinated by the Group Compliance & Legal division. Among other tasks, the data protection officers and experts work in their respective areas of responsibility to ensure compliance with the data protection regulations, monitor the lawfulness of IT-supported data processing, advise the respective companies on their duties under the applicable data protection regulations, answer staff questions on data protection, and serve as a first point of contact in communications with the supervisory authorities. Reports are made at least once a year to Munich Reinsurance Company's Board of Management concerning significant data protection issues and improvements to Munich Re's data protection management systems.

Particularly complex and risky data protection concerns at Munich Re are handled by the Data Strategy and Governance department, which is overseen by the Compliance and Legal division and serves as a centre of excellence. All Munich Re staff can contact this department if they have any enquiries relating to data protection and AI.

Management of information security risks is the responsibility of the Group Chief Information Security Officer (Group CISO). This involves defining, updating and implementing the information security strategy, which includes numerous measures and projects executed by the Group CISO.

To support this, within the Group we have also implemented guidelines on information security and business continuity management for relevant companies; these guidelines set binding targets, minimum requirements, responsibilities, processes and reporting procedures regarding information security and business continuity.

The idea of "responsible artificial intelligence" is the foundation of our work in the field of artificial intelligence. It is based on the seven Ethics Guidelines for Trustworthy Artificial Intelligence elaborated by an expert group at the European Commission. These guidelines form the basis for complying with international regulatory requirements for using AI, in particular the EU AI Act.

Munich Re's main goal when using AI in reinsurance is to offer solutions that are tailored to our clients' needs, for example by making it easier and quicker for us to assess risks, settle claims, or insure new types of risk. Moreover, Munich Re assumes the performance risk associated with

AI-based models through innovative insurance products such as aiSure™.

In primary insurance, data and artificial intelligence are also key factors driving digital transformation, particularly though intelligent process automation and strong, individualised client service.

Measures

To continuously improve our digitalisation processes, we implemented numerous measures in the course of the reporting year.

Munich Re staff receive regular training via e-learning programs on the GDPR, mandatory internal data protection regulations, and information security. All new staff are also required to complete the e-learning programs during their onboarding period. Moreover, division-specific on-site courses were held in the reporting year, along with regular online presentations outlining the handling of data, analytics and AI as well as the risks and opportunities associated with them. We continue to offer training courses, for example our data analytics curriculum, that are targeted towards specific groups of staff, such as developers, users and managers. We have also expanded our training programme with regard to trustworthy artificial intelligence.

In order to provide transparency about data protection risks and information security risks, and to fulfil data protection accountability obligations, every instance of IT-supported processing of personally identifiable information in reinsurance is reviewed using a defined process. Any data processing that entails a high risk of violating an individual's rights or restricting their freedoms is identified and monitored through a privacy impact assessment. ERGO and MEAG also comply with their accountability obligations under data protection law with the help of corresponding processes. In addition to the aforementioned data protection risk reviews, every instance of IT-supported data processing is reviewed – according to the protection needs of the processed data – for compliance with information security requirements. The data protection and information security processes are continually refined, also with respect to technical and legal developments. In 2023, we introduced an overarching governance, risk and compliance platform in reinsurance and integrated the data protection and information security processes in the affiliated Group companies. We also plan to integrate our existing third-party risk management approach into the platform.

It is our declared goal to avoid any type of discrimination through AI, which could for example arise through the use of historical data. In addition, we check that our data resources cover all relevant demographic groups where possible, for example regarding age, sex, nationality or ethnic background. At the same time, we bear in mind the legal, social and cultural standards of every country in which we do business. Moreover, making our algorithms as transparent as possible is a matter we take very seriously. Through partnerships with the scientific community and academic institutions, we have access to the latest techniques for illustrating the behaviour of AI systems.

Appraisal

In 2023, as in the previous year, no material data protection events as defined in the Solvency II Group Compliance Policy were identified anywhere in our Group worldwide, nor were any material proceedings for breach of data protection regulations initiated. Nevertheless, Munich Re is increasingly the target of cyber attacks, which threaten the confidentiality, integrity and availability of our information and business processes. As a result, measures that both prevent such attacks and facilitate their identification are being continually improved, particularly in this area. We are also optimising the systematic management of any such incidents.

Further details

In the following section, we publish further information under the German Commercial Code (HGB) about our business model, our management's involvement, and about non-financial risks and how we manage them, to provide a fuller understanding of the sustainability of our actions.

Details on the business model

Munich Re is one of the world's leading providers of reinsurance, primary insurance and insurance-related risk solutions. The information about Munich Re's business model, required under Sections 289c(1) and 315c(1) HGB, is published under "Munich Re Group".

Sustainability governance structure

We have clearly defined organisational responsibilities for sustainability throughout the Group. Fundamental strategic decisions are taken by the Board of Management, or, more specifically, by the ESG Committee, a subcommittee of the Strategy Committee. The members of the Strategy

Committee are part of the ESG Committee, as is the head of the central division Economics, Sustainability & Public Affairs (ESP). The ESG Committee's objective is to strengthen the Group's ESG management and accentuate the strategic importance of ESG topics for the Group. The ESG Committee is complemented operationally by the ESG Management Team, which is composed of the heads of ESP and Financial and Regulatory Reporting (FRR), the head of the Group's Sustainability department, the departmental head for ESG-relevant topics in Group Investment Management (GIM), as well as the chief underwriting officers from reinsurance and ERGO. The ESG Management Team is responsible for implementing and monitoring the Group-wide ESG strategy. Both bodies are supported by the Group's Sustainability department, part of the central division ESP, which reports directly to the CEO and coordinates sustainability initiatives within the Group.

In addition, we have been integrating ESG criteria into the Board of Management's remuneration system since 2012. This grants the Supervisory Board latitude to factor in aspects of sustainability when it considers remuneration. And as of the 2022 reporting year, at least one concrete ESG target is to be agreed for the multi-year bonus. Further information is available online at www.munichre.com/board-of-management.

The Supervisory Board addresses significant sustainability issues at least three times a year: on the basis of the combined non-financial statement, upon presentation of the annual personnel report, and through regular updates on ESG strategy and implementation measures. Such updates are based on the report detailing the work of the Praesidium and Sustainability Committee and other information. Several members of the Supervisory Board possess significant ESG expertise and are thus qualified to assess the information. Moreover, the Praesidium and Sustainability Committee regularly scrutinises ESG issues as a fundamental part of its responsibility. Further information on the Supervisory Board's responsibilities and those of its committees can be found under "Report of the Supervisory Board".

Risk analysis

For us as risk carriers, risk management constitutes a key element of responsible and sustainable corporate governance. In the context of sustainability risks, we differentiate between "outside-in" and "inside-out" perspectives. Outside-in risks refer to ESG events or conditions that could have real or potential negative consequences on investments or liabilities. We address the management of outside-in risks under "Risk report".

By contrast, inside-out risks are potential consequences that our business could have on ESG aspects, and thus correspond to the risks mentioned in Sections 289c(3) and 315c HGB – risks to society and the environment, for example. Munich Re's business operations, unlike those of other sectors, do not normally result in any material risks that could very likely have grave consequences for the aspects named in Section 289c(2) HGB. Nevertheless, risks that can be categorised as sustainability risks may indirectly arise from investments or our insurance business, e.g. through covering major infrastructure projects.

We are aware of our corporate responsibility for these risks, and manage them accordingly. We describe our strategic approach to sustainability, and how we handle specific ESG aspects such as climate change, in various sections of the non-financial statement.

Non-compliance with ESG criteria could also damage Munich Re's reputation. As a result, where societal and environmental risks are not already subject to specific operational standards, they are assessed by our reputational risk management and rejected if necessary. We identify, analyse, assess and monitor reputational risks with the aid of qualitative methods. Specific guidelines and process descriptions define how we deal with reputational and sustainability risks. Various measures raise our staff's awareness of reputational and ESG considerations, which in turn helps to mitigate risks. Reputational risk committees (RRCs) in the fields of investment, reinsurance and primary insurance (in the latter case called the Reputation and Integrity Committee) assess concrete reputational concerns and any potential reputational or sustainability risks of individual transactions. The reviewed incidents are documented. Our processes on dealing with reputational risks in the various fields of business' individual RRCs have been consistent across the Group since 2021. The figures in the tables illustrate the findings and the development of the reputational and sustainability risks reviewed by the RRCs for the 2023 financial year and the previous year.

Outcome of assessment by RRC of transactions submitted for review of critical reputational risks

Number	2023	Prev. year	Change
			%
Rejected due to critical reputational risk	2	4	–50.0
Accepted, no critical reputational risk identified	5	8	–37.5
Accepted under specified terms	3	2	50.0

No reportable sustainability risks were identified in the 2023 reporting year.

About this statement

Statutory requirements

In the combined non-financial statement, we report in accordance with the requirements of the European Non-Financial Reporting Directive (NFRD) and the corresponding commercial law provisions of Sections 289b and 315b HGB. This statement combines the consolidated non-financial statement of the Munich Re Group and the non-financial statement of Munich Reinsurance Company. All content contained in the statement applies both to the Group and to Munich Reinsurance Company, unless otherwise noted.

In preparing the non-financial statement, we bore in mind the Global Reporting Initiative (GRI) standards when describing the concepts. An exhaustive report is published separately in the Sustainability Report, which is available at www.munichre.com/s-report.

Moreover, our sustainability reports have followed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) since 2020. In the risk report, which includes a more detailed description of non-financial risks, our reporting on risks for insurance and investments resulting from climate change is also based on the TCFD recommendations.

We have also been using the standards issued by the Sustainability Accounting Standards Board (SASB) as guidance in compiling the non-financial statement since 2021 – as acknowledgement of the increasing significance of SASB standards to investors.

An overview of the relevant information about the TCFD and the SASB can be found in the TCFD, SASB Index at www.munichre.com/sustainability/download.

Our goal is to continue improving the transparency of our reporting and to keep meeting updated requirements.

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft was tasked with the assurance audit of our combined non-financial statement in 2023. All information in this statement was subjected to a limited assurance audit. Any references to information outside the combined management report constitute outside information and are thus not part of the combined non-financial statement; they are not covered by the audit.

Materiality analysis

The materiality analysis determines which sustainability topics are of special importance for Munich Re and its stakeholders, and therefore should be focused on in our sustainability management and reporting. In order to comply with both regulatory standards and best practices in our reporting, we conducted a validation of the previous materiality analysis to identify the material topics to be reported on for the 2023 reporting year. The materiality analysis that we completed was based on the concept of materiality as defined by Section 289c HGB.

The material topics were identified in the following steps:

- Pre-selection of topics based on external reporting requirements and topics already identified in the previous materiality analysis;
- Analysis of the context; determination of the business relevance of the topics and of Munich Re's impact on the topics, and
- Validation by internal expert committees and selected stakeholders, as well as final approval of the reportable topics by the Munich Re ESG Committee.

The following stakeholder groups were included in the analysis:

- Clients
- Staff
- Investors
- Representatives of wider society

The validation confirmed the reporting scope from 2022. Human rights was identified as material from both an impact and business relevance perspective. The following topics have been identified as material (in alphabetical order):

- Climate change
- Compliance
- Customer orientation and customer satisfaction
- Diversity, equity and inclusion
- Employer attractiveness
- ESG integration
- Human rights
- Natural disasters
- Responsible digital transformation and cyber security

- Sustainable services and products
- Responsible management structures
- Training and education

Although the topic of "environmental management in own operations" is not as significant as in other industries, given our business activities, we have nevertheless set clear goals for ourselves here as well and report on them in a separate section.

EU Taxonomy Regulation templates

In this section we present, in accordance with Article 6 of the Commission Delegated Regulation (EU) 2021/2178, the information relevant for insurance and reinsurance undertakings in table form, using the templates set out in Annex X. We also present the standard templates set out in Annex XII for the disclosure of nuclear and fossil gas related activities in accordance with Article 8, paragraphs 6 and 7.

Investments

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

Description	%	Description	€m
The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with Taxonomy-aligned economic activities relative to the value of total assets covered by the KPI, with following weights for investments in undertakings per below:		The weighted average value of all the investments of insurance or reinsurance undertakings that are directed at funding, or are associated with Taxonomy-aligned economic activities, with following weights for investments in undertakings per below:	
Turnover-based:	2.2	Turnover-based:	3,488
CapEx-based:	2.5	CapEx-based:	3,861
The percentage of assets covered by the KPI relative to total investments of insurance or reinsurance undertakings (total AuM). Excluding investments in sovereign entities.		The monetary value of assets covered by the KPI. Excluding investments in sovereign entities.	
Coverage ratio:	63.3	Coverage ratio:	156,093
Additional, complementary disclosures: breakdown of denominator of the KPI			
The percentage of derivatives relative to total assets covered by the KPI.	2.0	The value in monetary amounts of derivatives.	3,176
The proportion of exposures to financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU over total assets covered by the KPI:		Value of exposures to financial and non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU:	
For non-financial undertakings:	22.0	For non-financial undertakings:	34,374
For financial undertakings:	36.5	For financial undertakings:	57,012
The proportion of exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU over total assets covered by the KPI:		Value of exposures to financial and non-financial undertakings from non-EU countries not subject to Articles 19a and 29a of Directive 2013/34/EU:	
For non-financial undertakings:	15.6	For non-financial undertakings:	24,415
For financial undertakings:	18.5	For financial undertakings:	28,917
The proportion of exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU over total assets covered by the KPI:		Value of exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU:	
For non-financial undertakings:	4.7	For non-financial undertakings:	7,381
For financial undertakings:	7.2	For financial undertakings:	11,261
The proportion of exposures to other counterparties and assets over total assets covered by the KPI:[1]	27.5	Value of exposures to other counterparties and assets:[1]	42,889
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts where the investment risk is borne by the policy holders:[3]	94.9	Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts where the investment risk is borne by the policy holders:[3]	148,160

Description	%	Description	€m
The value of all the investments that are funding economic activities that are not Taxonomy-eligible relative to the value of total assets covered by the KPI:		Value of all the investments that are funding economic activities that are not Taxonomy-eligible:	
Turnover-based:	15.8	Turnover-based:	24,646
CapEx-based:	14.4	CapEx-based:	22,465
The value of all the investments that are funding Taxonomy-eligible economic activities, but not Taxonomy-aligned relative to the value of total assets covered by the KPI:		Value of all the investments that are funding Taxonomy-eligible economic activities, but not Taxonomy-aligned:	
Turnover-based:	16.6	Turnover-based:	25,876
CapEx-based:	17.0	CapEx-based:	26,491
Additional, complementary disclosures: breakdown of numerator of the KPI			
The proportion of Taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU over total assets covered by the KPI:		Value of Taxonomy-aligned exposures to financial and non-financial undertakings subject to Articles 19a and 29a of Directive 2013/34/EU:	
For non-financial undertakings: Turnover-based:	0.3	For non-financial undertakings: Turnover-based:	466
For non-financial undertakings: CapEx-based:	0.5	For non-financial undertakings: CapEx-based:	825
For financial undertakings: Turnover-based:	0.0	For financial undertakings: Turnover-based:	0
For financial undertakings: CapEx-based:	0.0	For financial undertakings: CapEx-based:	0
The proportion of the insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts where the investment risk is borne by the policy holders, that are directed at funding, or are associated with, Taxonomy-aligned economic activities:		Value of insurance or reinsurance undertaking's investments other than investments held in respect of life insurance contracts where the investment risk is borne by the policy holders, that are directed at funding, or are associated with, Taxonomy-aligned economic activities:	
Turnover-based:	2.2	Turnover-based:	3,468
CapEx-based:	2.5	CapEx-based:	3,829
The proportion of Taxonomy-aligned exposures to other counterparties and assets over total assets covered by the KPI:[1]		Value of Taxonomy-aligned exposures to other counterparties and assets over total assets covered by the KPI:[1]	
Turnover-based:	1.9	Turnover-based:	3,022
CapEx-based:	1.9	CapEx-based:	3,037
Breakdown of the numerator of the KPI per environmental objective			
Taxonomy-aligned activities – provided 'do-not-significant-harm' (DNSH) and social safeguards positive assessment:			
Environmental objective	**%**	**Breakdown**	**%**
1. Climate change mitigation[2]			
Turnover:	100.0	Transitional activities: (Turnover)	1.1
CapEx:	100.0	Transitional activities: (CapEx)	2.2
		Enabling activities: (Turnover)	11.8
		Enabling activities: (CapEx)	15.3
2. Climate change adaptation[2]			
Turnover:	0.0	Enabling activities: (Turnover)	0.0
CapEx:	0.0	Enabling activities: (CapEx)	0.0
3. The sustainable use and protection of water and marine resources[2]			
Turnover:	–	Enabling activities: (Turnover)	–
CapEx:	–	Enabling activities: (CapEx)	–
4. The transition to a circular economy[2]			
Turnover:	–	Enabling activities: (Turnover)	–
CapEx:	–	Enabling activities: (CapEx)	–
5. Pollution prevention and control[2]			
Turnover:	–	Enabling activities: (Turnover)	–
CapEx:	–	Enabling activities: (CapEx)	–
6. The protection and restoration of biodiversity and ecosystems[2]			

Description	%	Description	€m
Turnover:	–	Enabling activities: (Turnover)	–
CapEx:	–	Enabling activities: (CapEx)	–

1 Amended based on Art. 5 (3) of the Delegated Regulation of 27 June 2023.
2 In accordance with Art. 5 (3) of the Delegated Regulation of 27 June 2023, "transitional activities" were deleted for environmental objectives 2–6 (see Annex 5, paragraph 11).
3 The restriction to investments "that are directed at funding, or are associated with, Taxonomy-aligned economic activities" has been deleted, as this does not apply to the denominator.

Template 1 (Turnover): Nuclear and fossil gas related activities[1]

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

1 Liquid nuclear and gas investments are not included due to immateriality.

Template 2 (Turnover): Taxonomy-aligned economic activities (denominator)[1, 2]

		Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0	0	0.0	0	0.0
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0	0	0.0	0	0.0
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**3,488**	**2.2**	**3,488**	**2.2**	**0**	**0.0**
8.	**Total applicable KPI**	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 Liquid nuclear and gas investments are not included due to immateriality.

Template 3 (Turnover): Taxonomy-aligned economic activities (numerator)[1, 2]

		Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0	0	0.0	0	0.0
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0	0	0.0	0	0.0
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	**3,488**	**100.0**	**3,488**	**100.0**	**0**	**0.0**
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	**3,488**	**100.0**	**3,488**	**100.0**	**0**	**0.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 Liquid nuclear and gas investments are not included due to immateriality.

Template 4 (Turnover): Taxonomy-eligible but not taxonomy-aligned economic activities[1]

Row	Economic activities	Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	480	0.3	480	0.3	0	0.0
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0	0	0.0	0	0.0
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**25,395**	**16.3**	–	–	–	–
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**25,876**	**16.6**	–	–	–	–

1 Liquid nuclear and gas investments are not included due to immateriality.

Template 5 (Turnover): Taxonomy non-eligible economic activities[1]

Row	Economic activities	€m	%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**24,646**	**15.8**
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	**24,646**	**15.8**

1 Liquid nuclear and gas investments are not included due to immateriality.

Template 1 (CapEx): Nuclear and fossil gas related activities[1]

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

1 Liquid nuclear and gas investments are not included due to immateriality.

Template 2 (CapEx): Taxonomy-aligned economic activities (denominator)[1, 2]

		Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0	0	0.0	0	0.0
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**3,861**	**2.5**	**3,861**	**2.5**	**1**	**0.0**
8.	**Total applicable KPI**	**156,093**	**100.0**	**156,093**	**100.0**	**156,093**	**100.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 Liquid nuclear and gas investments are not included due to immateriality.

Template 3 (CapEx): Taxonomy-aligned economic activities (numerator)[1, 2]

		Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0	0	0.0	0	0.0
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	**3,861**	**100.0**	**3,861**	**100.0**	**1**	**0.0**
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	**3,861**	**100.0**	**3,861**	**100.0**	**1**	**0.0**

1 Only alignment figures from non-financial investee undertakings are included, as reported alignment data from financial undertakings is not yet available.
2 Liquid nuclear and gas investments are not included due to immateriality.

Template 4 (CapEx): Taxonomy-eligible but not taxonomy-aligned economic activities[1]

		Amount and proportion (the information is to be presented in monetary amounts and as percentages)					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	€m	%	€m	%	€m	%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	480	0.3	480	0.3	0	0.0
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**26,011**	**16.7**	–	–	–	–
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**26,491**	**17.0**	–	–	–	–

1 Liquid nuclear and gas investments are not included due to immateriality.

Template 5 (CapEx): Taxonomy non-eligible economic activities[1]

Row	Economic activities	€m	%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	**22,465**	**14.4**
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	**22,465**	**14.4**

1 Liquid nuclear and gas investments are not included due to immateriality.

Insurance activities

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

	Substantial contribution to climate change adaptation			DNSH (Do no significant harm)					
	Absolute insurance revenue 2023 (2)	Proportion of insurance revenue 2023 (3)	Proportion of insurance revenue 2022 (4)	Climate change mitigation (5)	Water and marine resources (6)	Circular economy (7)	Pollution (8)	Biodiversity and ecosystems (9)	Minimum safeguards (10)
Economic activities (1)	€m	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
A.1. Non-life insurance and reinsurance underwriting Taxonomy-aligned activities (environmentally sustainable)	**2,931**	**7.9**	**–**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
A.1.1. Of which reinsured	160	0.4	–	Y	Y	Y	Y	Y	Y
A.1.2. Of which stemming from reinsurance activity	2,673	7.2	–	Y	Y	Y	Y	Y	Y
A.1.2.1. Of which reinsured (retrocession)	160	0.4	–	Y	Y	Y	Y	Y	Y
A.2. Non-life insurance and reinsurance underwriting Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)	**17,797**	**48.1**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
B. Non-life insurance and reinsurance underwriting Taxonomy-non-eligible activities	**16,243**	**43.9**	**45.1**	**–**	**–**	**–**	**–**	**–**	**–**
Total (A.1 + A.2 + B)	**36,971**	**100.0**	**–**	**–**	**–**	**–**	**–**	**–**	**–**

Business performance

Overall assessment by the Board of Management on the business performance and situation of the Group

Munich Re was able to adjust the forecast of its net result from €4.0bn to €4.5bn in October due to good operational performance in all business segments. With a net result of €4.6bn for the full year, we exceeded our guidance despite a market environment that remains challenging. Insurance revenue from insurance contracts issued (insurance revenue) rose by 4.5% to €57,884m (55,385m). This considerable increase was due in particular to organic growth both in the property-casualty reinsurance segment and at ERGO; conversely, currency translation effects negatively impacted insurance revenue.

The property-casualty reinsurance segment contributed €2,448m (3,423m) to our net result of €4,597m (5,309m). The decline year on year was chiefly due to interest-rate developments. Although our insurance service result benefited to a similar extent from discounting effects on reserves in both reporting periods, the previous year was affected significantly more by the lower interest rates applied upon initial measurement. This resulted in substantially lower expenses for accrued interest (insurance finance expenses). The combined ratio amounted to 85.2% (83.2%) of net insurance revenue, and was thus in line with the adjusted forecast of 85%. Major-loss expenditure totalled €3,278m (3,741m)[1]. Major-loss expenditure corresponded to 12.6% (15.4%)[1] of net insurance revenue, and was thus below the expected value of 14%. Man-made major losses amounted to €943m (1,623m)[1]. Major losses from natural catastrophes rose to €2,335m, (2,118m)[1]. The largest individual loss for Munich Re in 2023 was the earthquake in Turkey, with a nominal value of around €0.7bn.

Life and health reinsurance contributed €1,428m (1,314m) to the net result, thus exceeding the previous year's result. The total technical result amounted to €1,433m (1,041m), within the adjusted expected range.

The ERGO field of business contributed €721m (572m) to the net result, substantially surpassing the previous year's result and meeting our target for the financial year of approx. €0.7bn. This increase year on year was chiefly attributable to operational improvements. Insurance revenue rose in all three segments, with the ERGO International segment contributing the most to revenue growth. The ERGO Life and Health Germany segment's net result amounted to €183m (307m). This development was due primarily to lower income from the release of the contractual service margin in the life insurance and long-term health business. This was partly offset by an increase in the insurance service result from short-term health and travel business. The ERGO Property-Casualty Germany segment's contribution to the net result increased substantially to €252m (173m). This increase was possible due to good operational development, lower major-loss expenditure, and a significantly higher investment result. Thanks to very profitable growth and substantially improved underwriting performance, ERGO International was able to significantly increase its net result to €286m (92m). Moreover, the segment's result had been impacted by one-off effects in the previous year.

Munich Re's investment result was €5,374m (2,983m). Overall, this represents a return of 2.5% (1.3%) on the average market value of the portfolio. While we benefited from higher regular income in the reporting year thanks to a significantly improved reinvestment yield, the previous year had been burdened by negative changes in the fair values of ERGO's promissory note loans, as well as impairment losses on Russian and Ukrainian government bonds. Net unrealised losses on investments dropped sharply due to interest-rate developments.

1 The figure is only comparable to a limited extent with the same period last year, as we raised the major-loss threshold to €30m on 1 January 2023 (previous years: €10m).

Comparison of the prospects for 2023 with the result achieved

Munich Re

Comparison of prospects for Munich Re in the 2022 annual report with results achieved

		Outlook 2023	Adjustment 2023	Result 2023
Insurance revenue from insurance contracts issued	€bn	58	58	57.9
Total technical result – Life and health reinsurance	€m	1.0	1.4	1.4
Combined ratio – Property-casualty reinsurance	%	86	85	85.2
Combined ratio – ERGO Property-casualty Germany	%	89	89	88.9
Combined ratio – ERGO International	%	90	90	90.1
Return on investment	%	more than 2.2	more than 2.2	2.5
Net result	€bn	4.0	4.5	4.6
Economic earnings	€bn	more than 4.0	more than 4.0	5.6

The economic environment in 2023 was marked by sustained high inflation, higher interest rates and volatile capital markets. Geopolitical tensions were exacerbated in 2023 and continued to pose challenges for the entire insurance industry.

Despite the unfavourable environment, Munich Re's performance was very encouraging. After Q3, we were able to raise the result targets announced in early 2023: the annual target for our net result, our profit guidance for the reinsurance field of business and the target for total technical result in the life and health reinsurance segment. What is more, favourable claims experience allowed us to improve our forecast for the combined ratio in property-casualty reinsurance.

At the beginning of the year, we had projected insurance revenue of around €58bn for Munich Re during the 2023 financial year. Generating insurance revenue of €57.9bn, we reached our target.

At the beginning of the year, we had anticipated a net result of around €4.0bn for the 2023 financial year – which was raised to €4.5bn following Q3 due to positive business performance in the reinsurance field of business. Despite geopolitical and macroeconomic turbulence, we were able to exceed our profit target, posting profits of €4.6bn. This result is attributable to pleasing operational performance in our segments.

At the beginning of the year, we had forecast a return on investment of above 2.2%. Due to the continued rise in interest rates, regular income from interest-bearing securities increased more than expected. This effect was compounded by generally favourable conditions on the stock markets, and by the fact that, under IFRS 9, price increases are recognised in full in the net result. Losses on derivatives to hedge against interest-rate and equity risk had a detrimental impact on the result. For the Group, this amounted to a return of 2.5% on the average market value of our portfolio. Accordingly, we surpassed our target.

For the 2023 financial year, we had expected economic earnings of over €4.0bn and exceeded this target by a wide margin with a figure of €5.6bn. Both our fields of business reported positive value added by new business, with the reinsurance field of business also reporting distinctly positive variances. Major-loss expenditure was lower than expected. The development of important capital market parameters also had a positive effect on the result. Foreign currency losses were offset by gains from credit risk premiums and rising share prices in light of falling interest rates.

Reinsurance

At the beginning of the financial year, we had aimed for insurance revenue of around €39bn for the reinsurance field of business. We adjusted this forecast to €38bn after Q3 due to changes in exchange rates. At €37.8bn, we were able to reach the adjusted target.

The growth in insurance revenue, primarily in property-casualty reinsurance, was due to an expansion of existing business across almost all lines and regions; however, this year the effect was partly offset by negative currency translation effects, particularly in connection with the US dollar. The main growth drivers were the expansion of existing business and the acquisition of new business with selected clients – particularly in our primary insurance units in North America – and growth in Europe, South America, Asia and Australia. At the same time, we made a conscious decision to discontinue business that failed to meet our expectations with regard to pricing or conditions.

At the beginning of the year, we had projected a total technical result of around €1bn in life and health reinsurance. Owing to the gratifying business performance in Q3 in particular, we significantly raised our expectation for the full-year total technical result to about €1.4bn. At €1.4bn, we were able to reach this target.

At the beginning of the financial year, our declared goal was to achieve a combined ratio of 86% of net insurance revenue in property-casualty reinsurance. Upon communicating the Q3 results, we reduced this target to around 85% owing to the positive business development. At the end of the reporting year, the ratio was, at 85.2%, in line with the revised target. Amounting to 12.6% of net insurance revenue, major-loss expenditure was below our expectation of 14%[1].

At €3.9bn, the net result for reinsurance as a whole in 2023 was above the forecast, which we had raised from €3.3bn to €3.8bn after Q3.

ERGO

For the ERGO field of business, we had projected insurance revenue of around €19bn at the beginning of the year. Following good business performance in the first nine months of the year, we increased our target for the full year to €20bn. With insurance revenue of €20.1bn, we marginally surpassed the revised target.

At the beginning of the year, we forecast a combined ratio of around 89% in the ERGO Property-casualty Germany segment – assuming that major losses remained within normal bounds. As major losses were in line with expectations overall, the combined ratio at the end of the year was slightly better than expected at 88.9% thanks to consistently high premium growth and the favourable development of basic losses.

In the segment ERGO International, we had aimed for a combined ratio of around 90% at the beginning of the year, provided major losses remained within normal bounds. Due to positive operational development overall, we achieved our forecast at 90.1%.

At the beginning of the year, we had anticipated that the ERGO field of business would contribute around €0.7bn to the net result. With its result of €721m, ERGO matched our expectations.

1 The figure is only comparable to a limited extent with the same period last year, as we raised the major-loss threshold to €30m on 1 January 2023 (previous years: €10m).

Business performance of the Group and overview of investment performance

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€bn	57,884	55,385	4.5
Combined ratio				
Reinsurance – Property-casualty	%	85.2	83.2	
ERGO Property-casualty Germany	%	88.9	90.3	
ERGO International	%	90.1	95.5	
Total technical result	€m	7,545	7,070	6.7
Investment result	€m	5,374	2,983	80.2
Currency result	€m	–292	1,067	–
Investment result for unit-linked life insurance	€m	816	–1,140	–
Net financial result	€m	507	1,850	–72.6
Taxes on income	€m	–936	–1,324	29.3
Net result	€m	4,597	5,309	–13.4
Investments	€bn	218.5	208.0	5.0
Insurance contracts issued and reinsurance contracts held (net)	€bn	203.4	195.5	4.1
Contractual service margin (CSM)[1]	€bn	25.1	25.0	0.5
Equity	€bn	29.8	27.2	9.3
Return on equity (RoE)[2]				
Group	%	15.7	20.2	
Reinsurance	%	16.2	22.2	
ERGO	%	13.5	11.6	
Earnings per share	€	33.88	38.12	–11.1
Dividend per share	€	15.00	11.60	29.3
Economic earnings	€bn	5.6	2.8	97.1
Solvency II ratio	%	267	260	

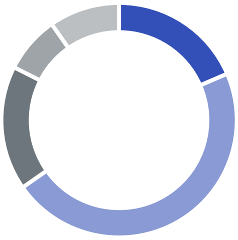
1 Including net cost/gain resulting from reinsurance contracts held.
2 Further information about this indicator can be found in the Combined management report > Strategy and > Tools of corporate management and strategic financial objectives. Information on calculation of the RoE can be found in the Notes to the consolidated financial statements > Explanatory information > Segment disclosures > 7 Alternative performance measures.

Munich Re is presenting its results for the 2023 financial year in accordance with the new accounting standards IFRS 9 and IFRS 17 for the first time. Comparative figures from the previous year for the insurance business are already presented on the basis of IFRS 17. The previous year's figures for financial instruments are predominantly still based on IAS 39, the standard applicable up to 31 December 2022. For that reason, they are only comparable to a limited extent with the figures for the 2023 financial year disclosed in accordance with IFRS 9. However, transition effects have already been anticipated in some cases[1].

Munich Re's insurance revenue from insurance contracts issued (insurance revenue) of €57,884m was significantly higher year on year (€55,385m). This is due in particular to organic growth both in the property-casualty reinsurance segment and at ERGO; conversely, currency translation effects negatively impacted insurance revenue.

1 Notably, the classification overlay approach applied to business with direct participation features in ERGO life and health insurance.

Insurance revenue from insurance contracts issued



	Reinsurance – Life and health	19%	(20%)
	Reinsurance – Property-casualty	47%	(46%)
	ERGO Life and Health Germany	17%	(18%)
	ERGO Property-casualty Germany	8%	(8%)
	ERGO International	10%	(9%)

At €5,374m, the investment result showed a marked increase on the previous year (€2,983m). While we benefited from higher regular income in the reporting year thanks to a significantly improved reinvestment yield, the previous year had been burdened by negative changes in the fair values of ERGO's promissory note loans, as well as impairment losses on Russian and Ukrainian government bonds.

The substantial decrease in the currency result to –€292m (1,067m) was chiefly attributable to the currency gains against the US dollar in 2022.

Munich Re's effective tax rate in the reporting year amounted to 16.9% (20.0%), which was affected by positive one-off effects.

Economic earnings are mainly attributable to factors from new and in-force business deriving from underwriting, and to the impact of capital market parameters on assets and liabilities. Favourable operational value creation in reinsurance and primary insurance, with lower-than-expected major-loss expenditure, had a positive influence on economic earnings. Developments in the capital markets had an overall positive impact on economic earnings in the financial year. Depreciation of key foreign currencies gave rise to negative result effects. These were offset by positive developments in equity markets in light of lower interest rates, and as a result of the positive contribution from credit risk premiums.

Information on events after the balance sheet date can be found in the Notes to the consolidated financial statements > Explanatory information > Other information > 65 Events after the balance sheet date.

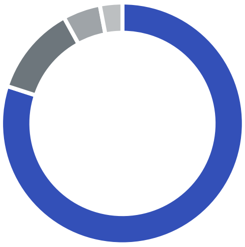
Investment mix

	Carrying amount		Unrealised gains/losses[1]		Fair values	
€m	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
Non-financial investments						
Investment property	9,384	9,618	3,379	3,473	12,763	13,092
Property, plant and equipment	511	547	122	116	633	663
Intangible assets	128	0	0	0	128	0
Biological assets	828	735	0	0	828	735
Inventories	0	0	0	0	0	0
Investments in affiliated companies, associates and joint ventures	6,895	5,945	2,724	2,840	9,621	8,785
	17,747	16,845	6,226	6,429	23,974	23,275
Financial investments						
Instruments subject to equity risk	10,820	10,022	0	256	10,820	10,022
Instruments subject to interest-rate and credit risk	174,496	168,582	–12,313	–18,747	174,496	168,166
Alternative investments	15,400	12,516	–562	362	15,400	12,313
	200,715	191,120	–12,876	–18,129	200,715	190,501
Total	**218,462**	**207,965**	**–6,650**	**–11,700**	**224,689**	**213,776**

1 Including on- and off-balance-sheet unrealised gains and losses.

Investment portfolio by economic category[1]

Total: €234bn (225bn)



The fair value of our investment portfolio increased in the reporting year, largely due to lower interest rates and higher stock market prices. Our investment portfolio continues to be dominated by fixed-interest securities and is composed as follows:

Portfolio of interest-bearing securities	80%	(80%)
Non-fixed-income alternative investments	12%	(12%)
Equities	5%	(4%)
Business-related participations	3%	(4%)

1 Measured at fair value.

Of our portfolio of interest-bearing securities, 80% falls into the following economic categories:

Government bonds[1]	33%	(34%)
Pfandbriefs (covered bonds)/Mortgage loans	15%	(15%)
Corporate bonds	14%	(14%)
Emerging-market government bonds	5%	(4%)
ABSs/MBSs[2]	3%	(3%)
Fixed-income alternative investments	4%	(3%)
Cash	7%	(8%)

1 Includes exclusively government bonds of industrialised countries and comprises other public-sector issuers and government-guaranteed bank bonds.
2 Asset-backed securities/mortgage-backed securities.

At the reporting date, 33% (34%) of our investment portfolio was invested in government bonds from developed markets. Our German and US government bond holdings at fair value constituted 20% (21%) and 25% (25%), respectively, of the government bonds from developed markets. Our new investments in the reporting year were mostly in US and French government bonds. We mainly reduced our bond holdings from issuers in Germany in the reporting year. The vast majority of our government bonds continue to come from countries with a high credit rating. The purchase of government bonds from emerging markets is part of our balanced investment strategy. They constituted 5% of our investment portfolio.

At around 48%, our investment in covered bonds and mortgage loans focused on German securities. Our portfolio also included bonds from France and the United Kingdom, with 14% and 7% respectively.

Our investment in corporate bonds at the reporting date amounted to 14% (14%) of our investment portfolio. Broken down and expressed as a share of the overall portfolio, the investments in corporate bonds comprised 5% (4%) in financial undertakings, 8% (7%) in corporate bonds from other sectors, and 2% (2%) in high-yield bonds. The regional weighting of corporate bonds in our portfolio was 35% for the USA and 47% for Europe.

Our portfolio of government bonds from developed markets, covered bonds, corporate bonds, and government bonds from emerging markets had a good rating structure: as at 31 December 2023, some 80% of securities were rated AAA to A.

Our asset-backed securities and mortgage-backed securities at fair value totalled 3% (3%) of the investment portfolio as at the reporting date. This asset class is composed of securitised receivables (asset-backed securities or mortgage-backed securities), e.g. securitisations of real estate finance or consumer credit. Around 43% of our structured credit products had a rating of AAA.

Our portfolio of fixed-income alternative investments totalled 4% (3%) as at the reporting date. The regional weighting of investments in our portfolio was 11% for the USA and 82% for Europe.

Non-fixed-income alternative investments accounted for 12% (12%) of our investment portfolio at the reporting date; of the overall portfolio, 7% (7%) comprised property and 6% (5%) equity securities.

The fair value of our equity portfolio increased, owing in particular to the positive market development, and the equity-backing ratio climbed to 4.6% (4.0%). Including derivatives, the equity-backing ratio was 3.7% (2.0%).

To hedge against inflation, we held inflation-linked bonds totalling €6.1bn (4.7bn) (at fair values). Real and financial assets such as shares, property, commodities, and investments in infrastructure, renewable energies and new technologies also serve to guard against inflation. Additionally, our investments in real assets have a positive diversification effect on the overall portfolio.

Our investment portfolio is highly diversified. Our bank exposure (concerning in particular US regional banks and Credit Suisse) did not have a material impact on the result.

Investment result[1]

	2023	Return[2]	Prev. year	Return
	€m	%	€m	%
Regular income	6,950	3.2	6,358	2.8
Write-ups/write-downs	–194	–0.1	–2,811	–1.2
Change in expected credit losses	–47	0.0	0	0.0
Gains/losses on disposal	–588	–0.3	3,755	1.6
Fair-value changes	–65	0.0	–3,649	–1.6
Other income/expenses	–682	–0.3	–670	–0.3
Total	**5,374**	**2.5**	**2,983**	**1.3**

1 Details of the investment result by type of investment can be found in the Notes to the consolidated financial statements > Explanatory information > Notes to the consolidated income statement > 35 Investment result.
2 Return on investment (RoI) in % p.a. on the average fair value of the investment portfolio at the quarterly reporting dates. The investment portfolio used to determine the return (2.5%) for 2023 is calculated as the mean of the fair values as at 31 December 2022 (€213,776m), 31 March 2023 (€217,080m), 30 June 2023 (€216,183m), 30 September 2023 (€216,340m) and 31 December 2023 (€224,689m).

Regular income increased on the previous year, primarily due to higher interest rates and a consequently higher reinvestment yield. The average reinvestment yield[1] in the financial year was 4.5% (2.8%). Higher interest rates in the reporting year resulted in yields on new investments that were above the average return on our existing portfolio of fixed-interest investments.

The net result from write-ups and write-downs was substantially less negative than in the same period of the previous year. Impairment losses on equities, which had a very negative impact on write-downs in 2022, are recognised as changes in fair value under IFRS 9. Moreover, no further write-downs of Russian or Ukrainian bonds were made in the 2023 reporting year. Impairment losses on both property and participations was the primary reason for the negative result.

The result from the change in expected credit losses amounted to –€47m in the reporting year. Introduced in IFRS 9 as its own category, "Expected credit losses" reflect anticipated losses on interest-bearing investments that are not posted in the category "Fair-value changes".

We posted net losses in the reporting year of €588m on the disposal of investments not recognised under "Fair-value changes". These losses resulted primarily from the disposal of fixed-interest securities that were sold and whose proceeds were then invested anew so as to profit from higher interest rates. In the same period of 2022, it was possible to generate profits through the disposal of equity portfolios, which are recognised as changes in fair value under IFRS 9.

The net result from fair-value changes totalled –€65m, with the key negative variable being the result from derivatives of –€622m – in turn mainly attributable to losses from equity derivatives used to hedge against bearish equity markets. This was positively offset by a boost of €1,067m to the result owing to changes in the fair values of equities due to stronger equity markets. In the same period of the previous year, higher interest rates in particular had a detrimental impact on the relevant fixed-interest securities.

1 The average reinvestment yield is shown as an annual rate of return. All reinvestments that are transacted in a specific reporting period and have remaining terms to maturity of more than one year are recognised at the rates of return applicable at the relevant trade dates; for securities with terms to maturity of up to one year the proportionate term to maturity is taken into account. Investments are not included if their return cannot be calculated (e.g. equities, debt securities with variable rates, inflation-linked bonds, derivatives, real estate) or if they do not have the characteristics of investments (e.g. cash at banks). Hedging costs for securities in foreign currency are not considered.

Result from equities and equity derivatives[1]

€m	2023	Prev. year
Regular income	377	566
Write-ups/write-downs	0	–1,814
Gains/losses on disposal	0	2,842
Change in fair value	1,067	–23
Result from equities	**1,443**	**1,571**
Result from equity derivatives	**–587**	**–354**
Total	**856**	**1,217**

1 To determine the total annualised return on our equity portfolio (see text), we calculate the ratio of the total result shown in the table and the mean value of the following figures: equity portfolio (carrying amounts) as at 31 December 2022 (€10,305m), 31 March 2023 (€11,302 m), 30 June 2023 (€11,714 m), 30 September 2023 (€11,349m) and 31 December 2023 (€12,036m).

The return on equity portfolios benefited from equity markets improving over the course of the reporting year. By contrast, the result was lower from equity derivatives that we used for hedging. Write-ups and write-downs as well as gains/losses on disposal that were recognised in the previous year appear in accordance with IFRS 9 in the category "Fair-value changes". The return on our equity portfolio, including equity derivatives, decreased to 7.5% in the reporting year (9.1%).

Reinsurance – Life and health

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€m	10,725	11,164	–3.9
Share of insurance revenue in reinsurance	%	28.4	30.6	
Total technical result	€m	1,433	1,041	37.7
Net financial result	€m	424	955	–55.6
Thereof: Investment result	€m	608	582	4.4
Operating result	€m	1,686	1,722	–2.1
Net result	€m	1,428	1,314	8.7

Insurance revenue

The development of insurance revenue from insurance contracts issued (insurance revenue) was shaped by negative currency translation effects. We write the majority of our business in non-euro currencies (around 94%). Exchange-rate fluctuations therefore have a significant impact on revenue development.

If exchange rates had remained unchanged, our insurance revenue would have remained largely constant (−0.2%) compared with the previous year. Revenue was down in our business in continental Europe, mainly due to a large-volume treaty, and also in Asia and Australia. This was largely compensated for by growth in North America and the United Kingdom.

The very pleasing growth in our financially motivated reinsurance is not reflected in the insurance revenue, as the majority of new contracts are presented in the result from insurance-related financial instruments.

Result

The total technical result improved significantly as against the previous year, bringing it into line with our guidance for the reporting year, which we had raised after Q3.

The total technical result is comprised of the insurance service result and the result from insurance-related financial instruments.

The insurance service result is substantially driven by the release of the contractual service margin and the risk adjustment for non-financial risk.

Overall, claims expenditure in the US portfolio was higher than expected, driven by mortality risk business. Otherwise, underwriting performance in our core markets was positive.

New business developed very favourably and made a positive contribution to the result. The improvement in underwriting conditions for a number of current contracts coupled with the annual review of our reserve position also had a positive effect on the insurance service result.

The result from insurance-related financial instruments is largely determined by that part of our financially motivated reinsurance that does not transfer significant insurance risk. The portfolio continues to show very encouraging growth, with results from the contracts that are in line with expectations. The result was influenced by changing economic parameters, in particular exchange rates, which are not reported as part of the currency result for this business. During the reporting period, they produced a negative effect.

The Russian war of aggression against Ukraine did not have any direct impact on the segment's total technical result. The impact of the Hamas terrorist attack on Israel was negligible in the reporting year.

The investment result was up year on year. Whilst realised losses on fixed-interest investments had a negative impact on the result, higher interest rates boosted the reinvestment yield, thus improving regular income. Equities also made a positive contribution to the investment result thanks to the good market development, unlike in the previous year, when the result had been hit by impairment losses on fixed-interest securities and equities.

Our individual core markets

Based on insurance revenue, around 50% of our reinsurance business is written in North America, with the USA accounting for approximately 35% and thus ranking before Canada. Some further 25% of our insurance revenue stems from Europe, with approximately 20% generated in the United Kingdom and Ireland. Another significant share of around 20% stems from Asia and the MENA (Middle East, North Africa) region. Australia and New Zealand contribute around 5% to insurance revenue. We are also well positioned in Africa and Latin America, but due to the small size of the markets their share of our global business is small.

In the USA, insurance revenue increased to about €4.0bn (3.8bn) despite negative currency translation effects. We therefore continue to be one of the most important reinsurers in this market, which is the largest worldwide. The insurance service result was lower than expected due to higher mortality claims. By contrast, the result from insurance-related financial instruments again showed encouraging development. We continue to be very satisfied with the development of our new business, both in terms of volume and profitability.

In Canada, insurance revenue increased slightly to €1.3bn (1.2bn). Once again, exchange rates had a negative impact on development. The insurance service result developed very well.

In Europe, on the other hand, insurance revenue dropped to €2.6bn (2.8bn), with €2.2bn (2.1bn) stemming from the United Kingdom and Ireland. Our longevity business continued to expand very pleasingly, boosting insurance revenue. By contrast, a large-volume treaty had a negative impact on insurance revenue, albeit without any material impact on profit or loss. We are highly satisfied with our total technical result.

Insurance revenue in Asia/MENA decreased to €2.0bn (2.2bn). Alongside exchange rate developments, the deciding factor in this trend was the termination of a number of contractual relationships, which had a minor impact on profit or loss. New business was again at a very gratifying level. This included the expansion of our financially motivated reinsurance business, the majority of which is posted as part of the result from insurance-related financial instruments. The total technical result outstripped our expectations and made a disproportionately high contribution to the net result from this segment.

The insurance revenue generated by our business activities in Australia and New Zealand fell to €578m (726m). This includes negative exchange-rate effects. Our main focus remains the rehabilitation of our existing portfolio; currently, we are very selective regarding the writing of new business. The total technical result was positive and in line with our expectations. This reflects the benefits of the rehabilitation measures we have taken in recent years.

Reinsurance – Property-casualty

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€m	27,061	25,325	6.9
Share of insurance revenue in reinsurance	%	71.6	69.4	
Loss ratio	%	69.8	67.9	
Thereof: Major losses[1]	Percentage points	12.6	15.4	
Expense ratio	%	15.4	15.3	
Combined ratio	%	85.2	83.2	
Total technical result	€m	3,968	4,224	–6.0
Net financial result	€m	88	736	–88.0
Thereof: Investment result	€m	1,824	727	150.9
Operating result	€m	3,052	4,201	–27.3
Net result	€m	2,448	3,423	–28.5

1 The figure is only comparable to a limited extent with the same period last year, as the major-loss threshold was raised to €30m with effect from 1 January 2023 (previous years: €10m).

Insurance revenue

Our insurance revenue from insurance contracts issued (insurance revenue) in property-casualty reinsurance was up 6.9% on the previous year, although changes in exchange rates had a negative impact on revenue development. 12% of the portfolio is written in euros and 88% in foreign currency, of which around 60 percentage points is in US dollars and around 8 percentage points in pounds sterling. If exchange rates had remained unchanged, insurance revenue would have risen by 10.3% year on year.

The substantial increase in insurance revenue was due to an expansion of business across almost all lines and regions. The main drivers were the expansion of existing and acquisition of new business with selected clients – particularly in our primary insurance units in North America. We realised growth in reinsurance business with natural hazard exposure above all in Europe, South America, Asia and Australia.

Prices at the reinsurance contract renewals in 2023 developed positively overall, and for the most part more than compensated for the significantly higher loss estimates in some areas – owing especially to inflation or other loss trends. Risk-adjusted prices rose slightly, especially in regions affected by natural catastrophes. Primary insurance prices also climbed in many markets. Overall, price gains were evident around the world to varying degrees. For Munich Re, risk-adjusted prices for the 2023 renewals increased by approximately 3.1%.

Quality continues to play an important role in the selection of reinsurers. This allows financially solid reinsurers to position themselves as reliable long-term partners. Overall, we are adhering to our clearly profit-oriented underwriting policy.

Result[1]

The net result and the total technical result in property-casualty reinsurance worsened year on year, despite lower major losses. The lower net result was due in particular to the drop in the net financial result. In the previous year, this figure had been affected significantly more by the lower interest rates applied upon initial measurement and the substantially lower expenses for accrued interest (insurance finance expenses) as a result. Adjusted for commissions, Munich Re's customary review of its provisions resulted in a reduction in the basic claims provisions for prior years of €1,308m for the full year, which is equivalent to 5.0 percentage points of the combined ratio. This positive development extended to almost all lines in our portfolio. The safety margin in the provisions increased year on year.

Major losses – in excess of €30m each – totalled €3,278m (3,741m)[2] after retrocession and before tax. This amount includes run-off profits and losses for major claims from previous years, and is equivalent to 12.6% (15.4%) of net insurance revenue. Expenditure was lower than in the previous year and also less than our major-loss expectation of 14% of net insurance revenue.

1 The data above on major losses was calculated to include the effects of discounting and risk adjustments, unless the explanatory notes indicate that this is a nominal amount.

2 The figure is only comparable to a limited extent with the same period last year, as the major-loss threshold was raised to €30m with effect from 1 January 2023 (previous years: €10m).

Man-made major losses totalling €943m (1,623m)[1] were down on the previous year. The decline is due, among other things, to expenditure from the previous year in connection with Russia's war against Ukraine. Expenditure for man-made major losses was equivalent to 3.6% (6.7%) of net insurance revenue. The number of losses above our major-loss threshold was similar to the previous year.

Major losses from natural catastrophes totalled €2,335m (2,118m)[1], equivalent to 9.0% (8.7%) of net insurance revenue. The highest natural catastrophe losses of the year occurred in Europe; the largest individual loss was the earthquake in Turkey, with a nominal amount of around €0.7bn. In addition, there were a number of flood, thunderstorm and storm events, particularly in North America, Mexico and Europe.

The combined ratio increased to 85.2% (83.2%) despite lower major-loss expenditure and higher insurance revenue, mostly as a result of prudent reserving. On the one hand, insurance service expenses (net) totalled €22,187m (20,251m); on the other, insurance revenue (net) amounted to €26,036m (24,344m).

The investment result was up €1,097m on the previous year. Whilst realised losses on fixed-interest investments had a negative impact on the result, higher interest rates boosted the reinvestment yield, thus improving regular income. Equities, thanks to the good market development, and alternative investments also made positive contributions to the investment result, unlike in the previous year, when the result had been hit by impairment losses on fixed-interest securities and equities.

Our individual core markets and selected special lines

Based on insurance revenue, around 40% of our global property-casualty reinsurance business is written in North America. Around 40% of our revenue comes from Europe, of which around 15% is generated in the United Kingdom. Further substantial shares were contributed by Asia and Australia/New Zealand (about 15%), and by Africa and Latin America (approximately 5%).

Prices in the US reinsurance market have continued to improve, particularly in property insurance. Major losses from natural catastrophes were below expectations due to the below-average impact of hurricanes.

In the year under review, insurance revenue for US reinsurance business decreased despite new business and the positive market environment as a consequence of selective portfolio restructuring and quota share reductions. The result for US reinsurance business was up on that of the previous year owing to higher prices and lower major losses.

In Canada, we are represented by the Munich Reinsurance Company of Canada and Temple Insurance Company. By virtue of the positive market environment, insurance revenue rose further to €551m (507m). The result for 2023 is pleasing, as in the past.

Insurance revenue in the United Kingdom and in continental Europe increased significantly year on year to €3,941m (3,061m). In many markets, this was realised through the targeted development of business with selected clients and the acquisition of profitable new business. Thanks to a favourable environment, high growth rates were achieved in almost all markets – particularly through the expansion of business exposed to natural hazards. We posted the greatest boosts in insurance revenue in Italy, growing to €636m (508m); in Spain, climbing to €473m (378m); and in France, rising to €216m (146m).

At our Swiss subsidiary, New Reinsurance Company Ltd., property-casualty business volume increased to €1,316m (556m). In particular, profitable traditional business was significantly supplemented by expanding existing client relationships, and by new business.

Insurance revenue in Australia and New Zealand increased considerably to €1,431m (886m), continuing the ongoing growth trend seen in recent years.

Business in Japan, which is aligned strongly with natural hazard risks, benefited from price increases that led to insurance revenue improving further to €519m (511m).

Revenue in China has been increased on an ongoing basis in recent years. Nevertheless, it dropped slightly, partially because we withdrew from unprofitable business. Insurance revenue came to €676m (699m).

India continued on its profitable growth path, with insurance revenue climbing to €626m (444m).

In the Caribbean, Central America and South America, we still provide high capacity for the coverage of risks from natural hazards, in particular windstorms and earthquakes. Owing to major losses from natural catastrophes (hurricanes, floods, earthquakes and wildfires) in recent years, demand remained elevated in the year under review. We took systematic advantage of this situation to further optimise our portfolio. This enabled us to grow the already high insurance revenue attained in recent years to €1,153m (761m) and to achieve a further margin improvement.

In agricultural insurance in the North American market, our insurance revenue remained at a high level of €1,093m (987m). This line of business was expanded further in South America and India in particular. The generally positive result

1 The figure is only comparable to a limited extent with the same period last year, as the major-loss threshold was raised to €30m with effect from 1 January 2023 (previous years: €10m).

was negatively impacted by drought and price decreases in the USA.

Buoyed by a market that remained positive, insurance revenue in marine reinsurance increased by around 9% to €1,544m (1,411m), which was also reflected in a good result.

At €892m (732m), credit and bond reinsurance saw significant year-on-year insurance revenue growth. Whilst traditional credit business generated a moderate rise, this growth was again attributable to profitable new business in specialty and niche segments.

The market environment in direct industrial insurance continues to be attractive. Renewals in the market continued to be characterised by price gains and new business. We were therefore able to maintain high insurance revenue in direct business generated by our Facultative & Corporate unit, totalling €1,721m (1,599m). The result was gratifying thanks to the price level and incurred losses that were in line with expectations.

Insurance revenue in aviation and space reinsurance grew to €866m (800m) in a positive market environment. The result this year was below that expected due to the development of major losses from previous years.

Our Capital Partners division offers clients a broad range of structured individual reinsurance and capital market products, as well as parametric and derivative solutions to hedge against weather and other risks. Agricultural clients likewise use these solutions. We have used Capital Partners' services for our own purposes: to buy retrocession cover on the basis of our defined risk strategy and to implement the Corporate Retrocession Strategy for 2023.

Since the start of 2023, the majority of the former Risk Solutions units have been brought together in the new Global Specialty Insurance (GSI) division; please refer to the information under Munich Re Group > The property-casualty reinsurance divisions. Revenue increased to €7,961m (7,224m). In terms of business development, GSI benefited from its successful business expansion and heightened prices. Thanks to a low-impact hurricane season, major losses from natural catastrophes remained within the range anticipated, even though the number of storm losses in the USA moved up.

New business and higher prices also contributed to insurance revenue at American Modern growing to €1,993m (1,730m). Its result, by contrast, was below expectations as a consequence of the high number of smaller natural catastrophes that heavily impacted the entire US primary insurance market. HSB bolstered its insurance revenue somewhat to €1,315m (1,191m) while at the same time reducing its exposure to cyber risks in this recently burgeoning line of business. The HSB result waxed once again, exceeding expectations.

Owing to growth in several products and generally good market conditions, MRSI boosted its insurance revenue to €2,664m (2,354m). Despite wildfires on Maui, MRSI's result benefited from low major losses from natural catastrophes, as the 2023 hurricane season in particular was comparatively calm. MRSG was borne up by the ongoing favourable market situation and increased its insurance revenue to €2,143m (2,089m). Its result came in above that of the previous year despite high claims expenditure from several satellite losses.

ERGO Life and Health Germany

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€m	9,942	9,802	1.4
Share of insurance revenue at ERGO	%	49.5	51.9	
Total technical result	€m	1,024	1,059	–3.3
Net financial result	€m	–167	66	–
Thereof: Investment result	€m	2,323	1,379	68.5
Operating result	€m	197	442	–55.5
Net result	€m	183	307	–40.4

Insurance revenue

For the ERGO Life and Health Germany segment, information about the German life, health and Digital Ventures operations is provided below. With regard to insurance revenue from insurance contracts issued (insurance revenue) approximately 62% derives from Health Germany, around 29% from Life Germany and approximately 9% from Digital Ventures.

This segment's insurance revenue in the 2023 financial year was higher than in the previous year – primarily due to positive development in the Health Germany division, in short-term and long-term health business, and in travel insurance. The Digital Ventures division also generated higher insurance revenue; the Life Germany division's contribution to insurance revenue changed little year on year.

Result

The total technical result was virtually the same as in the previous year for the ERGO Life and Health Germany segment. While income was lower from the release of the contractual service margin in the Life Germany and Health Germany divisions, the higher result in short-term health business and the substantially higher year-on-year result generated by financial reinsurance both made positive contributions to the total technical result.

The net financial result decreased year on year, partially on account of the above-mentioned compensating effect from financial reinsurance. The increase in the investment result was particularly attributable to the 2022 result having been impacted by high impairment losses on some of our fixed-interest securities due to rising interest rates. The investment result was also buoyed by greater regular income and considerably more favourable trends in equity markets compared to the previous year. The investment result, the investment result for unit-linked life insurance, and the currency result were largely offset by insurance finance income or expenses within the net financial result.

Declining interest rates in the capital markets during the financial year and the associated drop in income from the release of the contractual service margin were primarily responsible for the lower net result in the ERGO Life and Health Germany segment.

Development of revenue and results by division

Life Germany

Insurance revenue of €2,898m in the past financial year was comparable to the previous year (2,984m), with the change mainly driven by income from the release of the contractual service margin.

The total technical result in the past financial year rose slightly to €505m (494m), while the net financial result decreased. Overall, the operating result was down.

Health Germany

In the Health Germany division, which includes travel insurance business, insurance revenue rose year on year by 3.0% to €6,118m (5,939m), with increases in both long-term and short-term health business. Travel insurance, which was up by 16.5% year on year, was also a contributor to higher insurance revenue in Health Germany.

The total technical result amounted to €448m (491m), with the year-on-year difference mainly driven by lower income from the release of the contractual service margin. Conversely, short-term travel and health insurance boosted the total technical result thanks to very good growth. This division's operating result decreased compared with the previous year.

Digital Ventures

Insurance revenue rose by 5.3% year on year to €926m (879m). Growth of 8.4% in health insurance was due to supplementary dental insurance business in particular. Insurance revenue in property-casualty business was down 3.5% year on year.

The total technical result remained rather steady at €71m (74m). This division generated a slightly lower operating result than in the previous year.

ERGO Property-casualty Germany

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€m	4,539	4,227	7.4
Share of insurance revenue at ERGO	%	22.6	22.4	
Loss ratio	%	59.1	61.2	
Expense ratio	%	29.9	29.1	
Combined ratio	%	88.9	90.3	
Total technical result	€m	495	400	23.9
Net financial result	€m	134	118	13.2
Thereof: Investment result	€m	209	113	84.7
Operating result	€m	397	301	31.8
Net result	€m	252	173	45.6

Insurance revenue

In terms of insurance revenue from insurance contracts issued (insurance revenue), the ERGO Property-casualty Germany segment's main lines of business are fire and property insurance, accounting for approximately 24%; third-party liability insurance (about 20%); and motor insurance (around 18%).

Compared with the previous year, insurance revenue rose substantially – mainly on account of growth in third-party liability (15.7%), personal accident insurance (13.7%), and motor (12.5%). This segment also managed to generate higher insurance revenue in Other classes of business – especially in engineering (14.0%) and in fire and property insurance (3.4%). We experienced declines in insurance revenue of 12.9% in marine insurance and 1.5% in legal protection insurance.

Result

Our total technical result of €495m was far above the previous year's result (400m), owing primarily to strong operational performance and a lower major-loss burden. Lower expenditure due to greater discounting effects that resulted from interest rate developments likewise boosted the total technical result. The combined ratio improved by 1.4 percentage points year on year; this very good performance was attributable to the above-mentioned influencing factors. As insurance revenue increased significantly, the loss ratio fell year on year and the expense ratio rose only slightly. Insurance service expenses (net) totalled €3,976m (3,729m); insurance revenue (net) amounted to €4,471m (4,128m).

The net financial result rose year on year – particularly on account of the substantially higher investment result, mostly owing to higher regular income and significantly improved results from equities. Conversely, net insurance finance income/expenses declined due to a combination of interest rate developments and higher interest accrual.

Positive developments in the total technical result plus the net financial result added up to a very pleasing increase in the net result for the ERGO Property-casualty Germany segment.

ERGO International

Key figures

		2023	Prev. year	Change
				%
Insurance revenue from insurance contracts issued	€m	5,618	4,867	15.4
Share of insurance revenue at ERGO	%	28.0	25.8	
Loss ratio	%	59.3	63.9	
Expense ratio	%	30.8	31.6	
Combined ratio	%	90.1	95.5	
Total technical result	€m	625	347	80.2
Net financial result	€m	28	–25	–
Thereof: Investment result	€m	410	182	125.5
Operating result	€m	370	146	153.2
Net result	€m	286	92	208.8

Insurance revenue

With regard to the segment's insurance revenue from insurance contracts issued (insurance revenue), property-casualty insurance accounted for approximately 62%, health for about 30% and life insurance for around 8%. Our major markets are Poland, accounting for around 35% of insurance revenue, Belgium (approx. 18%), and Spain (approx. 17%).

Compared with the previous year, we posted an overall increase in insurance revenue – due especially to strong growth in Poland, improvements in health business in Spain and Belgium, and the full consolidation of the property-casualty insurer ERGO Insurance (Thailand) Public Co. Ltd. (ERGO Thailand). Adjusted for the purchase and sale of companies outside Germany and positive currency translation effects, insurance revenue in the segment rose by 11.0% compared with 2022.

In international property-casualty business, insurance revenue rose by 18.8% to €3,487m (2,934m). We generated significantly higher revenue in Poland and the Baltic states in particular. Owing to the full consolidation of ERGO Thailand, insurance revenue increased by €186m year on year.

Compared to 2022, insurance revenue in international health business rose by 15.2% to €1,687m (1,464m) thanks to the strong growth of our Spanish health insurer and positive development in Belgium.

Insurance revenue in international life insurance amounted to €444m (470m), a 5.4% decrease compared to the previous year. There were pleasing improvements in Poland and the Baltic states, but decreases in Belgium and Austria.

Result

The total technical result improved most remarkably compared with the previous year, chiefly on account of an increase in health insurance business in Spain and Belgium as well as improved performance of property-casualty business in Poland, Greece and the Baltic states. However, income from the release of the contractual service margin was slightly lower in life and health business.

The combined ratio in international property-casualty business, including short-term health business, improved markedly by 5.4 percentage points compared to the previous year. Both the loss ratio and the expense ratio decreased, despite being affected slightly by the full consolidation of ERGO Thailand. We achieved positive developments – especially in Poland and Greece, and in Spanish health business. Insurance service expenses (net) totalled €3,813m (3,398m); insurance revenue (net) amounted to €4,231m (3,559m).

The net financial result rose year on year, buoyed in particular by a much higher return on investment than in 2022 – in turn chiefly attributable to higher regular interest income, a better result from equities and a gain on disposal of participations.

On the whole, the net result for the ERGO International segment was very clearly higher year on year – particularly on account of its greater total technical result and higher net financial result. Moreover, the segment's net result had been impacted by one-off effects in the previous year.

Financial position

Analysis of our capital structure

Our primary insurance and reinsurance operations have a significant influence on the structure of our balance sheet. In this context, investments serve to cover insurance liabilities[1] (80% of the balance sheet total). Equity (11% of the balance sheet total) and bonds classified as strategic debt (2% of the balance sheet total) are the most important sources of funds.

Development of Group equity

	31.12.2023	Prev. year	Change
	€m	€m	%
Issued capital and capital reserve	7,424	7,422	0.0
Retained earnings	18,216	15,380	18.4
Other reserves	–597	–1,022	41.6
Net result attributable to Munich Reinsurance Company equity holders	4,606	5,313	–13.3
Non-controlling interests	122	152	–19.8
Total	**29,772**	**27,245**	**9.3**

Group equity was higher at the reporting date (€29,772m) than at the start of the year. Negative currency translation effects, the dividend payment and the share buy-backs were offset by a significant margin by the very good net result and the increased valuation reserves.

Strategic debt

We define as strategic debt all financial instruments with the character of outside financing that do not have a direct link to our operative business. Strategic debt supplements our financial resources, is essentially designed to optimise the cost of capital, and ensures that we have sufficient liquidity at all times. We quantify our debt leverage to make our capital structure transparent. This is defined as the ratio – expressed as a percentage – of strategic debt to the sum of Group equity, strategic debt and the contractual service margin net of tax. Our insurance liabilities are not considered, even though they are mostly available to us on a long-term basis as a source of financing for investment.

1 Insurance contracts issued and reinsurance contracts held (net).

Debt leverage

		31.12.2023	Prev. year	Change
		€m	€m	%
Strategic debt		4,979	5,048	–1.4
Equity		29,772	27,245	9.3
Contractual service margin (CSM)[1] net of tax		19,170	18,015	6.4
Total		**53,921**	**50,308**	**7.2**
Debt leverage	%	9.2	10.0	

1 Including net cost/gain resulting from reinsurance contracts held.

The components of our strategic debt are subordinated liabilities, and bonds and notes issued (see the relevant sections in the "Notes to the consolidated financial statements"). Munich Re's subordinated liabilities amounted to €4,713m (see Notes to the consolidated financial statements > Explanatory information > Notes to the consolidated balance sheet – Equity and liabilities > 25 Subordinated liabilities). Of this sum, €4,610m were recognised at the reporting date as eligible own funds pursuant to Solvency II. Under the supervisory regulations of Solvency II, subordinated liabilities are recognised as own funds provided that they are available at all times to cover losses on a going-concern basis. The contractual service margin largely represents the gain from a group of long-term life and health insurance contracts that has not yet been recognised through profit or loss because it relates to services to be provided in the future. This unrealised gain is reported as an insurance liability in the balance sheet; we include the CSM (net of tax) when calculating our debt leverage.

Insurance liabilities

Reinsurance business accounts for approximately 34% of insurance contracts issued and reinsurance contracts held (net); around 66% comes from primary insurance. In contrast to liabilities under loans and securities issued, we cannot foresee with certainty how high our liabilities from underwriting business will be and when they will arise. This applies especially to reinsurance. Whereas in property insurance a major portion of the insurance liabilities is generally settled within two to three years, in life or third-party liability insurance substantial amounts may still be due decades after the contracts were concluded. The currency distribution of our insurance contracts issued and reinsurance contracts held (net) reflects the global orientation of our Group. Besides the euro, our main currencies are the US dollar, pound sterling, the Canadian dollar and the Australian dollar.

Restraints on disposal

Since we are an international (re)insurance group, some of our financial resources are subject to restraints on disposal. Supervisory authorities in some countries, for example, require foreign reinsurers to establish premium and reserve deposits to the benefit of primary insurers, or set up trustee accounts or guarantees with certain financial institutions. At the reporting date, restraints on disposal applied to investments with a volume of €13bn (11bn). In addition, there were contingent liabilities. Information on these can be found in the Notes to the consolidated financial statements > Explanatory information > Other information > 62 Contingent liabilities, other financial commitments.

Capital position

Optimising our capital structure is one of the main objectives of our active capital management system, in which we also strive to ensure that Munich Re's capital satisfies all applicable standards. In addition to the capital requirements determined using our internal risk model, more far-reaching requirements by regulatory authorities, rating agencies and our key insurance markets must be met. The Solvency II ratio is a fundamental measure of Munich Re's capital strength. Further information on this ratio can be found in the Risk report. We aim to ensure that our financial strength is such that it enables us to take advantage of profitable opportunities for growth, is not significantly affected by normal fluctuations in capital market conditions, and remains at a reasonable level even in the wake of major loss events or substantial falls in the stock markets.

At the same time, we also define an appropriate level of Group own funds as one which does not lastingly exceed that which is required. Excess capital is returned to our shareholders via dividends and share buy-backs. In practice, capital repatriation comes up against limits because, for example, the German Commercial Code (HGB) obligates our parent, Munich Reinsurance Company, to conduct prudent accounting – with regard to the claims equalisation provision, for instance. This restricts the revenue reserves and profit distribution possibilities, but stabilises results in years with high claims expenditure. Additional information can be found under "Munich Reinsurance Company (information reported on the basis of German accountancy rules)".

Between 2006 and 2023, we returned a total of €36.8bn to our shareholders in the form of dividends and share buy-backs. During the reporting year, we bought back shares with a total volume of €1,045m, €665m of which as part of the €1bn share buy-back programme launched by the Board of Management in February 2023. This means that own shares with a maximum volume of €335m are still to be acquired in the period leading up to the Annual General Meeting to be held on 25 April 2024.

Information in accordance with Sections 315a and 289a of the German Commercial Code (HGB) and explanatory report by the Board of Management

Composition of the subscribed capital

As at 31 December 2023, Munich Reinsurance Company's share capital of €587,725,396.48 was divided into 136,468,150 registered, no-par-value, fully paid shares. The rights and obligations deriving from these shares follow from the applicable statutory requirements and the Company's Articles of Association. With respect to the Company, the only parties deemed shareholders in accordance with Section 67 of the German Stock Corporation Act (AktG) are those entered as such in the Company's register of shareholders.

Restrictions on voting rights and the transfer of shares

The listed registered shares are subject to transfer restrictions. The issuing of restrictedly transferable registered shares by Munich Reinsurance Company dates back to the Company's foundation in 1880. Restricted transferability means that these shares may be transferred to another holder only with the Company's consent, which, according to Article 3(2) of Munich Reinsurance Company's Articles of Association, is granted at the Company's discretion. Since the share-trading processes have been made very efficient, the consent requirement does not lead to any delays in entry in the register. In recent decades, it has been granted without exception.

Each share carries one vote at the Annual General Meeting and determines the shareholders' participation in the Company's profit. This excludes own shares held by the Company, from which it enjoys no rights. In the cases specified in Section 136 of the Stock Corporation Act, voting rights from the shares concerned are excluded by law. Insofar as shareholders are entered under their own name as being the holders of shares which belong to a third party and exceed the upper limit of 2% of the share capital as stated in the Articles of Association, the shares entered shall not carry any voting rights, pursuant to Article 3(5) of the Articles of Association.

Shareholdings exceeding 10% of the voting rights

Munich Reinsurance Company has not been notified of, nor is it otherwise aware of, any direct or indirect shareholdings in the Company that exceeded 10% of the voting rights as at 31 December 2023.

Shares with special control rights

There are no shares with special control rights.

System of control for employee share scheme where the control rights are not exercised directly by the employees

Like other shareholders, employees of Munich Reinsurance Company exercise their control rights in accordance with statutory provisions and the Articles of Association.

Statutory regulations and provisions of the Articles of Association regarding appointment and dismissal of members of the Board of Management, and concerning amendments to the Articles of Association

The legal parameters for the appointment and dismissal of members of the Board of Management are specified in the Company's Co-determination Agreement, Articles 13(3) and 16 of the Articles of Association, Sections 84 and 85 of the Stock Corporation Act (AktG), and Sections 24, 47 and 303 of the German Insurance Supervision Act (VAG). Munich Re's Co-determination Agreement and Articles of Association follow the legal tenets of the German Co-Determination Act (MitbestG). Pursuant to Article 16 of the Articles of Association, the Board of Management must comprise a minimum of two persons; beyond this, the number of members is determined by the Supervisory Board. Since 1 January 2023, the Board of Management has comprised ten members. The Supervisory Board appoints the members of the Board of Management pursuant to Section 84 of the Stock Corporation Act and may dismiss them at any time for good cause. On initial appointment, members of the Board of Management are usually given contracts for a term of three years. Extensions of up to five years are possible. For the appointment or dismissal of members of the Board of Management, Article 13(3) of the Articles of Association stipulates a two-thirds majority of the votes cast on the Supervisory Board. If the requisite majority is not obtained in the initial resolution, the appointment or dismissal of the Board of Management requires a simple majority of the votes cast. The second resolution is only possible following a suitable period of reflection and after the issue has been dealt with in the competent committee, but is thereafter also possible by written consent in lieu of a meeting. In exceptional cases, members of the Board of Management may also be appointed by a court of law, pursuant to Section 85 of the Stock Corporation Act.

The Stock Corporation Act contains general provisions governing amendments to the Articles of Association – Section 124(2) sentence 3, and Sections 179–181 of the Act. These state that only the Annual General Meeting can make resolutions on changes to the Articles of Association. In order to be carried, such a resolution must receive the votes cast by at least three-quarters of the share capital represented in the vote. The Articles of Association may stipulate a different capital majority (higher or lower) or other requirements, but the Company's Articles of Association do not provide for any such special features.

The Stock Corporation Act contains special regulations on amendments to the Articles of Association where increases and reductions in share capital are concerned (Sections 182–240 of the Act). Under these regulations, resolutions on capital measures are generally to be made by the Annual General Meeting. Within a self-determined scope, however, the Annual General Meeting can authorise the Board of Management to initiate certain (capital) measures. The authorisations relating to Munich Reinsurance Company are listed below. In all such cases, a resolution of the Annual General Meeting is required that has been adopted by at least a three-quarter majority of the share capital represented in the vote. Where these resolutions are concerned, the Company's Articles of Association again do not provide for other (i.e. higher) majorities or further requirements. Pursuant to Article 14 of the Articles of Association and Section 179(1) sentence 2 of the Stock Corporation Act, the Supervisory Board is empowered to make amendments to the Articles of Association which affect only the wording.

Powers of the Board of Management, with particular regard to the option of issuing or buying back shares

The powers of the members of the Board of Management are defined in Sections 71 and 76–94 of the Stock Corporation Act (AktG). The Board of Management has the following powers to issue and buy back shares:

- The Annual General Meeting of 28 April 2022 authorised the Board of Management to buy back, with the consent of the Supervisory Board, shares until 27 April 2025 up to a total amount of 10% of the share capital at the time of the resolution, pursuant to Section 71(1) no. 8 of the Stock Corporation Act. The shares acquired plus other own shares in the possession of the Company, or attributable to the Company pursuant to Sections 71d and 71e of the Stock Corporation Act may at no time amount to more than 10% of the share capital. In accordance with the provisions of the authorisation, the shares may be acquired in various ways. The Board of Management is authorised to use shares thus acquired for all legally permissible purposes, in particular those specified in the authorisation, whilst excluding subscription rights. Among other things, the Board of Management is empowered under Section 71(1) no. 8 of the Stock Corporation Act to retire the shares without requiring further approval from the Annual General Meeting.

- The Annual General Meeting of 29 April 2020 authorised the Board of Management to issue, with the consent of the Supervisory Board, in one or more issues until 28 April 2025, subordinated or non-subordinated convertible bonds, bonds with warrants, profit participation rights, profit participation certificates or combinations of such instruments, with or without a limited term to maturity, which may grant the holders or creditors conversion rights, warrants or conversion obligations in respect of shares of the Company up to a maximum proportional amount of the share capital of €117m (hereinafter referred to as "bonds"), with a total nominal amount of up to €5bn. Shareholders are generally entitled to a subscription right in respect of these bonds, but the Board of Management is authorised, with the consent of the Supervisory Board, to exclude this subscription right in the cases specified in the authorisation.

- Under Article 4(1) of the Articles of Association, the Board of Management is authorised, with the consent of the Supervisory Board, to increase the Company's share capital at any time up to 27 April 2026 by an amount of up to €117.5m by issuing new registered, no-par-value shares against cash or non-cash contribution (Authorised Capital 2021). In accordance with the above-mentioned provisions of the Articles of Association, it may exclude subscription rights.

- Pursuant to Article 4(2) of the Articles of Association, a contingent increase in the share capital by up to €117m, consisting of new registered no-par-value shares (Contingent Capital 2020), has been authorised. The purpose of this contingent capital increase is to permit shares to be granted to the holders of convertible bonds, bonds with warrants, profit participation rights or profit participation certificates (or combinations of such instruments) with conversion rights, warrants or conversion obligations, which are issued by the Company or a Group company in accordance with the authorisation granted by the Annual General Meeting on 29 April 2020 for the period from 29 April 2020 to the end of the day on 28 April 2025. The increase in the share capital is to be carried out only to the extent that warrants or conversion rights under the aforementioned instruments are exercised, or conversion obligations under these instruments are fulfilled, and insofar as other means of fulfilment are not introduced.

The complete text of the aforementioned authorisations and the declaration by the Board of Management is provided in the agenda of the respective Annual General Meeting at www.munichre.com/agm/archive. Munich Reinsurance Company's Articles of Association are available at www.munichre.com/articles-of-association.

Significant agreements which take effect, alter or terminate upon a change of control following a takeover bid, and resultant implications

Based on our underwriting guidelines, our reinsurance agreements generally include a clause that grants one or both parties to the agreement a right of extraordinary cancellation in the event that "the other party merges with another company or its ownership and control undergoes a material change". Such or similar clauses are typical of the industry. They are also common in joint venture or cooperation agreements between shareholders of a joint investment company.

Compensation agreements concluded with members of the Board of Management or employees for the event of a takeover bid

There are no compensation agreements with members of the Board of Management or employees for the event of a takeover bid.

Analysis of the consolidated cash flow statement

Our primary insurance and reinsurance operations have a significant influence on Munich Re's cash flow. We generally first collect the premiums for the risks assumed and do not make payments until later, when claims need to be settled. Cash flow statements of insurance companies are therefore of limited relevance. The cash flow statement is adjusted to eliminate the effects of fluctuations in exchange rates and changes in the entities consolidated.

Consolidated cash flow statement

	2023	Prev. year	Change
	€m	€m	%
Cash flows from operating activities	2,543	3,972	–36.0
Cash flows from investing activities	–329	–270	–22.2
Cash flows from financing activities	–2,983	–2,702	–10.4
Cash flows for the financial year	**–770**	**1,000**	**–**

In the consolidated cash flow statement, cash inflows from operating activities of €4,597m were derived from the net result of €4,597m using the indirect method. In line with our insurance business model, these now include cash flows from investment activities that were previously presented under cash flows from investing activities.

The net result was also adjusted by cash outflows of €4,915m arising from the expansion of our portfolio of financial and non-financial investments, as well as by €2,594m for non-cash changes in the fair values of assets and liabilities in particular. These mostly relate to investments.

Outflows from investing activities were primarily determined by those from the acquisition of intangible assets and property, plant and equipment, which amounted to €346m.

The cash outflows from financing activities stem mainly from the dividend payment in 2023 and from share buy-backs.

Overall in the year under review, cash – which encompasses cash at banks, cheques and cash in hand – fell by €770m (including currency effects) to €5,621m. There were items pledged as security and other restrictions on title amounting to €95m (62m).

Risk report

Risk governance and risk management system

Risk management organisation

Organisational structure

Munich Re set up a governance system that meets Solvency II requirements. The main elements of this system are the risk management, compliance, audit and actuarial functions. At Group level, risk management is part of the Integrated Risk Management division (IRM) and reports to the Group Chief Risk Officer (Group CRO). In addition to the Group functions, there are risk management units ("mirror functions") in the fields of business.

Risk governance

Our risk governance ensures that an appropriate risk and control culture is in place by clearly assigning roles and responsibilities for all material risks. The Board of Management must consult the risk management function on major decisions to be taken. The appropriateness of our risk governance is reviewed by the Board of Management on a regular basis.

Defining the risk strategy

The risk strategy, which is aligned with Munich Re's business strategy, defines where, how and to what extent we are prepared to incur risks. The further development of our risk strategy is embedded in the annual planning cycle, and hence in our business planning. The risk strategy is approved by the Board of Management, and discussed with both the Audit Committee of the Supervisory Board and the full Supervisory Board as a material element of the own risk and solvency assessment (ORSA) process.

We determine the risk strategy by defining risk tolerances and limits for a number of risk criteria that are based on the capital and liquidity available, and on our business strategy, and provide a frame of reference for the Group's operating divisions.

Implementation of strategy and the risk management cycle

The risk appetite defined by the Board of Management is reflected in our business planning and integrated into the management of our operations. If capacity shortages or conflicts with the limit system or regulations arise, defined escalation and decision-making processes are followed. These have been designed to ensure that the interests of the business and risk management considerations are weighed and reconciled with each other as far as possible.

Our implementation of risk management at the operational level embraces the identification, analysis and assessment of all material risks. This provides a basis for risk reporting, the control of limits and monitoring.

Risk identification is performed by means of appropriate processes and indicators, which are complemented by expert opinions. At Munich Re, the early identification of risks is primarily operationalised using the emerging risk process. In this process, new or changing risks are discussed with internal and external experts, especially regarding their relevance in terms of occurrence probability, expected loss amount, and potential impact on Munich Re.

As part of the risk analysis, a quantitative and qualitative assessment of all risks at consolidated Group level is made in order to take into account possible interactions between risks across all fields of business.

Internal risk reporting provides the Board of Management with regular information on the risk situation, as regards the individual risk categories and the entire Group alike. This ensures that negative trends are identified in sufficient time for countermeasures to be taken. The purpose of our external risk reporting is to provide clients, shareholders and the supervisory authorities with a clear overview of the Group's risk situation.

Actual risk limits are derived from the risk strategy: taking the defined risk appetite as a basis, limits, rules and any risk-reducing measures required are approved and implemented. We also have a comprehensive early-warning system that draws our attention to any potential risks.

The risk management system is regularly audited by Group Audit.

Internal control system[1]

Our internal control system is an integrated, Group-wide system for managing operational risks. Comprising two key components – the operational risk control system (ORCS) and the compliance management system (CMS) – our internal control system addresses both Group management requirements and local regulations.

1 The section on the internal control system is part of the Combined management report and was not audited.

Operational risk control system

The operational risk control system (ORCS) is an essential part of the internal control system. At Group level, the ORCS is overseen by the Integrated Risk Management division (IRM), which reports to the Group Chief Risk Officer (Group CRO). As part of the ORCS, risk and control self-assessments are carried out at least once a year in all fields of business, and the material operational risks, including compliance-related risks, are identified and assessed in the process. Key controls and management measures to mitigate the material operational risks are analysed and assessed. In addition, the risk management function carries out independent analyses and company-wide cross-comparisons regarding operational risks and controls (monitoring). Significant control deficiencies are addressed by means of improvement measures and/or close monitoring. The main findings derived from the risk and control self-assessments and from monitoring are reported to the Board of Management and the Audit Committee of the Supervisory Board.

The identification, management and control of risks arising out of the accounting process is indispensable for the production of reliable annual financial statements at both consolidated and solo-undertaking level. Risks significant for financial reporting from a Group perspective are integrated into the internal control system in accordance with uniform criteria. The risks are checked annually by the process owners to ascertain whether they are up to date, and the controls are amended as necessary.

The standardised methodology has been implemented on the basis of a Group-wide ORCS policy and guidelines specific to the fields of business. The decision about whether to include a Group undertaking in the standardised ORCS is taken on the basis of the principle of proportionality – with due consideration being given to the nature, scale and complexity of the risks inherent in the undertaking's operations, and to compliance with regulatory and legal requirements. The Group undertakings that have not been integrated into the ORCS Group standard control their risks in compliance with the principles of good corporate governance, Group-wide principles of risk management and relevant national laws.

No material changes were made to the ORCS in the reporting period.

Compliance management system

The second key component of the internal control system is the compliance management system (CMS). At Group level, the Group Compliance & Legal (GCL) division is responsible for the CMS, which is managed by the Group Chief Compliance Officer (Group CCO). In addition to the Group function, there are local compliance functions within the fields of business, as well as decentralised compliance functions for selected compliance programmes (such as Tax Compliance). The Board of Management of Munich Reinsurance Company entrusts the development, implementation, monitoring and ongoing improvement of the Group-wide compliance management system to the compliance function. The CMS is the methodical framework for the structured implementation of early-warning, risk-control, consulting and monitoring functions for compliance risks.

The CMS is based on an integral compliance culture, an established compliance organisation with clearly defined roles and responsibilities, and independent, suitable and qualified human resources that enable the compliance function to work effectively and efficiently.

In the scope of the CMS, compliance risks are systematically identified, analysed and appropriately handled so as to minimise the risks. This process is based on the foundation of the above-mentioned ORCS methodology. Process results are reported to the Board of Management and the Supervisory Board's Audit Committee.

No material changes were made to the CMS in the reporting period.

You will find a detailed description of the main features of the CMS in the Combined non-financial statement > Compliance.

Statement on the adequacy and effectiveness of the risk management system and the internal control system[1]

In reviewing the adequacy and effectiveness of our risk management systems and internal control systems, we take into consideration many pieces of information in order to, among other things, identify any material internal control deficiencies. The primary pieces of information are as follows:

- the auditor's report on the results of the accounting-related control system,
- the annual report on the results of the ORCS,
- regular risk reporting, in particular by the Group CRO,
- regular compliance reporting, in particular by the Group CCO, on topics including key compliance metrics and the essential contents of the compliance management system, and
- regular reporting by Group Audit, especially on insights gained from audit activities about our risk management and internal control systems.

In addition, the Audit Committee of the Supervisory Board regularly requests reports on the adequacy and effectiveness of the internal control system and on changes to the risk and control landscape compared with the previous year. The audit reports from Group Audit confirm the general effectiveness of the accounting-related internal control system.

In light of the information and reports above – and considering the assessments made by experts in the divisions IRM, GCL and Group Audit – we consider our risk management systems and internal control systems to be generally adequate.

1 The statement on the adequacy and effectiveness is part of the Combined management report and was not audited.

Based on the fact that no material violations or systematic deficiencies were identified in the reporting period, we therefore consider our risk management and internal control systems to also be generally effective.

Significant risks

Our general definition of risk is possible future developments or events that could result in a negative prognosis or a negative deviation from the Group's targets. We consider three criteria when evaluating the materiality of risks. First, the extent to which a risk could influence stakeholder assessments of Munich Re. Second, the ways in which a risk could impact the solvency of Munich Re. And third, the extent to which a risk could exhaust cumulative limits or budgets. We have applied this definition consistently to each business unit and legal entity, taking account of its individual risk-bearing capacity. The assessment of whether a risk is significant or not for a business unit or legal entity according to the above definition is performed in the responsible risk management functions. We make a basic distinction between risks included in our internal model and covered by risk-based capital and other risks not quantified in the internal model. The risks included in the internal model are divided into the following risk categories: underwriting risk in property-casualty business, underwriting risk in life and health business, market risk, credit risk and operational risk. Sustainability risks can affect all of these risk categories and are therefore an integral part of the management of these risks.

Risks depicted in the internal model

Munich Re has a comprehensive internal model that determines the capital needed to ensure that the Group is able to meet its commitments even after extreme loss events. We use the model to calculate the capital required under Solvency II (the solvency capital requirement, or SCR).

The SCR is the amount of eligible own funds that Munich Re needs to have available, with a given risk tolerance, to cover unexpected losses in the following year. It corresponds to the value at risk of the economic profit and loss distribution over a one-year time horizon with a confidence level of 99.5%, and thus equates to the economic loss for Munich Re that, given unchanged exposures, will be exceeded each year with a statistical probability of 0.5%. Our internal model is based on specially modelled distributions for the risk categories property-casualty, life and health, market, credit and operational risks. We use primarily historical data for the calibration of these distributions, complemented in some areas by expert judgement. Historical data covers a long period to provide a stable and appropriate estimate of our risk parameters. We continue to take account of diversification effects we achieve through our broad spread across various risk categories and the combination of primary insurance and reinsurance business. We also take into account dependencies between the risks, which can result in higher capital requirements than would be the case if no dependency were assumed. We then determine the effect of the loss absorbency of deferred taxes.

The table shows the solvency capital requirement for Munich Re and its risk categories as at 31 December 2023.

Solvency capital requirements (SCR)

	Reinsurance		ERGO		Diversification	
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
	€m	€m	€m	€m	€m	€m
Property-casualty	12,189	12,785	769	730	–547	–603
Life and health	6,815	5,771	999	883	–367	–329
Market	6,076	6,191	3,169	3,500	–966	–1,177
Credit	3,256	2,357	1,112	947	–58	–58
Operational risk	1,080	1,046	782	746	–235	–234
Other[1]	540	494	376	333		
Subtotal	**29,954**	**28,643**	**7,206**	**7,139**		
Diversification effect	–10,746	–9,982	–1,788	–1,586		
Tax	–3,705	–3,446	–922	–965		
Total	**15,504**	**15,215**	**4,496**	**4,588**	**–2,025**	**–2,110**

→

	Group		Change	
	31.12.2023	Prev. year		
	€m	€m	€m	%
Property-casualty	12,411	12,911	–500	–3.9
Life and health	7,447	6,325	1,122	17.7
Market	8,279	8,514	–235	–2.8
Credit	4,309	3,245	1,064	32.8
Operational risk	1,627	1,558	69	4.4
Other[1]	915	826	89	10.8
Subtotal	**34,987**	**33,381**	**1,606**	**4.8**
Diversification effect	–12,863	–11,768	–1,095	9.3
Tax	–4,151	–3,920	–231	5.9
Total	**17,974**	**17,693**	**281**	**1.6**

1 Capital requirements for other financial sectors, e.g. institutions for occupational retirement provision.

At Group level, the SCR increased by 1.6% to €18.0bn – compared with €17.7bn as at 31 December of the previous year. This increase was mainly driven by extraordinarily strong growth in life reinsurance business and a moderate expansion of exposure to credit risks in reinsurance investments. Conversely, a more well-balanced risk profile resulted directly in better diversification across risk categories, which helped to reduce risk. In addition, the SCR for property-casualty reinsurance business decreased due to an expansion of external retrocession, a more well-balanced portfolio structure and the depreciation of the US dollar. Other information about the changes in individual risk categories and details about risk concentrations can be found in the following sections.

Property-casualty underwriting risk

The property-casualty risk category encompasses the underwriting risks in the property, motor, third-party liability, personal accident, marine, aviation and space, and credit classes of insurance, together with special lines also allocated to property-casualty. Further risk-relevant information on property-casualty business can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 53 Disclosures on further risks from insurance contracts.

Underwriting risk is defined as the risk of insured losses being higher than our expectations. The premium and reserve risks are significant components of the underwriting risk. Premium risk is the risk of future claims payments relating to insured losses that have not yet occurred being higher than expected. Reserve risk is the risk of the loss provisions established potentially being insufficient to cover losses that have already been incurred. In measuring loss provisions, we follow a cautious reserving approach and assess uncertainties conservatively. In every quarter, we also compare notified losses with our loss expectancy, in order to sustain a high level of reserves.

We differentiate between large losses involving expenditure that exceeds a certain large-loss limit; losses affecting more than one risk or more than one line of business (accumulation losses); and all other losses (basic losses). For basic losses, we calculate the risk of subsequent reserving being required for existing risks within a year (reserve risk) and the risk of under-rating (premium risk). To achieve this, we use actuarial methods that are based on standard reserving procedures, but take into account the one-year time horizon. The calibration for these methodologies is based on our own historical loss and run-off data. Appropriate homogeneous segments of our property-casualty portfolio are used for the calculation of the reserve and premium risks. To aggregate the risk to whole-portfolio level, we apply correlations that take account of our own historical loss experience.

Our experts develop scientifically sound models for the accumulation scenarios that quantify the probability of occurrence and the damage potential. The models also take risk-limiting elements into consideration, such as cover limits. In addition to natural catastrophes, we include other accumulation risks such as cyber and pandemics, using special models. Based on these scenarios, the potential effects on our portfolio are determined using stochastic models.

Our internal model considers the resulting accumulation-risk scenarios to be independent events. Munich Re's greatest natural hazard exposure lies in the scenarios "Atlantic Hurricane" and "Earthquake California", for which our estimates of annual loss exposure are €8.5bn (10.0bn) for Atlantic Hurricane and €6.3bn (6.3bn) for Earthquake California (before tax, retained) for a return period of 200 years.

As part of our regular validation, we look in particular at the sensitivity of results produced by the risk model for large and accumulation losses to changes in the return periods or loss amounts for events, or a change in the business volumes written. We also consider the effect of changes of dependency assumptions on the results. We regularly adapt our models on the basis of the findings from our validation.

Another measure for controlling underwriting risks is the targeted cession of a portion of our risks to other carriers via external reinsurance or retrocession. Most of our companies have intra-Group and/or external reinsurance and/or retrocession cover.

In addition to traditional retrocession, we use alternative risk transfer for natural catastrophe risks in particular. Under this process, underwriting risks are transferred to the capital markets via special purpose vehicles.

Solvency capital requirement – Property-casualty

The solvency capital requirement decreased by around 3.9% at Group level, mainly owing to expanded external retrocession and a more well-balanced portfolio structure in reinsurance business. The depreciation of the US dollar also contributed to the drop in SCR, which was partially offset by an update to the basic loss model.

Solvency capital requirements (SCR) – Property-casualty

	Reinsurance		ERGO		Diversification	
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
	€m	€m	€m	€m	€m	€m
Basic losses	5,685	4,790	657	630	–476	–448
Large and accumulation losses	11,420	12,261	438	420	–335	–312
Subtotal	**17,105**	**17,051**	**1,095**	**1,050**		
Diversification effect	–4,916	–4,266	–327	–319		
Total	**12,189**	**12,785**	**769**	**730**	**–547**	**–603**

→	Group		Change	
	31.12.2023	Prev. year		Change
	€m	€m	€m	%
Basic losses	5,866	4,972	894	18.0
Large and accumulation losses	11,523	12,369	–846	–6.8
Subtotal	**17,389**	**17,340**	**49**	**0.3**
Diversification effect	–4,978	–4,429	–549	12.4
Total	**12,411**	**12,911**	**–500**	**–3.9**

Life and health underwriting risk

We define underwriting risk as the risk of insured benefits payable in life or health insurance business being higher than expected. Of particular relevance are biometric risks and policyholder-behaviour risks, such as lapses and lump-sum options. We differentiate between risks that have a short-term or long-term effect on our portfolio. In addition to the simple risk of random fluctuations resulting in higher claims expenditure in a particular year, the adverse developments with a short-term impact that we model notably include rare – but costly – events such as pandemics. To this end, we model losses and the sum at risk – taking into particular consideration excess mortalities in connection with, for instance, the pandemics of the 20th and 21st centuries.

Further information on the risks in life and health business can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 53 Disclosures on further risks from insurance contracts.

Life insurance products in particular, and a large part of our health primary insurance business, are long-term in nature, and the results they produce are spread over the entire duration of the policies. This can mean that negative developments in risk drivers with long-term effects sustainably reduce the value of the insurance portfolio (trend risks). The risk drivers mortality and disability are dominated by the life and health reinsurance segment, particularly by exposure in North America and the Asia-Pacific region. We also underwrite longevity risk in the life and health reinsurance segment, especially in the United Kingdom. The longevity risk driver can additionally be found in the products marketed by ERGO in Germany, together with typical risks related to policyholder behaviour, such as the lapse risk. To a lesser extent, we write risks connected with the increase in treatment costs.

Risk modelling attributes probabilities to potential modified assumptions. We use primarily historical data extracted from our underlying portfolios to calibrate these probabilities, and additionally apply general mortality rates for the population to model the mortality trend risk. To enable us to define appropriate parameters for the modelling of the range of areas in which we operate, portfolios with a homogeneous risk structure are grouped together and individual comprehensive profit and loss distributions determined. We then aggregate these distributions, taking account of the dependency structure, to obtain an overall distribution.

Our largest short-term accumulation risk in the life and health risk category is a severe pandemic. We counter this risk by examining our overall exposure in detail using scenario analysis, and by deploying appropriate measures to manage the risks.

In reinsurance, we control the assumption of biometric risks by means of a risk-commensurate underwriting policy. Interest-rate and other market risks are frequently ruled out by depositing the provisions with the cedant, with a guaranteed rate of interest from the deposit. In individual cases, these risks are also hedged by means of suitable capital market instruments. We also limit our exposure to individuals and groups of persons in life insurance.

For primary insurance, substantial risk minimisation is achieved through product design. In case of adverse developments, parts of the provision for premium refunds – which are recognised and reversed in profit or loss – are of great significance for risk-balancing. In health primary insurance, most long-term contracts include the possibility and/or obligation to adjust premiums. Practically, however, there are limits to the resilience of policyholders.

Limits are laid down for the pandemic scenarios, which affect the portfolio in the shorter term, and for the longevity scenarios and their longer-term effects in conformity with the risk strategy. We continue to analyse the sensitivity of the internal model to the input parameters on a regular basis. This relates to the interest rate, the biometric risk drivers and customer behaviour.

Solvency capital requirement – Life and health

The solvency capital requirement at Group level increased significantly by 18%, which was primarily attributable to extraordinarily strong growth in reinsurance (especially in North America). Capital market effects caused by a drop in interest rates and movements in exchange rates virtually offset each other.

Solvency capital requirements (SCR) – Life and health

	Reinsurance		ERGO		Diversification		Group	
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
	€m	€m	€m	€m	€m	€m	€m	€m
Health	242	343	634	597	–68	–82	808	857
Mortality	5,023	4,343	221	176	–35	–15	5,209	4,504
Disability	3,786	3,111	193	175	–18	1	3,961	3,287
Longevity	1,150	942	518	409	–25	–17	1,644	1,333
Other	380	298					380	298
Diversification	–3,766	–3,266	–568	–474			–4,554	–3,955
Total	**6,815**	**5,771**	**999**	**883**	**–367**	**–329**	**7,447**	**6,325**

Market risk

We define market risk as the risk of economic losses resulting from price changes in the capital markets. It includes equity risk, general interest-rate risk, specific interest-rate risk, property-price risk and currency risk. The general interest-rate risk relates to changes in the basic yield curves, whereas the specific interest-rate risk models changes in credit risk spreads – for example, on euro government bonds from various issuers, or on corporate bonds. We also include in market risk the risk of changes in inflation rates (depicted in the subcategory “general interest-rate risk”) and implicit volatilities (cost of options). Fluctuations in market prices affect not only our investments, but also the underwriting liabilities – especially in life primary insurance. Due to the long-term interest-rate guarantees given in some cases and the variety of options granted to policyholders in traditional life insurance, the amount of the liabilities can be highly dependent on conditions in the capital markets.

Market risks are modelled by means of Monte Carlo simulation of possible future market scenarios. We revalue our assets and liabilities for each simulated market scenario, thus showing the probability distribution for changes to basic own funds.

We use appropriate limit and early-warning systems in our asset-liability management to manage market risks. Derivatives such as equity futures, options and interest-rate swaps – which are predominantly used for hedging purposes – also play a role in our management of the risks. The impact of derivatives is taken into account in the calculation of solvency capital requirements. Further information on derivative financial instruments can be found in the Notes to the consolidated financial statements > Explanatory information > Notes to the consolidated balance sheet – Assets > 16 Financial investments and also > 18 Insurance-related financial instruments, as well as under Notes to the financial instruments and fair value disclosures on assets and liabilities > 47 Hedge accounting.

Solvency capital requirements (SCR) – Market

	Reinsurance		ERGO		Diversification		Group		Change	
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year		
	€m	€m	€m	€m	€m	€m	€m	€m	€m	%
Equity risk	3,399	2,943	1,337	1,736	–123	–219	4,614	4,461	153	3.4
Interest-rate risk	2,844	2,654	1,763	1,970	–923	–968	3,685	3,656	29	0.8
General interest-rate risk	2,163	2,002	1,171	1,280	–631	–459	2,703	2,822	–119	–4.2
Specific interest-rate risk	1,387	1,145	1,246	1,518	–309	–432	2,324	2,230	94	4.2
Diversification interest-rate risk	–706	–492	–654	–828	18	–77	–1,342	–1,397	55	–3.9
Property risk	1,631	1,724	630	767	–67	–137	2,195	2,354	–159	–6.8
Currency risk	4,207	4,234	239	211	–83	–45	4,363	4,400	–37	–0.8
Subtotal	**12,082**	**11,555**	**3,970**	**4,685**			**14,856**	**14,870**	**–14**	**–0.1**
Diversification effect	–6,006	–5,363	–801	–1,185			–6,578	–6,356	–222	3.5
Total	**6,076**	**6,191**	**3,169**	**3,500**	**–966**	**–1,177**	**8,279**	**8,514**	**–235**	**–2.8**

Solvency capital requirement – Market

The solvency capital requirement declined by 2.8% at Group level. Detailed information on the changes in the individual subcategories is available in the following sections.

Equity risk

The minor increase in the equity risk was due to a rise in equity exposure.

Interest-rate risk

The general interest-rate risk in the reinsurance field of business rose slightly. The specific interest-rate risk rose on account of higher exposure to fixed-interest securities with credit risk exposure, which was attributable, among other things, to the restructuring of portfolios and to higher market values caused by lower interest rates.

The interest-rate risks in the ERGO field of business were down, mainly owing to the restructuring of portfolios and more dynamic modelling of volatility adjustments. The decrease in interest-rate risks was partially offset by lower interest rates.

In the reinsurance field of business, the market value of interest-sensitive investments as at 31 December 2023 was €74.0bn (70.1bn). Measured in terms of modified duration, the interest-rate sensitivity of those investments was 4.7 (4.8), while that of the liabilities was 4.5 (5.0). A decrease in interest rates of one basis point led to a change in available own funds amounting to around €9.0m (6.4m).

In the ERGO field of business, the market value of interest-sensitive investments was €109.3bn (105.9bn). The modified duration was 7.8 (7.6) for interest-sensitive investments and 7.1 (6.9) for liabilities. A decrease in interest rates of one basis point led to a change in available own funds amounting to around €2.4m (6.0m).

Property risk

The property risk decreased slightly, mainly on account of lower market values.

Currency risk

The currency risk sank slightly due to modified positions in foreign currencies.

Credit risk

We define credit risk as the financial loss that Munich Re could incur as a result of a change in the financial situation of a counterparty. In addition to credit risks arising out of investments in securities and payment transactions with clients, we actively assume credit risk through the writing of credit and financial reinsurance and in corresponding primary insurance business.

When determining credit risks, Munich Re uses a portfolio model that is calibrated over a longer period (at least one full credit cycle); it also takes account of changes in fair value caused by rating migrations and debtor default. The credit risk arising out of investments (including government bonds and credit default swaps, or CDSs), deposits retained on assumed reinsurance and reserves ceded is calculated by individual debtor. If the credit risk does not exclusively depend on the debtor's creditworthiness, but also on other factors (such as subordination, guarantees or collateralisation), these are also taken into account. We use historical capital market data to determine the associated migration and default probabilities. Correlation effects between debtors are derived from the sectors and countries in which they operate, and sector and country correlations are based on the interdependencies between the relevant stock indices.

The calculation of the credit risk in "Other receivables" is based on internal expert assessments. We also capitalise the credit risk for highly rated government bonds. Information on ratings can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 51 Disclosures on risks from financial instruments.

Risk concentrations are mainly in government bonds issued by countries inside and outside the European Union. In addition, corporate bonds, pfandbriefs and similar covered bonds account for a large proportion of the investments.

We use a cross-balance-sheet counterparty limit system valid throughout the Group to monitor and control our Group-wide credit risks. The limits for each counterparty (a group of companies or country) are based on its financial situation as determined by the results of our fundamental analyses, ratings and market data, and the risk appetite defined by the Board of Management. The utilisation of limits is calculated on the basis of risk-weighted exposures. There are also volume limits for securities lending and repurchase transactions. Group-wide rules for collateral management – for example, for over-the-counter derivatives and catastrophe bonds issued – reduce the resultant credit risk.

In monitoring the country risks, we do not simply rely on the usual ratings, but perform independent analyses of the political, economic and fiscal situation in the countries issuing bonds in which Munich Re is most heavily invested. In this regard, climate-change-related risks are also considered. On this basis, and taking account of the investment requirements of the fields of business in the respective currency areas and countries, limits or specific measures are approved. These are mandatory throughout the Group for investments and the insurance of political risks.

The sensitivities in the credit risk model are regularly checked against the most important input parameters. This primarily concerns the recovery rates from insolvent debtors, the probabilities of debtor migration between rating classes, and the parameters for correlations between debtors.
All validations demonstrated the appropriateness of the modelling approaches used.

We manage credit default risk in retrocession and external reinsurance with the assistance of limits determined by the Retro Security Committee. Information on our default risks from insurance business and from reinsurance contracts held that are assets can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 53 Disclosures on further risks from insurance contracts.

Solvency capital requirement – Credit
The solvency capital requirement rose by 32.8% at Group level, resulting primarily from a moderate increase in investments with credit risk exposure in reinsurance. In addition, slightly lower interest rates for longer maturities led to higher market values of fixed-interest securities.

Operational risk

We define operational risk as the risk of losses resulting from inadequate or failed internal processes, incidents caused by the actions of personnel or system malfunctions, or external events. This includes criminal acts committed by employees or third parties, insider trading, infringements of antitrust law, business interruptions, inaccurate processing of transactions, non-compliance with reporting obligations, and disagreements with business partners.

We use scenario analyses to quantify operational risks. The results are fed into the modelling of the solvency capital requirement for operational risks and are validated using various sources of information, such as the ORCS findings and both internal and external loss data.

The sensitivity in the internal model is regularly checked against the most important input parameters. This mainly relates to the dependence of the result on frequency and loss amounts and the parameters for the correlations between scenarios. The analyses showed no anomalies in the year under review.

Solvency capital requirement – Operational risk
At Group level, the solvency capital requirement for operational risks increased slightly by 4.4% owing to updated assessments in selected scenarios.

Security risk
Security risk is an integral component of operational risk. We define security risks as risks resulting from threats to the security of our employees, data, information, and property. We have intensified our monitoring of cyber risks in recognition of the increasing importance of information technology for Munich Re's core processes and the dynamic environment of cyber crime.

The Group Chief Information Security Officer (CISO), a function that is assigned to risk management, is responsible for the central and Group-wide coordination and control of all activities involving information security risks. Security risk committees have also been set up in the fields of business to assess and manage security risks. The members of the security risk committees are managers from operational units (e.g. IT Security), the control functions (e.g. Risk Management, Information Security, and Data Protection), and representatives from the divisional units.

To further improve cyber security, we are working on initiatives both specific to and across the fields of business to ensure a level of protection in line with our information security strategy. Further information can be found in the Combined non-financial statement > Responsible digital transformation, data protection and information security.

Other risk categories

As is typical throughout the industry and in accordance with regulatory requirements, the risk types specified below are not explicitly capitalised in our internal model. Qualitative risk management is very important for dealing with these risks.

Reputational risk

We define reputational risk as the risk of loss that may result from a deterioration in the Group's public image among clients, shareholders or other parties. Our reputation is affected by our behaviour in a number of areas, such as client relationships, product quality, corporate governance, earnings power, our treatment of employees and corporate responsibility. Reputational risk is closely intertwined with all other risk categories. The assessment of individual business transactions in terms of their reputational risk is performed at field-of-business level by reputational risk committees. Where a reputational risk could potentially have an impact across fields of business, other central divisions may be involved in the assessment if required.

Strategic risk

We define strategic risk as the risk of making wrong business decisions, implementing decisions poorly, or being unable to adapt to changes in the operating environment. Existing and new potential for success in the Group and the fields of business in which it operates creates strategic risks. At Munich Re, strategic risks are identified, assessed and managed in a recurring process comprising a strategic dialogue in the Strategy Committee of the Board of Management (StratC) and annual planning. Furthermore, the Group-wide annual (financial) planning process is integrated into the strategic dialogue within the StratC. This annual planning process includes analysing financial sensitivities and risks as well as assessing the capital management and risk strategy. These process steps are mirrored in the primary insurance and reinsurance fields of business and in investment management. In this way, we put our strategy to the test in close dialogue with the various stakeholders at different levels (Group, primary insurance and reinsurance, asset management). The above processes ensure that the Board of Management addresses the strategic risks in detail and is well placed to monitor and manage them. The Group CRO is involved in both the strategic and operational business planning as well as in significant company sales, mergers and acquisitions.

Liquidity risk

Our objective in managing liquidity risk is to ensure that we are in a position to meet our payment obligations at all times.

The liquidity risk is managed within the framework of our holistic risk strategy, with the Board of Management defining limits on which minimum liquidity requirements for our operations are based. Compliance with minimum requirements is continually monitored and regularly reported to the Board of Management. Using quantitative risk criteria, we ensure that Munich Re has sufficient liquidity available to meet all its payment obligations even under adverse scenarios, with the liquidity position being assessed both for extreme insurance scenarios and for adverse situations in the capital markets.

Further information on liquidity risks in life and health insurance business and in property-casualty insurance business can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 53 Disclosures on further risks from insurance contracts.

Solvency ratio under Solvency II

The solvency ratio under Solvency II is the ratio of the eligible own funds to the solvency capital requirement.

Solvency II ratio[1]

		31.12.2023	Prev. year	Change
Eligible own funds[2]	€m	47,979	46,019	1,960
Solvency capital requirement	€m	17,974	17,693	281
Solvency ratio under Solvency II	%	267	260	

1 Eligible own funds excluding the application of transitional measures for technical provisions; including the application of transitional measures for technical provisions, the own funds amounted to €52.5bn (51.1bn); Solvency II ratio: 292% (289%).
2 Driven by economic earnings of €5.6bn, the eligible own funds increased as at the reporting date. The following factors had a reducing effect on eligible own funds: the dividend of €2.0bn agreed by the Board of Management and to be proposed to the Annual General Meeting for the 2023 financial year; the share buy-back programme with a volume of €1.0bn; the adjustment to the opening balance amounting to –€0.1bn; and other measures totalling €0.5bn.

The eligible own funds as at the reporting date take into account a deduction for the dividend of €2.0bn agreed by the Board of Management and proposed to the Annual General Meeting for the 2023 financial year.

Other risks

Economic and financial-market developments and regulatory risks

Munich Re is heavily invested in the eurozone, and – in reinsurance in particular – in the US dollar currency area, a consequence of our global business activities in these currency areas. We prioritise maintaining a correspondingly broad diversification of investments to cover our insurance liabilities. We take various risk management measures to counter fluctuations in the capital markets that can lead to volatilities in the Group's own funds.

There was moderate growth overall in the global economy in 2023. However, the eurozone and especially Germany stood out negatively, as high inflation, higher interest rates and sustained elevated energy prices in particular burdened households and manufacturers. In the United States, strong consumer spending fuelled by a persistently worker-friendly job market helped to boost the economy. There was also more investment in fixed assets – despite higher refinancing costs and thanks in part to government assistance as part of the Inflation Reduction Act and other programmes. Growth momentum remained weak in China, where problems in the real-estate and shadow-banking sectors still threaten to spread.

Inflation rates have decreased compared with the previous year. Despite sustained high forecast uncertainty, we expect inflation in the USA and the eurozone to continue easing. However, demographic change in Germany is exacerbating the shortage of labour and fostering high wage pressure, which could in turn contribute to prolonged inflation.

For Munich Re, above-average inflation rates can have a particularly adverse effect on its claims reserves. However, we believe that expected inflation rates are adequately taken into account by applying the standard actuarial methods, which address the effects of inflation, and by our conservative reserving approach. Nevertheless, there is a risk that inflation exceeds forecasts and remains high for longer than anticipated, in turn impacting the business operations, financial position and performance of the Group. Although Munich Re protects itself against accelerated inflation by holding inflation-linked bonds and inflation-linked assets such as property, commodities and infrastructure, these measures would not be sufficient to fully mitigate the repercussions of inflation. Conversely, the strong increase in interest rates in the eurozone associated with high inflation has been a significant relief for life insurance companies with guaranteed minimum interest rates. Although the number of lapses could increase as soon as interest rates rise significantly above the guaranteed interest rate, Munich Re life insurance companies have not on the whole observed such a trend. Thus far, both the positive impact on earnings capacity and the solvency ratio of life insurance companies significantly outweigh the lapse risk.

In this environment, the general risk of insolvency is also elevated and risks could worsen in the real-estate and banking sectors. Higher interest rates also make refinancing more costly for governments and necessitate budgetary consolidation. Lower real income, reduced discretion for the allocation of money, and plans for economic transformation can trigger social unrest, more protests, more labour strikes and political instability. A lack of stability will likely pervade upcoming elections, consequently increasing the risk of abrupt changes in ruling parties and the risk of political deadlock. The US general election in November could lead to economic policy that is more isolationist and protectionist.

We regard geopolitical risks in our planning period as very relevant. In addition to the war in Ukraine, which continues to be fought with the same intensity, and the shifts in the balance of power, with China as the key player, 2023 was marked by a further increase in geopolitical crises. These included clashes and coups, both attempted and successful, in sub-Saharan Africa (Sudan, Niger, Sierra Leone, Gabon, Burkina Faso), Azerbaijan's seizure of Nagorno-Karabach, the tensions on the Kosovo-Serbian border and, first and foremost, Hamas' attack on Israel. Munich Re is observing the developments closely and is analysing the risks in regions where it has substantial exposures.

We have conducted detailed analyses of potential losses in various war scenarios (particularly China/Taiwan, Russia and the Baltic states, and a nuclear escalation of the war between Russia and Ukraine), with a focus on direct war cover. We regard any potential indirect consequential losses or collateral damage or implications for capital markets as extremely dependent on a given assumption. Our analyses indicate that the direct exposures are manageable and do not necessitate any modifications to our risk strategy. Although the indirect consequences – particularly capital market upheavals – could be material and exceed the direct losses, they are subject to considerable uncertainty, which severely restricts the scope for taking preventive measures or recommending courses of action.

Global players such as Munich Re are subject to increased fiscal pressure nationally and internationally, as well as a higher audit intensity. Given the current political emphasis on an appropriate taxation of international companies and the introduction of a global minimum tax rate, which has applied in the EU since 1 January 2024, this trend will continue and intensify.

Climate change

Climate change is an emerging risk that represents the central sustainability risk in relation to the environment. Climate-related risks arise in the form of physical and transition risks, with interdependencies between both risk types. Physical risks arise from the increasing frequency and severity of extreme weather events (hurricanes, wildfires, severe convective storms, floods, etc.) and chronic changes such as sea level rise. Transition risks arise particularly as a consequence of political or economic measures to shift to a low-carbon economy or reactions to changing living conditions in certain regions. Both types of risks involve medium-term and long-term effects, but can also have disruptive, short-term consequences. Any assessment of how these risks will impact Munich Re's exposures in the long term is subject to a high degree of uncertainty. This is because the transition path and the way it affects other emerging risks are uncertain, as are the resulting impacts on known risk drivers such as premium and reserve risks or the impact of changes in share prices, interest rates or exchange rates on investments. We are therefore working intensively on the impact of climate change on our Group. Consequently, we have performed cross-balance sheet scenario analyses in order to estimate how resilient the company is in the event of various climate change scenarios and in order to devise specific actions to be taken.

On the basis of these scenario analyses, we more closely assessed potential risks arising from climate suits (lawsuits in connection with climate change). In the process, potential exposures to litigation risk in our insurance portfolio were identified as a material risk. To counter this risk, we have issued/updated a range of topic papers and best practices that provide underwriters with standard clauses and update them on developments in case law. Respective training is also offered. Furthermore, the new product process criteria were expanded to include ESG aspects such as greenwashing risk.

We do not see any material additional risk in property insurance arising from climate change. This is due to our ability to regularly adapt risk and natural-hazard models to take the effects of climate change into appropriate consideration. For the majority of our underwriting portfolio, the annual renewals process provides the opportunity to react at short notice to negative developments and negotiate premium adjustments and/or new contractual terms such as limits. Further information – in particular on the probable maximum loss (PML) to our insurance portfolio from climate-related natural catastrophes for a 200-year return period – is available in the Combined non-financial statement > Insurance activities.

In the long term, however, a material strategic risk could arise. For example, at some point the risk-commensurate prices for insurance products could exceed what customers are willing to pay, which would make insuring against certain types of risk unaffordable for customers or unfeasible for insurers (financial limits of insurability). Munich Re counters this risk by generally ensuring that its risk strategy includes a diversified insurance portfolio.

In the life and health reinsurance segment, we have analysed the potential effects of climate change on the mortality and health of insureds in our portfolios. Climate change scenarios relate to much longer periods than our usual scenarios for potential trend risks. Reliable quantitative information is only available to a limited extent and depends heavily on a variety of potential climate change pathways. The effects are dependent on climate forecasts and a population's demographic and geographic composition. Older people and socio-economically disadvantaged groups are at greatest risk. It is very difficult to identify deaths in which climate was a contributing factor. Furthermore, the insured population may be less severely impacted by the effects of climate change than the overall population. Our analyses indicate that the two greatest potential physical risks for life and health insurance are extreme heat events in the United States and Asia as well as the unabated increase in average temperatures, which may ultimately lead to more frequent epidemics/pandemics. Although the quantitative information on these topics is subject to considerable uncertainty, we do not currently anticipate climate change to have any material effects on our exposures.

With reference to our investments, we see a relevant risk in illiquid investments with long maturities. The due diligence process for alternative investments therefore includes analysing potential location-specific threats due to climate change. In addition, we continually monitor and limit the concentration and liquidity risks affecting our investments. We therefore consider the impacts of climate change on our investments not to be a material risk overall.

Legal risks

As part of the normal course of business, Munich Re companies are involved in court, regulatory and arbitration proceedings in various countries. The outcome of those or possibly imminent proceedings is neither certain nor predictable. However, we believe that none of these proceedings will have a significant negative effect on the financial position of Munich Re. Such proceedings are dealt with using combined expertise within the individual departments and units.

Assessment of the risk situation

In accordance with the prescribed processes, our Board committees explicitly defined the risk appetite for significant risk categories in the year under review, and quantified it with key figures. We determined and documented the risk appetite across the Group hierarchy and communicated it throughout the Group. In 2023 risk exposures were regularly quantified and compared with the risk appetite. They were reported on and discussed in the relevant committees.

At 267%, the Solvency II ratio is at a very comfortable level above our communicated optimal range of 175–220% (without application of transitional measures). Munich Re thus continues to have a very solid capital base. Based on up-to-date findings and on our internal model, Munich Re's Solvency II ratio (without application of transitional measures) would be at least within or above the optimal range even in the event of major loss events and negative capital market effects. We therefore assess Munich Re's risk situation to be manageable and under control.

Further risk figures[1]

Premium risks and reserve risk in property-casualty insurance

The degree of exposure to premium risks differs according to class of business and also between primary insurance and reinsurance. On the basis of the loss ratios and combined ratios shown in the following table, conclusions can be drawn about the volatilities in the different classes of business and about possible interdependencies.[2] The differences are due to fluctuations in claims expenditure and fluctuations in the respective market-price level for the covers granted.

Loss ratios and combined ratios by class of business

	2023	2022
Loss ratio in %		
Reinsurance		
Liability	89.8	76.9
Accident	75.9	67.9
Motor	94.2	77.8
Marine, aviation, space	60.5	83.6
Fire and other property insurance	58.4	65.7
Engineering	51.6	42.4
Credit and surety	57.9	25.1
Other classes of business	66.1	56.3
ERGO Property-casualty Germany	59.1	61.2
ERGO International[1]	59.3	63.9
Combined ratio in %		
Reinsurance		
Liability	102.7	89.2
Accident	89.6	82.1
Motor	109.4	94.5
Marine, aviation, space	79.3	105.4
Fire and other property insurance	74.0	80.6
Engineering	72.7	62.7
Credit and surety	67.8	35.8
Other classes of business	79.6	69.7
ERGO Property-casualty Germany	88.9	90.3
ERGO International[1]	90.1	95.5

1 Excluding life insurance business and health insurance conducted like life insurance.

In the pricing of risks assumed in the motor, fire and other property insurance, and marine lines of business, and also in sections of engineering reinsurance and ERGO, there is a high degree of sensitivity regarding the underlying assumptions about natural catastrophes. The following table therefore shows the combined ratios for property-casualty reinsurance, including and excluding natural catastrophe losses.

Combined ratio in property-casualty reinsurance for the last ten years[1]

%	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Including natural catastrophes	85.2	83.2	99.6	105.6	100.2	99.4	114.1	95.7	89.7	92.7
Excluding natural catastrophes	76.2	74.5	87.6	101.6	90.2	92.6	92.1	90.2	88.8	89.4

1 Due to the application of IFRS 4 for financial years preceding 2022, and to the increased limit for major risks from 1 January 2023 (€30m, previously €10m), the values shown in the table are only comparable to a limited extent.

1 In accordance with German Accounting Standard No. 20 (GAS 20).

2 Further information on the combined ratio can be found under "Tools of corporate management and strategic financial objectives", and in the Notes to the consolidated financial statements > Explanatory information > Segment disclosures > 7 Alternative performance measures.

Major losses, by which we mean individual losses exceeding €30m, are particularly relevant in property-casualty reinsurance.

Large losses in property-casualty reinsurance (net)[1]

€m	2023	2022
Large losses	3,278	3,741
Thereof: Natural catastrophe losses	2,335	2,118
Thereof: Other accumulation losses	943	1,623

1 The figure is only comparable to a limited extent with the same period last year, as the major-loss threshold was raised to €30m with effect from 1 January 2023 (previous years: €10m).

The provision for outstanding claims is subject to a reserve risk, i.e. the risk that actual claims settlement may be less than or exceed the amount reserved. Information on the development of claims and claims payments over time can be found in the Notes to the consolidated financial statements > Explanatory information > Notes to the consolidated balance sheet – Equity and liabilities > 28 Liability for incurred claims. A particular sensitivity to reserve risks exists in the case of contracts with long run-off periods. This characteristic applies especially to third-party liability insurance, where liabilities may manifest themselves after a considerable latency period.

Risks from defaults on receivables from insurance business

As at 31 December 2023, the accounts receivable for reinsurance contracts held were split between the following ratings (based on those of Standard & Poor's):

Rating of accounts receivable[1]

€m	31.12.2023	Prev. year
AAA	0	0
AA	105	86
A	164	156
BBB and lower	6	12
No external rating	116	278

1 The previous year's figures are based on IFRS 4.

Of all our receivables on underwriting business at the reporting date, €644m (646m)[1] were outstanding for more than 90 days. The receivables on underwriting business are included in the carrying amounts of insurance contracts issued and reinsurance contracts held. The average default rate for the last three years was 1.1% (1.4%)[1].

Further information on underwriting risks (including biometric risks, lapse risk and interest-rate risk), market risks, and default risks in life insurance can be found in the Notes to the consolidated financial statements > Explanatory information > Disclosures on risks from financial instruments and insurance contracts > 53 Disclosures on further risks from insurance contracts. In addition, this section includes information on liquidity risk in connection with maturity date analyses of contractual net cash flows and amounts payable on demand.

1 The figure for the previous year was based on IFRS 4.

Opportunities report

Our integrated business model, strong capitalisation and innovation, good customer focus, and deep knowledge of the industry put us in a good position to benefit from continuously evolving markets and changes in client behaviour, while generating profitable growth by developing customised solutions for our clients. Unless stated otherwise, the opportunities for Munich Re outlined below generally relate equally to all fields of business.

Business environment

We assume that global economic growth will be sluggish in 2024. Tight monetary policy, high price levels and geopolitical uncertainty will likely continue to impede economic growth. Although we expect inflation to ease further, we also anticipate that average annual inflation in many countries will again considerably exceed the targets of key central banks in 2024. Our high degree of diversification and our strong capitalisation mitigate the risks we face, and will open up additional business opportunities for us provided the macroeconomic parameters that are especially relevant to us improve. Stronger economic growth – in combination with more rapidly decreasing inflation rates – tends to have a positive impact on the demand for insurance cover and triggers higher premium volume in most classes of insurance. In addition, the coronavirus pandemic has caused many reinsurance and primary insurance clients to recognise that they need increased risk protection. The need for first-class medical care and cover against unforeseeable risks was brought home to consumers, which could have a positive effect on demand for insurance products, particularly private health insurance.

Economic dynamics, which are expected to be positive in the long term, and the low degree of insurance penetration in many developing and emerging markets represent opportunities for profitable expansion and further diversification of our business portfolio along the entire value chain. One example of that is the targeted growth in reinsurance through service provision for cedants in emerging markets in Asia, the Middle East and South America.

Against the backdrop of higher inflation and moderately increasing global reinsurance capacity in 2023, we expect prices to remain stable in international property insurance, with numerous opportunities for profitable growth – especially in our reinsurance and industrial insurance portfolios.

Digital transformation

Digitalisation is increasingly transforming the markets, and the continuous changes in customer behaviour are demanding greater flexibility in terms of providing access, coverage and solutions, as well as in our underlying internal structures. Driving digital transformation therefore remains one of Munich Re's strategic priorities and is part of our Group Ambition 2025.

We are continually adjusting our internal structures and processes to reduce complexity and costs, while at the same time seizing the opportunities that digital transformation offers. We are attempting to automate as much as possible, along the entire value chain and across all units. We want to deliver what our clients and we ourselves expect in terms of quality, speed and security, while continuing to increase efficiency. This applies not just to traditionally client-focused areas such as sales, contract administration and claims handling, but also for example to the digitalisation of our asset management. In addition, we are leveraging opportunities arising from flexible, mobile working models to retain and attract qualified staff.

We are also taking account of increasing demand for digital products in our research and development activities. At ERGO, for example, we heavily invest in the development of new technologies, such as traditional and generative AI, the metaverse, robotics and virtual assistants. In doing so, we intend to make our processes and operations more efficient and intelligent, thus enhancing customer experience.

The above-mentioned technologies, particularly traditional and generative AI, play a similarly key role in reinsurance. The primary focus here is on new opportunities in business management, such as providing a greater range of information to underwriters for faster, better decision-making ("augmented underwriting"). We are also leveraging our many years of experience with traditional and generative AI to help our clients overcome challenges associated with the implementation of augmented underwriting, the success of which can be facilitated by our AI-based solutions.

We are fostering the development of innovative products and services by means of our digital infrastructure, our corporate venture capital (CVC) activities and many initiatives of relevance to our lines of business. Doing so helps us to safeguard our business model in the long term and, whenever necessary and promising, to expand our model so as to tap growth opportunities in the digital world. Given our clients' hybrid requirements, we are actively driving the integration of various products and sales channels, and the expansion of direct sales in all classes of primary insurance.

Social trends

In life and health insurance, an ageing population coupled with frequently diminishing state benefits are leading to increasing demand for private and company insurance plans, which we are catering to with our broad spectrum of products in life primary insurance. MEAG is also playing a key role in this respect with its investment expertise. Moreover, advances in medicine and the increasing significance of prevention in primary insurance are providing us with a host of possibilities for satisfying our clients' most diverse needs and binding them to Munich Re, as well as for expanding our business. In life reinsurance, we also offer integrated reinsurance and financing solutions.

Ecologically and socially sustainable action is becoming more and more important for the insurance industry. Our many different activities in this context and our high and reliable ESG standards give us the opportunity to be perceived as an attractive partner for investors, clients and staff, and to address societal expectations. Further information is available in the Combined non-financial statement.

Climate change and natural catastrophes

We expect climate change to lead to an increase in weather-related natural catastrophes in the long term – despite the global efforts being made. This growing loss potential will result in greater demand for primary insurance and reinsurance products. Our expertise in dealing with natural hazard risks and advances in our risk management – such as new, high-resolution risk models – allow us to support preventative measures, calculate competitive prices for traditional covers, and develop new solutions for our primary insurance and reinsurance clients.

We see considerable business potential in the transition to a climate-neutral economy. We anticipate a sharp increase in investment in renewable energy in an effort to meet the net-zero goal by 2050. We possess leading engineering and risk assessment expertise and we have innovative risk-transfer concepts ready for this investment surge. This relates to many significant renewable energy areas such as electricity generation (solar, wind, hydroelectric, etc.), transmission and storage (battery storage, pumped storage and hydrogen).

Expanding the limits of insurability

Together with our clients, we strive to expand the boundaries of insurability in many ways and provide our customers with new and enhanced types of cover. For example, in cyber insurance we are offering our clients diverse coverage concepts for risks and damage caused by faulty product software and cyber attacks, as well as services ranging from preventative measures to the recovery of lost data. At the same time, we are developing a broad spectrum of insurance covers for types of risk that are rapidly becoming as important as the traditional ones in a changing world, including performance guarantees for alternative energies and propulsion systems, risks from artificial intelligence and algorithms, parametric risks, flood risks and credit insurance.

Prospects

This section contains forward-looking statements that are based on current assumptions and forecasts of the management of Munich Re. We do not accept any responsibility or liability in the event that they are not realised in part or in full.

Outlook 2024

Outlook for Munich Re

		2024
Insurance revenue from insurance contracts issued	€bn	59
Total technical result – Life and health reinsurance	€bn	1.45
Combined ratio – Property-casualty reinsurance	%	82
Combined ratio – ERGO Property-casualty Germany	%	87
Combined ratio – ERGO International	%	90
Return on investment	%	over 2.8
Net result	€bn	5.0
Economic earnings	€bn	over 5.0

All forecasts and targets face increased uncertainty owing to fragile macroeconomic and geopolitical developments and volatile capital markets. As always, the projections are subject to major losses remaining within normal bounds, and to the income statement not being impacted by severe fluctuations in the currency or capital markets, significant changes in the tax environment, or other one-off effects.

Munich Re

We estimate that the Group's insurance revenue from insurance contracts issued (insurance revenue) in 2024 will total around €59bn, up slightly on 2023.

In addition, we expect our annual return on investment to surpass 2.8% – a considerable year-on-year increase.

Our target net result for 2024 is around €5.0bn, substantially higher than the 2023 net result. The forecasts are subject to major losses being within normal bounds and liability for incurred claims remaining unchanged. Furthermore, they are dependent on our income statement not being impacted by severe currency or capital market movements, significant changes in fiscal parameters, or other special factors.

For 2024, we expect our economic earnings to surpass the IFRS net result of €5.0bn. The compilation of financial reports in accordance with IFRS 9 and IFRS 17 has increased harmonisation between the IFRS net result and economic earnings as performance indicators – but differences remain nevertheless. Of particular note are the differences pertaining to both the timing of the recognition of profit and the impact of capital market effects. The projection for the economic earnings is based on the assumption of stable conditions and capital markets, unchanged modelling parameters, and normal major-loss incidence. Deviations from these assumptions may have a different impact on economic earnings than on IFRS accounting. Further information on economic earnings as a management tool can be found under "Tools of corporate management and strategic financial objectives".

Subject to approval by the Annual General Meeting, the dividend will amount to €15.00 per share. This is equivalent to a total payout of €2.0bn.

Reinsurance

In the reinsurance field of business, we expect insurance revenue of around €39bn for 2024, up marginally on 2023's figure. Currency translation effects could potentially have a considerable impact on this estimate. The net result for the reinsurance field of business is expected to total around €4.2bn.

We project a total technical result of around €1.45bn for life and health reinsurance. The total technical result comprises the insurance service result and the result from insurance-related financial instruments.

We anticipate the combined ratio in property-casualty reinsurance to be about 82% based on net insurance revenue.

Price development was stable overall, and for the most part more than compensated for the higher loss estimates in some areas, which were caused primarily by inflation or other loss trends. Primary insurance prices also increased in many markets. Overall, the high price level for Munich Re's portfolio was maintained with a 0.3% increase. Higher interest rates had a positive effect on economic profitability.

As at 1 January 2024, around two-thirds of non-life reinsurance treaty business was up for renewal, with a focus on Europe, the USA, and global business, and representing a premium volume of €15.2bn. Total premium volume written increased by 3.5% to around €15.7bn. Thanks to our strong client relationships and our sought-after expertise, we were able to tap into attractive business opportunities across all regions and classes of business. These involved the expansion of existing client relationships as well as new business. At the same time, we were willing to discontinue business that did not meet our expectations with regard to prices or terms and conditions.

The renewals as at 1 April 2024 (above all in Japan and India) and 1 July 2024 (parts of the portfolio in the USA, Australia and Latin America) will involve the renegotiation of a premium volume of around €6.5bn in reinsurance treaty business. It is Munich Re’s expectation that the recent price increases and improved treaty conditions will be upheld in these renewal rounds, too.

ERGO

In the ERGO field of business, we expect stable insurance revenue of around €20bn for 2024. The net result for 2024, at around €0.8bn, should be substantially higher than that for 2023.

We aim to achieve a combined ratio of around 87% in the ERGO Property-casualty Germany segment, and around 90% in the ERGO International segment. Both forecasts are based on the assumption that major losses are at a normal level. Just as in property-casualty reinsurance, the ERGO combined ratios are based on net insurance revenue.

Munich Reinsurance Company (information reported on the basis of German accountancy rules)

For the 2023 financial year, Munich Re again utilised the option of publishing a combined management report in accordance with Section 315(5) in conjunction with Section 298(2) of the German Commercial Code (HGB). Supplementary to our Munich Re reporting, this section provides details on the performance of Munich Reinsurance Company.

The annual financial statements of Munich Reinsurance Company are prepared in accordance with German accounting rules (HGB). By contrast, the consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRSs). As a result, there are some deviations in the accounting policies – mainly with regard to intangible assets, investments, financial instruments, individual underwriting assets and liabilities, and deferred taxes.

Market environment and major factors of influence

The macroeconomic and industry environment of Munich Reinsurance Company essentially corresponds to that of the Group. Please see the section “Macroeconomic and industry environment” for more detailed information.

Business performance

In the 2023 financial year, Munich Reinsurance Company’s business performance was once again pleasing overall. Major-loss expenditure was lower than in the previous year, although it was impacted by significant losses resulting from the devastating earthquake in Turkey in February. While natural catastrophe losses were higher in the reporting year, man-made major losses were down considerably. Growth of profitable business likewise contributed to the positive net result.

Conversely, the reserve releases made for prior accident years following a review of our reserving position were down on the previous year. The underwriting result before claims equalisation provision decreased overall.

The accounting result of Munich Reinsurance Company developed as follows:

Condensed income statement for Munich Reinsurance Company

	2023	Prev. year	Change
	€m	€m	%
Earned premiums for own account	25,742	24,513	5.0
Interest on technical provisions for own account	235	360	–34.7
Other underwriting income for own account	0	–18	–
Claims incurred for own account	–18,674	–17,540	–6.5
Change in other technical provisions for own account	474	333	42.5
Expenses for performance-related and non-performance-related premium refunds for own account	–1	–1	38.6
Operating expenses for own account	–6,289	–6,063	–3.7
Other underwriting expenses for own account	–29	–36	19.2
Subtotal	**1,459**	**1,549**	**–5.8**
Change in claims equalisation provision and similar provisions	252	250	0.7
Underwriting result for own account	**1,711**	**1,799**	**–4.9**
Investment income	5,257	6,188	–15.0
Investment expenses	–2,266	–5,981	62.1
Interest income on technical provisions	–263	–395	33.4
Other income	955	1,907	–49.9
Other expenses	–1,093	–2,171	49.7
Non-technical result	**2,590**	**–453**	**–**
Operating result before tax	**4,301**	**1,347**	**219.4**
Taxes on income and profit and other taxes	–360	–251	–43.3
Profit for the year	**3,941**	**1,095**	**259.9**
Profit brought forward from previous year	13	0	–
Transfers from other revenue reserves	0	500	–
Appropriations to revenue reserves	–1,943	0	–
Net retained profits	**2,011**	**1,596**	**26.0**

Technical result

In the 2023 financial year, Munich Reinsurance Company's gross premium income totalled €32,018m (31,550m). The year-on-year increase of 1.5% chiefly resulted from new business and growth of existing business. Changes in the value of the euro as against other currencies had a dampening effect.

Gross premium volume in life and health reinsurance was down in the reporting year, with gross premiums falling by 7.1% to €8,254m (8,885m). If exchange rates had remained unchanged, our premium income in life and health reinsurance would have decreased by 2.9%.

In property-casualty reinsurance, on the other hand, we posted growth in gross premium income of 4.9% to €23,764m (22,665m) in the reporting year. The increase was due to new business and business growth across a large number of lines and regions. If exchange rates had remained the same, premium volume would have been up by 8.4%.

In the reinsurance renewals, Munich Re managed to exploit growth opportunities, particularly in the area of non-proportional natural catastrophe covers owing to the attractive price level. Prices, terms and conditions improved overall in the sectional markets, with considerably different trends dependent upon claims experience, future claims expectations and the situation in each individual market. Prices rose – considerably in some instances – for insurance cover in regions and classes of business with high loss experience. By contrast, prices rose only slightly in regions and classes of business with low claims experience. Munich Re takes the different price trends into account and has deliberately withdrawn from business that no longer met risk-return expectations. All in all, prices for the Munich Re portfolio increased by around 3.1%. Overall, we adhered to our profit-oriented underwriting policy.

At €1,459m, the underwriting result before claims equalisation provision was slightly less than in 2022 during the reporting year. This reduction resulted primarily from a lower release of provisions for claims from prior years as part of our customary review of provisions for the full year. Over the years, the safety margin in the provisions has remained unchanged at a high level. By contrast, major-loss expenditure was lower overall than in the previous year, which had seen a much greater impact from natural catastrophe losses.

Major-loss expenditure totalling €2,724m after retrocession and before tax was lower year on year, and slightly below the expected value of 14%. There were again many major losses in the 2023 financial year. With expected losses of around €550m, the year's biggest loss event by far was the devastating earthquake in Turkey.

Due to various other major loss events – such as Hurricane Otis, which tore through Mexico in October 2023 – natural catastrophe losses totalled €1,973m, up on the previous year. In terms of net earned premium, aggregate natural catastrophe losses accounted for 9.8 percentage points of the loss ratio.

Man-made major losses in the reporting year totalled €750m in property-casualty reinsurance, down considerably on the previous year. This was equivalent to 3.7 percentage points of net earned premium.

The combined ratio, which reflects the relation of claims and costs to net earned premiums, came to 96.4% (93.7%) overall, mainly owing to the above effects.

Performance of the classes of business

Life

		2023	Prev. year	Change
				%
Gross premiums written	€m	7,301	7,816	–6.6
Underwriting result before claims equalisation provision and similar provisions	€m	758	376	101.6

In life reinsurance, the drop in premium income for intra-Group retrocessions with primary insurance subsidiaries was partially offset by new contracts in the United Kingdom and the United States. The underwriting result improved compared with the previous year due to adjustments to provisions in Canada in particular.

Health

		2023	Prev. year	Change
				%
Gross premiums written	€m	953	1,068	–10.8
Combined ratio	%	90.6	97.2	
Underwriting result before claims equalisation provision and similar provisions	€m	80	30	166.7

In health reinsurance, a decline in premium income due to the termination of reinsurance contracts in Asia in particular was partly offset by business growth, primarily in Canada. The improvement in the underwriting result can also be traced back primarily to the positive business development in Canada.

Personal accident

		2023	Prev. year	Change
				%
Gross premiums written	€m	400	402	−0.5
Combined ratio	%	82.3	74.9	
Underwriting result before claims equalisation provision and similar provisions	€m	83	97	−14.4

Premium income in personal accident reinsurance remained almost constant year on year. The underwriting result before claims equalisation provision was down on the previous year due to a higher combined ratio.

Third-party liability

		2023	Prev. year	Change
				%
Gross premiums written	€m	3,832	4,317	−11.2
Combined ratio	%	126.6	110.4	
Underwriting result before claims equalisation provision and similar provisions	€m	−950	−416	−128.4

In third-party liability reinsurance, premium income fell in the reporting year mainly on account of quota share reductions and moves to withdraw from unprofitable business. The underwriting result before claims equalisation provision decreased year on year owing to a much higher loss ratio.

Motor

		2023	Prev. year	Change
				%
Gross premiums written	€m	4,537	4,461	1.7
Combined ratio	%	115.0	95.7	
Underwriting result before claims equalisation provision and similar provisions	€m	−398	105	–

In motor reinsurance, premium income increased slightly in the reporting year – mainly on account of new business. The underwriting result before claims equalisation provision, which in the previous year had shown a profit, moved into negative territory in the reporting year, largely owing to significantly higher claims expenditure compared with the previous year.

Marine

		2023	Prev. year	Change
				%
Gross premiums written	€m	638	577	10.6
Combined ratio	%	84.1	133.1	
Underwriting result before claims equalisation provision and similar provisions	€m	75	−162	–

In marine reinsurance, we were able to increase premium income in the reporting year on account of new business. The underwriting result before claims equalisation provision is back in positive territory. The previous year had been hit hard by the consequences of the war in Ukraine, in particular.

Aviation

		2023	Prev. year	Change
				%
Gross premiums written	€m	722	703	2.7
Combined ratio	%	107.0	155.7	
Underwriting result before claims equalisation provision and similar provisions	€m	−49	−367	86.6

Premium income in aviation reinsurance, which comprises the aviation and space classes, increased slightly compared with the previous year. The underwriting result before claims equalisation provision improved considerably in the reporting year. The previous year had been hit hard by the consequences of the war in Ukraine.

Fire

		2023	Prev. year	Change
				%
Gross premiums written	€m	3,390	3,041	11.5
Combined ratio	%	97.7	114.6	
Underwriting result before claims equalisation provision and similar provisions	€m	59	–383	–

Premium income in fire reinsurance rose in the reporting year, mainly on account of improved contractual conditions. The underwriting result before claims equalisation provision improved considerably year on year thanks to lower major-loss expenditure.

Engineering

		2023	Prev. year	Change
				%
Gross premiums written	€m	1,232	1,115	10.5
Combined ratio	%	84.2	71.8	
Underwriting result before claims equalisation provision and similar provisions	€m	156	262	–40.5

In engineering (machinery, EAR, CAR, EEI, etc.), premium income saw a year-on-year increase due to business growth. The underwriting result was down due to a higher loss ratio than in the previous year.

Other classes

		2023	Prev. year	Change
				%
Gross premiums written	€m	9,013	8,049	12.0
Combined ratio	%	78.3	69.6	
Underwriting result before claims equalisation provision and similar provisions	€m	1,645	2,008	–18.1

Under “Other classes”, we subsume the remaining classes of property insurance, such as burglary, plate glass, hail (including agricultural insurance), water damage, contingency, windstorm, livestock and householders’ and homeowners’ comprehensive insurance as well as credit insurance.

Premium income was up significantly year on year, above all on account of new business and business growth. The combined underwriting result of the “Other classes” before claims equalisation provision fell year on year, mainly due to higher claims expenditure.

Non-technical result

Global economic growth weakened slightly in 2023, owing mainly to high inflation and restrictive monetary policy. Economic momentum waned considerably, particularly in Europe. By contrast, the US economy remained surprisingly strong and China’s economy grew faster year on year following the lifting of COVID-19 restrictions. Rates of inflation fell thanks to lower energy prices, but average inflation rates for the year were still significantly above the long-term average in many countries.

In response to persistently high inflation, key central banks further tightened monetary policy in 2023.

Yields on ten-year government bonds in the United States and Germany reached their highest levels in years in 2023. Growing expectations that central banks would soon cut rates, however, contributed to a drop in yields in Q4. By the end of December, yields on US bonds had returned to approximately the same level as at the beginning of the year, while those on German bonds were down slightly.

In the reporting year, international financial markets were generally less volatile than in the previous year. Important equity indices rose significantly in 2023, including the US Dow Jones Industrial Average and the EURO STOXX 50.

On the currency markets, fluctuations were also less pronounced in 2023 than in the previous year. At the end of December, the US dollar and Canadian dollar were somewhat lower against the euro. The pound sterling was up against the euro. The annual average values against the euro, however, were lower in 2023 than in 2022 for the above-mentioned currencies.

In the 2023 financial year, Munich Reinsurance Company’s return on investment (including deposits retained on assumed reinsurance) totalled 3.5% (0.3%) on the basis of carrying amounts.

Investment result

€m	2023	Prev. year
Regular income	2,938	2,342
Write-ups/write-downs	193	–1,224
Gains/losses on the disposal of investments	444	166
Other income/expenses	–584	–1,077
Total	**2,991**	**206**

The marked increase in the investment result in the reporting year can be attributed in particular to the fact that no diminishing one-off effects materialised. The previous year had been particularly affected, for example, by high impairment losses due to interest rate developments and by a considerable increase in the provision for anticipated losses from derivative financial instruments. We were also able to generate higher regular income in the reporting year.

Profit for the year

Munich Reinsurance Company generated a profit of €3,941m (1,095m) in the 2023 financial year, up significantly in a year-on-year comparison thanks not only to the encouraging business performance but also, and in particular, to an above-average investment result.

The increase in tax expenses compared to the previous year is attributable to the German parent company's higher tax burden and higher taxes incurred by the branches for the current year.

Financial position

Balance sheet structure of Munich Reinsurance Company

€m	2023	Prev. year	Change
	€m	€m	%
Intangible assets	104	119	–12.4
Investments	86,449	82,108	5.3
Receivables	21,774	22,968	–5.2
Other assets	1,117	1,223	–8.7
Deferred items	446	324	37.7
Excess of plan assets over pension liabilities	158	146	8.2
Total assets	**110,049**	**106,889**	**3.0**
Equity	15,288	13,975	9.4
Subordinated liabilities	4,632	4,671	–0.8
Technical provisions	72,409	70,011	3.4
Other provisions	2,858	2,920	–2.1
Deposits retained on retroceded business	2,578	2,851	–9.6
Other liabilities	12,267	12,441	–1.4
Deferred items	17	21	–15.4
Total equity and liabilities	**110,049**	**106,889**	**3.0**

In the 2023 financial year, Munich Reinsurance Company generated net retained profits of €2,011m (1,596m) according to German accountancy rules (HGB). Including these net retained profits, the Company's revenue reserves amounted to €7,864m (6,552m) as at the reporting date, of which €150m (177m) is subject to a restriction on distribution. The distributable earnings thus amount to €7,714m (6,375m).

The shareholders' equity of Munich Reinsurance Company as determined under German accountancy rules is protected against the risk of loss arising from a random accumulation of losses by the claims equalisation provision totalling €7,395m (7,671m). Given our robust capital position according to all calculation methods, we intend – subject to the approval of the Annual General Meeting – to pay our shareholders an increased dividend of €15.00 per share for the 2023 financial year, or €2,011m in total, from Munich Reinsurance Company's net retained profits.

The carrying amount of Munich Reinsurance Company's investments excluding deposits retained on assumed reinsurance increased to €77,053m (72,753m).

As at 31 December 2023, 87% of our fixed-interest securities were rated "A" or better. Overall, 97% of our fixed-interest securities were investment-grade at the reporting date.

Equity[1]

€m	2023	Prev. year
Issued capital	580	577
Capital reserve	6,845	6,845
Revenue reserves	5,853	4,957
Net retained profits	2,011	1,596
Equity	**15,288**	**13,975**

1 Information on Section 160(1) no. 2 of the German Stock Corporation Act (AktG) can be found in Note 6 of Munich Reinsurance Company's Annual Report 2023.

Pursuant to German commercial and company law, dividends and share buy-backs may only be paid out of profits and revenue reserves. Besides the expenses and income incurred in the current year, changes in the claims equalisation provision also have a significant influence on the level of profits for the year.

The claims equalisation provision is established for individual classes of property-casualty business. It serves to smooth significant fluctuations in loss experience over a number of years. Its recognition and measurement are governed by legal provisions.

If, in a given financial year, loss ratios in individual classes of business are significantly in excess of the long-term average (which amounts to 15 years in most classes), the claims equalisation provision is reduced and the above-average loss expenditure is largely offset. According to current calculations, it is expected that – given normal claims expenditure in the 2024 financial year – the amounts allocated will be moderate.

The target or maximum amount allowed for the claims equalisation provision, which is essentially calculated on the basis of earned premiums and the standard deviation of the loss ratio in the respective class of insurance, determines the amount of the annual non-performance-related allocation to the claims equalisation provision. The performance-related change in the claims equalisation provision is added to this figure in years in which claims experience is favourable (i.e. when the random occurrence of claims is below average), whereas amounts are withdrawn in years in which claims experience is adverse (i.e. the random occurrence of claims is above average).

The balance sheet item “Claims equalisation provision and similar provisions” decreased by €252m to €8,060m (8,313m) in the 2023 financial year. Owing to positive results, we had to allocate significant amounts to the claims equalisation provision in some classes of business – especially in fire €338m (−462m), credit €197m (221m), and marine €25m (−189m).

Due to negative results, the claims equalisation provision was reduced in the following classes of business: motor −€270m (−234m), third-party liability −€237m (381m), and aviation −€46m (44m).

In addition, owing to a reduction of the maximum amount, the claims equalisation provision in personal accident reinsurance was adjusted by −€284m (−35m).

As we ceased preparing separate profit and loss accounts in engineering and “Other classes” in the 2021 reporting year, we have no longer set a claims equalisation provision for these classes of business since then.

The current level of the claims equalisation provision is 100% of the legally stipulated maximum amount allowed in the personal accident class of business, and more than 50% in third-party liability, motor and credit.

Liquidity

Our liquidity is ensured at all times by means of detailed liquidity planning. As a rule, the Company generates significant liquidity from its premium income, from regular investment income and from investments that mature. We also attach great importance to the credit rating and fungibility of our investments. Given the maturity structure of the outstanding bonds and the credit facilities employed (which are, in any case, relatively insignificant in scope), there are no refinancing requirements.

Statement on Corporate Governance for the 2023 financial year pursuant to Section 289f and Section 315d of the German Commercial Code (HGB)

Munich Reinsurance Company has submitted the Statement of Corporate Governance pursuant to Section 289f of the Commercial Code (HGB), and the Group Statement of Corporate Governance in accordance with Section 315d of the Commercial Code. The statements have been combined and can be found in the “Corporate governance” section. Pursuant to Section 317(2) sentence 6 of the Commercial Code, the audit of statements by the auditors is limited to whether or not this has been done. The combined Statement on Corporate Governance can be found on the Munich Re website at www.munichre.com/cg-en.

Further information

Risks and opportunities

The business performance of Munich Reinsurance Company is largely subject to the same risks and opportunities as the performance of the reinsurance field of business presented in the consolidated financial statements. Munich Reinsurance Company generally participates in the risks of its shareholdings and subsidiaries in accordance with its respective percentage interest held. Munich Reinsurance Company is integrated in the Group-wide risk management system and internal control system of the Group. Further information is provided in the “Risk report” and in the “Opportunities report”.

Remuneration report of Munich Reinsurance Company

The principles regarding the structure and design of the compensation system of Munich Reinsurance Company correspond to those of the Group. Further information is provided in the Remuneration report at www.munichre.com/board-of-management.

Other information

On 31 December 2023, Munich Reinsurance Company had 4,716 employees.

Munich Reinsurance Company has branches in Australia, Canada, China, France, India, Italy, Japan, Malaysia, New Zealand, Singapore, South Korea, Spain and the United Kingdom.

Prospects

The projections by Munich Reinsurance Company about the future development of its business are essentially subject to the same influences as the reinsurance life and health and reinsurance property-casualty segments presented in the consolidated financial statements. You can find this information in “Outlook 2024”.

Against this background, Munich Reinsurance Company should post gross premium of around €33bn in the 2024 financial year – assuming that exchange rates remain constant. We expect the combined ratio to be at around the same level as in the reporting year. An accurate forecast is not possible, partly due to the obvious fluctuations in the incidence of major losses. Assuming average claims experience, we project that the underwriting result before claims equalisation provision for the 2024 financial year will be slightly higher than in the reporting year.

The investment result of Munich Reinsurance Company is expected to once again show positive development in the 2024 financial year. While we expect to report lower gains on disposals, we predict much higher income from affiliated companies in the year ahead.

All in all, as things stand at present, we expect to achieve a German GAAP (HGB) result in 2024 that is likely to be even higher than the already substantial result achieved in the reporting year.

Dr. Nikolaus von Bomhard
Chair of the Supervisory Board

Dear Readers,

In the 2023 financial year, the Supervisory Board fulfilled all the tasks and duties incumbent upon it by law and under the Articles of Association and the rules of procedure. The overall attendance rate of members at meetings of the Supervisory Board and its committees was 99.5%; an overview of attendance can be found at the end of the Report of the Supervisory Board and at www.munichre.com/supervisory-board. Most of the meetings of the full Supervisory Board and of the committees were held in person. A number of meetings were also held as virtual sessions using video calls or as hybrid meetings, i.e. with some members participating in person and others by video call.

We monitored the Board of Management in its conduct of the business, and gave advice on all matters of importance for the Group. No inspection measures in accordance with Section 111(2) sentence 1 of the German Stock Corporation Act (AktG) were required at any time.

Collaboration between Supervisory Board and Board of Management

The Board of Management punctually and directly involved the Supervisory Board in all important business transactions and decisions of fundamental significance for the Group. In our meetings, we discussed the reports from the Board of Management in detail. Cooperation with the Board of Management was characterised in every regard by targeted and responsible action aimed at promoting the successful development of Munich Re. The Board of Management satisfied its reporting obligations towards the Supervisory Board in all respects, both verbally and in writing.

Outside of Supervisory Board meetings, the Board of Management informed us promptly and extensively about important events in the Group. In addition, the shareholder representatives and the employee representatives met regularly with the Chair of the Board of Management, Joachim Wenning, for separate discussions in preparation for the meetings. The employee representatives also met with the Labour Relations Director, Achim Kassow, in July.

Between meetings, I had regular discussions with the Chair of the Board of Management. We discussed questions of strategic orientation, succession planning, risk management, compliance, the current business situation and the impact of geopolitical crises on Munich Re. Also between meetings, the Chair of the Audit Committee, Maximilian Zimmerer, remained in close contact with Chief Financial Officer Christoph Jurecka.

Focal points of the meetings of the full Supervisory Board

There were six meetings of the Supervisory Board in the reporting year. The meeting held on 22 February 2023 was via video conference; the other meetings were held in person. We regularly had in-depth discussions with the Board of Management about business performance and current topics, with a special focus on strategic considerations of the Board of Management with respect to the individual fields of business. The Board of Management reported to us regularly on Munich Re's investments, addressing developments in the global economy and financial markets in detail, as well as their impact on the Group's assets, financial position and results. In addition, we advised the Board of Management on matters of strategic importance for the future of the Group, with a particular focus last year on the innovation and growth strategies. Besides the above-mentioned issues, we dealt specifically with the following topics at the individual meetings in 2023:

The meeting on 22 February focused on the preliminary figures for the 2022 Company and Group financial statements and the Board of Management's proposal for appropriation of the net retained profits. We discussed and decided how to measure the annual bonus for 2022, the multi-year bonus for 2019–2022 and the resultant bonus payments to the Board of Management. At this meeting, we also approved the remuneration report of the Board of Management and the Supervisory Board for the 2022 financial year so that the report could be presented at the 2023 Annual General Meeting. The meeting also addressed the self-assessment that insurance supervisory law requires the members of the Supervisory Board to undertake concerning their knowledge of topics that are important for providing advice and supervision to the Munich Re Board of Management. The Supervisory Board also addressed the qualification matrix for the Supervisory Board derived from this self-assessment and to be disclosed in the Statement on Corporate Governance. The level of collective expertise on the Supervisory Board is high. The Supervisory Board possesses the appropriate diversity of qualifications, knowledge and experience to proficiently monitor Munich Re's business performance, taking account of the characteristics specific to the Company and the Group.

The meeting on 15 March focused, among other things, on the Company and Group financial statements for 2022, the Combined management report (including the Combined non-financial statement and information regarding the EU Taxonomy) and the Supervisory Board's motions for resolution by the Annual General Meeting. We also discussed and then took a decision on extending the appointments of the Board members Thomas Blunck and Stefan Golling, and confirmed their fitness and propriety within this context. In addition, we approved the appointment of Thomas Blunck as Chair of the Reinsurance Committee.

We used the meeting held on 5 May to make last-minute preparations for the Annual General Meeting, which was to take place as a virtual event on the same day. We also adopted a resolution on the update of the Declaration of Conformity in accordance with the German Corporate Governance Code (in German: DCGK) as amended on 28 April 2022.

On 26 July, the Board of Management provided us with information on the current strategy for ERGO International. It also reported on current reinsurance developments, as well as on the cyber insurance market and Munich Re's strategy in this regard.

On 26 October, we adapted the rules on fringe benefits, remuneration in kind and other regulations concerning members of the Board of Management. Topics related to corporate governance were on the agenda as usual, including the resolution regarding the Declaration of Conformity with the German Corporate Governance Code and the discussion of the self-assessment findings of the Supervisory Board and its committees in 2023. The Board of Management also supplied information on the growth strategies pursued by Global Specialty Insurance and the life and health reinsurance segment. Moreover, we received the Group-wide remuneration report for the 2022 financial year in line with Solvency II and the Remuneration Regulation for Insurance Companies (VersVergV) at this meeting.

On 14 December, we reviewed the compensation of the Board of Management and, following a comprehensive discussion, we established the target overall remuneration to be paid to members of the Board of Management with effect from 2024. We also adopted individual assessment bases for variable remuneration in 2024. During this meeting, the Group Chief Risk Officer updated us on the Group's risk situation. We also discussed and approved the financial planning for 2024, as presented by the Board of Management. Furthermore, the Board presented us with the Group human resources report, and explained the focal points of human resources work within the Group. We also received updates on the Group's investment strategy, also concerning sustainable investments.

Work of the committees

There are six Supervisory Board committees. These are assigned certain matters for resolution, and also prepare the topics which are to be addressed and decided upon by the full Supervisory Board. At each Supervisory Board meeting, detailed information about the work of the committees was provided to the full Supervisory Board by the respective chairs of the committees.

Details of the tasks of the committees and their composition are included in the Statement on Corporate Governance and on our website at www.munichre.com/supervisory-board.

The Personnel Committee met three times during the reporting period. Two meetings were held in person; the other was a hybrid meeting. The Committee essentially prepared resolutions on matters involving the Board of Management, unless these fell under the remit of the Remuneration Committee. One focus of the Personnel Committee's work was on preparing the confirmation of fitness and propriety required for the extension of two current Board of Management members' appointments. In addition, it approved the assumption of mandates on supervisory, advisory and similar boards by members of the Board of Management. Under consideration of aspects of diversity, the Personnel Committee also addressed Group-wide succession planning for Board of Management positions.

The Remuneration Committee met five times in the period under review, holding three in-person and two hybrid meetings. In particular, it prepared resolutions on the matters involving the Board of Management already mentioned above on the work of the full Supervisory Board, as far as these resolutions concerned the determination of the target overall remuneration, the establishment of the assessment basis for variable remuneration and the corresponding evaluation, fringe benefits and remuneration in kind, or the sections of the Board members' contracts relating to remuneration. The Committee adopted the proposal to be made to the full Supervisory Board regarding the approval of the remuneration report of the Board of Management and the Supervisory Board for presentation at the Annual General Meeting.

The Praesidium and Sustainability Committee held six meetings, five times in person and once as a hybrid event. It made preparations for each Supervisory Board meeting and, in particular, addressed topics of corporate governance and sustainability strategy. The Committee prepared, among other items, the assessment of the effectiveness of the Supervisory Board as a whole and its committees (self-assessment). It also approved the resolution passed by the Board of Management on implementation of the 2023/2024 share buy-back programme. The Committee addressed relevant sustainability issues on a regular basis at its meetings. At the Committee's July meeting, the Chief Financial Officer reported on the latest sustainability reporting developments. In addition, the Praesidium and Sustainability Committee assessed related-party transactions in an internal procedure as per Section 111a(2) of the German Stock Corporation Act (AktG). The Chair of the Board of Management regularly provided information to the Committee about the shareholder structure and the current share buy-back programme.

In the reporting period, the Audit Committee held seven meetings, with all meetings being held in person. The external auditor attended all of the meetings. At the meeting held on 22 February 2023, the Audit Committee discussed the preliminary year-end figures as at 31 December 2022, along with the Board of Management's proposal for appropriation of the net retained profits for the 2022 financial year. On 14 March 2023, the Audit Committee took an in-depth look at the Munich Reinsurance Company and Group financial statements, the Combined management report and the auditor's reports. On 3 May 2023, the Audit Committee also held a special session to obtain detailed information on the impact of the new IFRS 9 and IFRS 17 accounting standards.

In the reporting period, the Committee also discussed in detail the quarterly statements for the first and third quarters of 2023, and reviewed both the 2023 Half-Year Financial Report and the findings of the external auditor's review. At these meetings, the Audit Committee also heard regular reports on the key Solvency II figures and discussed the quarterly reporting to the supervisory authority. Other key tasks of the Audit Committee consisted in monitoring the Group's risk situation and risk management on an ongoing basis, and discussing the risk strategy. In addition to the Group Chief Risk Officer's quarterly written reports, the Committee also obtained detailed verbal information from the Group CRO on several occasions. The Head of the Actuarial Function reported on the Group Actuarial Function Report 2022 at the meeting held on 9 August 2023. There were regular discussions about the internal control system and compliance topics – particularly individual compliance violations that were presented to the Audit Committee. The Group Chief Auditor comprehensively informed the members of the Committee about the outcome of the audits for 2022 and, throughout the year, reported on the results of the 2023 audits and on the audit planning for 2023 and 2024. Without the Board of Management in attendance, Committee members took the opportunity to regularly confer amongst themselves or with the Group Chief Auditor, the Group Chief Compliance Officer, the Group Chief Risk Officer, or the external auditor.

The Chair of the Audit Committee also held a meeting to conduct a bilateral discussion with the Group Chief Auditor.

In addition, the Audit Committee and the external auditor exchanged views on selected topics on an ad-hoc basis between meetings. The Chair of the Audit Committee, Maximilian Zimmerer, also consulted with the auditor on a regular basis between meetings. The Chair discussed, among other things, the progress of the audit with the auditor, and then reported to the Committee.

The Audit Committee closely reviewed and monitored the auditor's independence. It regularly called for reports on the auditor's non-audit activities and on the utilisation of the statutory limit for awarding such contracts. Moreover, the Audit Committee and the auditor discussed the assessment of audit risk, the audit strategy, audit planning and the audit findings. The auditor also presented the Audit Committee with explanations of the key audit matters for the 2023 financial year. The Audit Committee regularly assessed the quality of the audit. The Committee is satisfied with the qualifications and integrity of the persons on the audit team of EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft (EY). Within this context, Munich Re and EY discuss the composition of the audit team at least once a year. In addition, the Audit Committee prepared for the full Supervisory Board the proposal for the Annual General Meeting to appoint the external auditor. Following a resolution adopted at the Annual General Meeting, the Chair of the Committee commissioned EY, Munich with the audit for the 2023 financial year and also commissioned EY to conduct the auditor's review of the 2023 Half-Year Financial Report. Furthermore, the Audit Committee defined focal points of the audits and set the auditor's fee. The Audit Committee also discussed, and took a decision on, an invitation for tenders for the auditor's mandate for the financial years from 2026 onwards.

The Nomination Committee met twice in the reporting period, with both meetings being held in person. The Nomination Committee prepared for the Supervisory Board elections to be held at the 2024 Annual General Meeting, also addressing this matter between meetings. In preparation for the election of ten shareholder representatives to the Supervisory Board, the Nomination Committee prepared requirement profiles and discussed the re-election of Supervisory Board members, as well as suitable candidates to succeed Supervisory Board members who would be leaving. In looking for and evaluating candidates, the Nomination Committee was also guided by the objectives determined by the Supervisory Board regarding its composition, the competence profile for the overall Supervisory Board, and the criteria for the shareholder representatives. Suitable candidates with excellent profiles were identified for each member who would be leaving. The Nomination Committee also prepared nominations for the election of shareholder representatives to the Supervisory Board committees.

As in previous years, there was no need to convene the Conference Committee in the 2023 financial year.

Corporate governance and Declaration of Conformity

The Supervisory Board works to ensure good corporate governance. Further information on corporate governance and the Declaration of Conformity can be found in the Statement on Corporate Governance.

In accordance with their own assessment, all ten shareholder representatives are independent within the meaning of the German Corporate Governance Code.

In order to avoid even the semblance of work or decision-making processes being influenced by personal interests, each member of the Supervisory Board promptly discloses any conflicts of interest. Where a current Supervisory Board member was on the Board of Management during a period which is currently being dealt with by the Supervisory Board, the member in question does not participate in any of the discussions of the matter or in any related resolutions. This was the approach I took for one agenda item in the 2023 financial year.

The Supervisory Board also met regularly without the Board of Management.

Members of the Supervisory Board were invited to participate in two information events in 2023. Nearly all members used the opportunity to learn more about the new IFRS 9 and IFRS 17 accounting standards in May, and about sustainability issues that are relevant for Munich Re, liability risks, legal disputes and insurance solutions related to climate change, as well as cyber and information security at Munich Re, in July.

The Company also provides the members of the Supervisory Board with extensive digital training material for self-study, focusing on underwriting, risk management, accounting, investment, controlling, sustainability and digitalisation. New members of the Supervisory Board receive specially compiled informational material to prepare for their new role.

As I do every year in the lead-up to the Annual General Meeting, I spoke – in my role as Chair of the Supervisory Board – with investors and proxy advisers at the beginning of 2024; as part of an ongoing dialogue with investors about topics relevant to the Supervisory Board, we discussed the remuneration of Board of Management members, the work and composition of the Supervisory Board and its committees, and the upcoming elections of shareholder representatives by the 2024 Annual General Meeting, among other topics.

Changes on the Supervisory Board

Ruth Brown left the Supervisory Board, effective 2 January 2024, upon the transfer of the British DAS companies to ARAG SE. Her successor is Andrea Maier, who was appointed by a court of law.

The Supervisory Board would like to thank Ruth Brown for her constructive consulting for Munich Re.

Company and Group financial statements for 2023, Solvency II reporting and non-financial information

The external auditor EY duly audited the annual financial statements of Munich Reinsurance Company, the Group financial statements and the Combined management report as at 31 December 2023, and issued them with an unqualified auditor's opinion. The German Public Auditor responsible for the engagement is Thomas Kagermeier.

These reports and the Board of Management's proposal for appropriation of the net retained profits were submitted to the members of the Supervisory Board. On 26 February 2024, the Audit Committee thoroughly discussed the preliminary year-end figures as at 31 December 2023, along with issues related to capital management, in particular regarding the dividend distribution and share buy-backs.

At its meeting on 26 February 2024, the Supervisory Board also intensively discussed the preliminary year-end figures as at 31 December 2023, along with the capital repatriation policy. On 12 March 2024, the Audit Committee prepared the Supervisory Board's resolution on the adoption of the Company financial statements and the approval of the Group financial statements. To this end, the Audit Committee examined in advance the Company and Group financial statements, the Combined management report and the Board of Management's proposal for appropriation of the net retained profits. The Committee also examined the Combined non-financial statement (a section of the Combined management report), including information regarding the EU Taxonomy. The Audit Committee discussed both documents at length with the external auditor present at the meeting, and addressed the auditor's reports in detail. The Audit Committee paid particular attention to the key audit matters described in the auditor's report, including audit activity. The Chair of the Audit Committee briefed the full Supervisory Board about the outcome of its deliberations. In its March meeting, the Audit Committee discussed the preliminary key figures under Solvency II reporting – and the Solvency II ratio in particular – and reported on this to the full Supervisory Board.

The full Supervisory Board also checked the financial statements of Munich Reinsurance Company and the Group, and the Combined management report (including the Combined non-financial statement and information regarding the EU Taxonomy), as well as the Board of Management's proposal for appropriation of the net retained profits. The auditor's reports were available to all members of the Supervisory Board and were discussed in detail at the meeting of the Supervisory Board on 13 March 2024 in the presence of the external auditor. The audit findings regarding the Combined non-financial statement were also considered by the Supervisory Board. The external auditor reported on the scope, the main points, and the key findings of the audit – and went into particular detail on both the key audit matters and the audit activity. There were no reports of material weaknesses in the internal control system or the risk management system.

More information on the internal control system and the risk management system can be found in the Risk report and in the Combined non-financial statement.

On the basis of this comprehensive examination, the Supervisory Board raised no objections concerning the outcome of the external audit. It approved the Company and Group financial statements on 13 March 2024. The financial statements were thus adopted. Having carefully weighed all relevant aspects, the Supervisory Board supported the Board of Management's proposal for appropriation of the net retained profits.

Words of thanks to the Board of Management and employees

The Supervisory Board wishes to thank all members of the Board of Management and staff worldwide. Through their hard work and commitment, they have contributed to a very gratifying result for Munich Re.

Munich, 13 March 2024

For the Supervisory Board

Nikolaus von Bomhard
Chair

Attendance of Supervisory Board members at meetings of the Supervisory Board of Munich Reinsurance Company and its committees in 2023

Member of the Supervisory Board	Supervisory Board	Participation rate Supervisory Board	Personnel Committee	Remuneration Committee	Praesidium and Sustainability Committee	Audit Committee	Nomination Committee
Nikolaus von Bomhard	6/6	100%	3/3		6/6	7/7	2/2
Anne Horstmann	6/6	100%			6/6		
Ann-Kristin Achleitner	6/6	100%		5/5		6/7	2/2
Clement Booth	6/6	100%					
Ruth Brown	6/6	100%					
Stephan Eberl	6/6	100%	3/3	5/5	6/6		
Frank Fassin	6/6	100%					
Ursula Gather	6/6	100%					
Gerd Häusler	6/6	100%			6/6		
Angelika Judith Herzog	6/6	100%					
Renata Jungo Brüngger	6/6	100%	3/3	5/5			
Stefan Kaindl	6/6	100%				7/7	
Carinne Knoche-Brouillon	6/6	100%					
Gabriele Mücke	6/6	100%					
Ulrich Plottke	6/6	100%				7/7	
Manfred Rassy	6/6	100%					
Carsten Spohr	6/6	100%					
Karl-Heinz Streibich	6/6	100%					
Markus Wagner	6/6	100%					
Maximilian Zimmerer	6/6	100%			6/6	7/7	2/2
Participation rate (average)		**100%**	**100%**	**100%**	**100%**	**97%**	**100%**

Statement on Corporate Governance pursuant to Section 289f and Section 315d of the German Commercial Code (HGB)[1]

Pursuant to Section 289f and Section 315d of the German Commercial Code (HGB), Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company Joint-Stock Company in Munich) has issued the following Statement on Corporate Governance and Group Statement on Corporate Governance. This Statement also contains the disclosures and explanatory notes as recommended in the German Corporate Governance Code of 28 April 2022 (published on 27 June 2022). More information on corporate governance can be found at www.munichre.com/cg-en.

We apply the highest standards to our operations and activities and therefore comply with all but one of the recommendations and proposals of the German Corporate Governance Code. There are no overriding statutory provisions that render the recommendations and suggestions of the German Corporate Governance Code not applicable to Munich Reinsurance Company.

Declaration of Conformity by the Board of Management and Supervisory Board of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act

Since the last Declaration of Conformity in November 2022, Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München ("Company") has fulfilled all recommendations of the German Corporate Governance Code of 28 April 2022 (published on 27 June 2022, "GCGC") and will continue to do so in future. An exception applies to recommendation C.5 and another exception applied once, limited to the quarterly statement Q1 2023, for recommendation F.2.

Recommendation C.5 GCGC: Number of supervisory board mandates

In accordance with recommendation C.5, members of the management board of a listed company shall not have, in aggregate, more than two supervisory board mandates in non-group listed companies or comparable functions, and shall not accept the chairmanship of a supervisory board in a non-group listed company.

The Supervisory Board member Renata Jungo Brüngger sits on the Board of Management of Mercedes-Benz Group AG. Following restructuring measures, Ms. Jungo Brüngger has accepted two supervisory board memberships at companies that, in the view of Mercedes-Benz Group AG, are to be classified as non-group companies. Firstly, she is a supervisory board member of Daimler Truck AG. Secondly, she is a supervisory board member of the listed company Daimler Truck Holding AG, which holds all shares in Daimler Truck AG.

The Supervisory Board has satisfied itself that Ms. Jungo Brüngger will continue to have enough time to fulfil her tasks at the Company.

Recommendation F.2 GCGC: Quarterly Statement for Q1 2023

In accordance with recommendation F.2, mandatory interim financial information shall be made available to the public no later than 45 days after the end of the reporting period. This deadline applies inter alia to quarterly statements as per Section 53 of the Frankfurt Stock Exchange Rules.

In the course of the first time application of the reporting standards IFRS 9 and IFRS 17, the Company has published its quarterly statement for Q1 2023 47 days after the end of the reporting period. The publication of the 2023 Half-Year Financial Report was again published within the 45-day deadline provided for in the GCGC.

Munich, November 2023

The Board of Management   The Supervisory Board

1 The Statement on Corporate Governance is part of the combined management report and was not audited.

Corporate legal structure

Munich Reinsurance Company has three governing bodies: the Annual General Meeting, the Board of Management, and the Supervisory Board. Their functions and powers are defined by law, the Articles of Association, the Co-Determination Agreement applicable to Munich Reinsurance Company, and by rules of procedure and internal guidelines. Employee co-determination on the Supervisory Board is governed by the Co-Determination Agreement concluded pursuant to the German Act on the Co-Determination of Employees in Cross-Border Mergers (MgVG). The principle of parity co-determination on the Supervisory Board has been strengthened by taking into account staff employed in the European Union and in the European Economic Area (EU/EEA).

Additional corporate governance requirements are set out in the regulatory requirements for (re)insurance companies, especially the German Insurance Supervision Act (VAG) and the European supervisory regulations (Solvency II). They include specific and supplementary rules on various issues such as business organisation or the qualifications and remuneration of members of the Board of Management, Supervisory Board members and other individuals.

The Annual General Meeting

The Annual General Meeting decides on the appropriation of net retained profits, the approval of the actions of the Board of Management and Supervisory Board, the election of the auditor, the election of shareholder representatives to the Supervisory Board, amendments to the Articles of Association and capital measures, among other things.

The principle of “one share, one vote” applies at the Annual General Meeting of Munich Reinsurance Company. Shareholders may cast their votes by postal vote (also via electronic means of communication). In addition, shareholders may cast or change their postal votes on the day of the Annual General Meeting.

Shareholders may also have their voting rights exercised at the Annual General Meeting by one of the proxies nominated by Munich Reinsurance Company. These proxies will exercise the voting rights solely in accordance with the instructions they receive from the shareholders. Power of attorney and instructions may also be issued to the Company proxies via electronic means of communication. Shareholders may grant, issue, change or revoke power of attorney or instructions on the day of the Annual General Meeting. Shareholders may watch the whole Annual General Meeting live on the internet. In addition, the opening of the Annual General Meeting by the meeting chair and the address by the Chair of the Board of Management are broadcast live online.

The documents required by law for the Annual General Meeting, including the Annual Report, and the agenda will be available on the Munich Re website with effect from the day the Annual General Meeting is called.

The Annual General Meeting on 5 May 2023 was held as a Virtual Annual General Meeting without the physical attendance of the shareholders or their proxies (with the exception of the proxies appointed by the Company) in accordance with section 118a of the German Stock Corporation Act in conjunction with section 26n, paragraph 1 of the Introductory Act to the German Stock Corporation Act (in German: EGAktG).

On the basis of the resolution by the Annual General Meeting on 5 May 2023, the Articles of Association were amended to authorise the Board of Management to provide for holding the General Meeting without the shareholders or their proxies being physically present at the location of the General Meeting (Virtual General Meeting). The authorisation applies to General Meetings held during a period of two years after the entry of this provision of the Articles of Association in the commercial register. The entry was made in the commercial register on 20 June 2023.

Board of Management

As at 31 December 2023, the Board of Management of Munich Reinsurance Company comprised ten members, including two women.

Responsibilities of the members of the Board of Management and their memberships of statutory supervisory boards and comparable bodies[1]

Member of the Board of Management/Responsibilities	Memberships of statutory supervisory boards	Memberships of comparable bodies of German and foreign business enterprises
Dr. Joachim Wenning Chair of the Board of Management Strategy & Innovation Group Communications Group Audit Economics, Sustainability & Public Affairs[3] Group Executive Affairs Group Compliance and Legal	ERGO Group AG[2] (Chair)	–
Dr. Thomas Blunck Data and Analytics Internet of Things Corporate Underwriting Claims Accounting, Controlling and Central Reserving for Reinsurance Information Technology	ERGO Group AG[2] ERGO Digital Ventures AG[2] ERGO International AG[2]	–
Nicholas Gartside Chief Investment Officer Group Investments Third Party Asset Management	MEAG MUNICH ERGO AssetManagement GmbH[2] (Chair)	–
Stefan Golling Global Clients and North America Capital Partners	–	Munich Re America Corporation, USA[2] (Chair)
Dr. Christoph Jurecka Chief Financial Officer Financial and Regulatory Reporting Corporate Finance and Performance Integrated Risk Management Group Taxation Investor and Rating Agency Relations	ERGO Group AG[2] MEAG MUNICH ERGO AssetManagement GmbH[2]	–
Dr. Achim Kassow Labour Relations Director Asia Pacific and Africa Human Resources Central Procurement Global Real Estate and Services	ERGO International AG[2]	–
Michael Kerner Global Specialty Insurance	Great Lakes Insurance SE[2] (Chair)	American Modern Property and Casualty Insurance Company, USA[2] (Chair) The Hartford Steam Boiler Inspection and Insurance Company, USA[2] (Chair) Munich Re America Corporation, USA[2] Munich Re America Services Inc., USA[2] (Chair) Munich Reinsurance America, Inc., USA[2] (Chair)
Clarisse Kopff Europe and Latin America	–	–
Mari-Lizette Malherbe Life and Health	–	–
Dr. Markus Rieß Primary Insurance/ERGO	ERGO Deutschland AG[2] (Chair) ERGO Digital Ventures AG[2] (Chair) ERGO International AG[2] (Chair) ERGO Technology & Services Management AG[2] (Chair)	Next Insurance, Inc., USA

1 As at 31 December 2023.
2 Position held within the Munich Re Group.
3 Including responsibility for ESG issues.

The Board of Management is responsible for managing the Company, in particular for setting the Company's objectives and determining strategy. It is bound to act in the Company's best interests. It should take account of the interests of shareholders, employees, and other stakeholders of Munich Reinsurance Company, with the objective of sustainable value creation. The Board of Management is responsible for effecting adequate risk management and risk control. It must ensure that statutory requirements and internal Company rules are observed, and works to ensure compliance by Group companies and their staff members.

Compliance

We understand compliance to mean acting in accordance with the law, administrative regulations and internal rules – particularly all requirements that apply to the operation of an insurance and investment business. Compliant conduct is made possible by a defined reference framework, comprising our Munich Re Code of Conduct and guidelines that apply throughout the Munich Re Group.

Established by the Board of Management of Munich Reinsurance Company, our Group-wide, risk-based compliance management system (CMS) constitutes the methodological basis for the structured implementation of the early-warning, risk-control, advising and monitoring functions. The compliance function oversees the development, implementation, monitoring and ongoing improvement of the Group-wide CMS. Please refer to the "Combined non-financial statement" and the "Risk report" for details on CMS and our whistleblowing portal, a platform that enables internal and external whistleblowers to report potential misconduct.

Further information on compliance at Munich Re can be found at www.munichre.com/en/compliance.

Working procedures of the Board of Management

The work of the Board of Management, in particular the allocation of responsibilities among the individual Board members, matters reserved for the full Board of Management, and the majority required to pass resolutions, is regulated by rules of procedure issued by the Supervisory Board. The full Board of Management decides on all matters that, either by law, or according to the Articles of Association or rules of procedure, require a resolution of the Board of Management. In particular, it is responsible for matters requiring the approval of the Supervisory Board, for items which have to be submitted to the Annual General Meeting, for tasks which constitute management functions or are of exceptional importance, and for significant personnel measures.

Meetings of the Board of Management take place as required, but generally at least once a month, and are presided over by the Chair of the Board of Management. The adoption of a resolution requires the majority of votes cast; in the event of a tie, the Chair has the casting vote. The members of the Board of Management cooperate closely for the benefit of the Company. On an ongoing basis, they inform each other about all important business transactions.

Composition and working procedures of the Board of Management committees

Three Board of Management committees ensure efficient work by the Board of Management: the Group Committee, the Reinsurance Committee, and the Strategy Committee.

Composition of the Board of Management committees[1]

Group Committee	Dr. Joachim Wenning (Chair) Dr. Christoph Jurecka
Reinsurance Committee	Dr. Thomas Blunck (Chair) Stefan Golling Dr. Achim Kassow Michael Kerner Clarisse Kopff Mari-Lizette Malherbe Chief Financial Officer for the reinsurance field of business[2]
Strategy Committee	Dr. Joachim Wenning (Chair) Dr. Thomas Blunck Nicholas Gartside Dr. Christoph Jurecka Dr. Markus Rieß

1 As at 31 December 2023.
2 No voting rights.

Group Committee

The Group Committee is the central management committee of the Group. It decides in particular on fundamental issues concerning the strategic and financial management of the Group for all fields of business, and on the principles of general business policy and organisation within the Group. The Committee also makes decisions on all matters of fundamental importance relating to the divisions headed by its voting members. In addition, it serves as an executive committee with responsibility for important ongoing issues, in particular the approval of significant individual transactions.

Reinsurance Committee

The Reinsurance Committee is the central management committee for the reinsurance field of business. It decides on all matters of fundamental importance for this field of business, except investments.

Strategy Committee

The Strategy Committee is the central management committee for fundamental strategic matters in the fields of business (reinsurance, primary insurance). It makes decisions on all strategic matters of fundamental importance for the fields of business, including own investments and administered (third-party) funds.

The following applies to all Board of Management committees: Where decisions within the sphere of responsibility of a committee relate to issues reserved for the full Board of Management, the respective committee will prepare these matters for decision. Committee meetings are held regularly, and as required. Only members of the Board of Management have voting rights on the committees. The committees are further governed by their respective rules of procedure, as adopted by the full Board of Management.

Subcommittees of the Board of Management Committees

All three Board committees have set up subcommittees. Specifically, the Group Committee has established the Group Risk Committee; the Reinsurance Committee has set up the Global Underwriting and Risk Committee as well as the Board Committee IT Investments; and the Strategy Committee has established the ESG Committee. These subcommittees also include senior executives from Munich Reinsurance Company and the Group who do not have voting rights.

Subcommittees of the Board of Management committees[1]

Group Risk Committee	Dr. Christoph Jurecka (Chair) Dr. Joachim Wenning Chief Risk Officer (Group)[2]
Global Underwriting and Risk Committee	Dr. Thomas Blunck (Chair) Stefan Golling Mari-Lizette Malherbe Chief Financial Officer for the reinsurance field of business[2] Chief Risk Officer (Group)[2] Head of Investment Strategies[2] Head of CU (Corporate Underwriting)[2]
ESG Committee	Dr. Joachim Wenning (Chair) Dr. Thomas Blunck Nicholas Gartside Dr. Christoph Jurecka Dr. Markus Rieß Head of Economics, Sustainability and Public Affairs[2]
Board Committee IT Investments	Dr. Thomas Blunck (Chair) Stefan Golling Dr. Achim Kassow Chief Financial Officer for the reinsurance field of business[2]

1 As at 31 December 2023.
2 No voting rights.

The work of these subcommittees is governed by their own written rules of procedure. Both the Group Risk Committee and the Global Underwriting and Risk Committee deal with risk management issues, albeit with different emphases. The Board Committee IT Investments is responsible for IT investments. The ESG Committee is the central management committee for fundamental, ESG-related strategic matters in the Group.

Remuneration of the members of the Board of Management

The remuneration system for members of the Board of Management is determined by the Supervisory Board and the Annual General Meeting is asked to endorse the system upon any material change and at least every four years. This was most recently the case on 28 April 2021. The remuneration report contains detailed information on the remuneration paid to the members of the Board of Management.

The remuneration system for members of the Board of Management and the remuneration report (which must be submitted to the Annual General Meeting for approval once a year) along with the Auditor's opinion are available at www.munichre.com/board-of-management.

Collaboration between Board of Management and Supervisory Board

The Board of Management and the Supervisory Board work together closely and in a spirit of trust for the benefit of the Company.

The Board of Management determines the strategic direction of the Company in conjunction with the Supervisory Board. The Board of Management reports regularly and as needed to the Supervisory Board about all questions relevant to the Company. The Chair of the Supervisory Board maintains regular contact with the Board of Management between meetings – in particular with the Chair of the Board of Management – in order to discuss issues of strategy, planning, business development, the risk situation, risk management and Company compliance. The Supervisory Board has defined the Board of Management's information and reporting obligations in detail. The Supervisory Board's consent is required before the Board of Management can conduct specific types of transactions, which include the following: annual financial planning, certain investments and divestments, the implementation of share buy-back programmes, the conclusion of inter-company agreements, and the execution of corporate restructurings in which the Company holds a stake. The Supervisory Board's approval is also required for sideline activities assumed by members of the Board of Management and for material related-party transactions as defined in Section 111b(1) of the German Stock Corporation Act (AktG).

Supervisory Board

Pursuant to the Articles of Association, the Supervisory Board of Munich Reinsurance Company comprises twenty members; half are shareholder representatives and are elected by the Annual General Meeting. The other ten members are elected employee representatives from Group companies in the EU and EEA.

Members of the Supervisory Board and their mandates on statutory supervisory boards and comparable bodies[1]

Member of the Supervisory Board	Memberships of statutory supervisory boards	Memberships of comparable bodies of German and foreign business enterprises
Dr. Nikolaus von Bomhard (Chair) Chair of the Supervisory Board of Munich Reinsurance Company Member since 30 April 2019	Deutsche Post AG (Chair)[4]	Athora Holding Ltd., Bermuda (Chair)[6, 9]
Dr. Anne Horstmann[2] (Deputy Chair) Employee of ERGO Group AG Member since 30 April 2014	ERGO Group AG[3]	–
Prof. Dr. Dr. Dr. h.c. Ann-Kristin Achleitner Member of the Board of Directors of Linde plc, Ireland Member since 3 January 2013	–	Lazard Ltd., USA[4] Linde plc, Ireland[4] Luxembourg Investment Company 261 S.à r.l., Luxembourg[5]
Clement B. Booth Member of the Board of Directors of Howden Group Holdings Limited, United Kingdom Member since 27 April 2016	Howden Deutschland AG [6, 7]	Howden Group Holdings Limited, United Kingdom
Ruth Brown[2] Foreign Services Specialist at DAS Legal Expenses Insurance Member from 30 April 2019 until 2 January 2024	–	–
Stephan Eberl[2] Member of the Staff Council of Munich Reinsurance Company Member since 30 April 2019	–	–
Frank Fassin[2] Independent consultant Member since 22 April 2009	–	–
Prof. Dr. Dr. h.c. Ursula Gather Chair of the Board of Trustees of the Alfried Krupp von Bohlen und Halbach Foundation Member since 30 April 2014	thyssenkrupp AG[4]	–
Gerd Häusler Member of the Supervisory Board of Auto1 Group SE Member since 30 April 2014	Auto1 Group SE[4]	–
Angelika Judith Herzog[2] Chair of the Staff Council of ERGO Direkt AG Member since 1 July 2021	–	–
Renata Jungo Brüngger Member of the Board of Management of Mercedes-Benz Group AG Member since 3 January 2017	Daimler Truck Holding AG[4, 8] Daimler Truck AG	–
Stefan Kaindl[2] Head of Department at Munich Reinsurance Company Member since 30 April 2019	–	–

See the end of the table for footnotes.

Member of the Supervisory Board	Memberships of statutory supervisory boards	Memberships of comparable bodies of German and foreign business enterprises
Dr. Carinne Knoche-Brouillon Member of management of C.H. Boehringer Sohn AG & Co. KG Member since 28 April 2021	–	–
Andrea Maier[2] Employee of Munich Re of Malta p.l.c. Member since 2 February 2024	–	–
Gabriele Mücke[2] Chair of the Board of Management of Neue Assekuranz Trade Union – NAG Member since 30 April 2019	–	–
Ulrich Plottke[2] Employee of ERGO Group AG Member since 30 April 2014	–	–
Manfred Rassy[2] Member of the Staff Council of Munich Reinsurance Company Member since 30 April 2019	–	–
Carsten Spohr Chair of the Board of Management of Deutsche Lufthansa AG Member since 29 April 2020	–	–
Karl-Heinz Streibich Member of the Supervisory Board of Deutsche Telekom AG (Deputy Chair of the Supervisory Board of Siemens Healthineers AG since 15 February 2023) Member since 30 April 2019	Siemens Healthineers AG[4] Deutsche Telekom AG[4]	–
Markus Wagner[2] Employee of ERGO Beratung und Vertrieb AG Member since 1 February 2022	ERGO Beratung und Vertrieb AG[3]	–
Dr. Maximilian Zimmerer Member of the Supervisory Board of Munich Reinsurance Company Member since 4 July 2017	Deutsche Beteiligungs AG[4] Investmentaktiengesellschaft für langfristige Investoren TGV (Chair)[6, 9]	KfW Capital GmbH & Co. KG[10]

1 As at 31 December 2023, unless stated otherwise.
2 Employee representative.
3 Mandate within the Munich Re Group.
4 Listed on the stock exchange.
5 Membership of a non-statutory supervisory board.
6 Company with fewer than 500 employees.
7 Mandate within Howden Group Holdings Limited.
8 Daimler Truck Holding AG holds all shares in Daimler Truck AG.
9 Until 31 December 2023.
10 From 11 March 2024.

The Supervisory Board advises the Board of Management and monitors the management of the Company, but it is not authorised to take management action in place of the Board of Management.

Working procedures of the Supervisory Board

The Supervisory Board has its own rules of procedure, which specify responsibilities, work processes and further modalities for the adoption of resolutions. The Audit Committee also has its own rules of procedure, which have been adopted by the full Supervisory Board.

The rules of procedure for the Supervisory Board and for the Audit Committee are available on the Munich Re website at www.munichre.com/supervisory-board.

The Supervisory Board normally meets at least six times during the financial year. Supervisory Board meetings are generally held with the members of the Supervisory Board personally present at the meeting (face-to-face meeting). If the Chair of the Supervisory Board so rules, meetings of the Supervisory Board may also be held using electronic media, and individual members of the Supervisory Board may attend meetings via electronic media. The members of the Board of Management attend the meetings of the Supervisory Board unless the Chair of the Supervisory Board decides otherwise. If the external auditor is consulted as an expert appraiser, the Board of Management does not attend this meeting unless the Supervisory Board considers the Board of Management's attendance to be necessary. The Supervisory Board also meets regularly without the Board of Management.

The Supervisory Board is quorate if all its members have been invited to the meeting or called upon to vote, and if fifteen members – or ten members including the Chair – participate in the vote. Supervisory Board resolutions are adopted by a majority of votes cast, unless the law or the Articles of Association require otherwise. In the event of a Supervisory Board vote being tied, should a second vote on the same motion also result in a tie, the Chair of the Supervisory Board has a casting vote. The Chair is authorised to make declarations for the Supervisory Board based on resolutions.

Self-assessment

The Supervisory Board and its committees regularly assess how effectively the Supervisory Board as a whole and also its individual committees perform their duties. Following preparations by the Praesidium and Sustainability Committee in 2023, the Supervisory Board conducted an internal self-assessment based on a questionnaire. The Supervisory Board thoroughly discussed the findings of the self-assessment at its meeting on 26 October 2023. The self-assessment confirmed that the working relationships within the Supervisory Board and with the Board of Management are professional and constructive, and characterised by a high degree of trust and candour. In addition, the findings documented the efficient organisation and execution of meetings, as well as appropriate reporting by the Board of Management. There was no indication of any fundamental need for change. A few optimisation measures were identified and are being put into practice.

Composition and working procedures of the Supervisory Board committees

The Supervisory Board has set up six committees from among its members: the Praesidium and Sustainability Committee, the Personnel Committee, the Remuneration Committee, the Audit Committee, the Nomination Committee and the Conference Committee.

The committees adopt decisions by the majority of votes cast. With the exception of the Conference Committee, the chair of the committee has a casting vote in case of a tie. The full Supervisory Board is regularly informed about the work of the committees by their respective chairs.

Composition of the Supervisory Board committees[1]

Praesidium and Sustainability Committee	Dr. Nikolaus von Bomhard (Chair) Stephan Eberl Gerd Häusler Dr. Anne Horstmann Dr. Maximilian Zimmerer
Personnel Committee	Dr. Nikolaus von Bomhard (Chair) Stephan Eberl Renata Jungo Brüngger
Remuneration Committee	Prof. Dr. Dr. Dr. h.c. Ann-Kristin Achleitner (Chair) Stephan Eberl Renata Jungo Brüngger
Audit Committee	Dr. Maximilian Zimmerer (Chair) Prof. Dr. Dr. Dr. h.c. Ann-Kristin Achleitner Dr. Nikolaus von Bomhard Stefan Kaindl Ulrich Plottke
Nomination Committee	Dr. Nikolaus von Bomhard (Chair) Prof. Dr. Dr. Dr. h.c. Ann-Kristin Achleitner Dr. Maximilian Zimmerer
Conference Committee	Dr. Nikolaus von Bomhard (Chair) Frank Fassin Dr. Anne Horstmann Dr. Maximilian Zimmerer

1 As at 31 December 2023.

Further details of the work of the Supervisory Board committees can be found in the report of the Supervisory Board and at www.munichre.com/supervisory-board.

The main responsibilities of the committees are as follows:

Praesidium and Sustainability Committee

The Praesidium and Sustainability Committee prepares meetings of the Supervisory Board, unless another committee is responsible for doing so. It decides on matters of Company business requiring the Supervisory Board's consent, unless the full Supervisory Board or another committee is responsible. In addition, the Praesidium and Sustainability Committee is responsible for an internal procedure – as per Section 111a(2) of the Stock Corporation Act (AktG) – that assesses related-party transactions. The Committee regularly deals with sustainability issues (ESG), except in cases where other committees are responsible. The Praesidium and Sustainability Committee also prepares the Report of the Supervisory Board to the Annual General Meeting, the Declaration of Conformity with the German Corporate Governance Code pursuant to Section 161 of the Stock Corporation Act (AktG), and the Statement on Corporate

Governance for the Supervisory Board. Moreover, the Praesidium and Sustainability Committee prepares the annual self-assessment of the effectiveness of the Supervisory Board as a whole and its individual committees with regard to the performance of their duties. Further details about the self-assessment in the past financial year are provided in the section "Self-assessment" and in the Report of the Supervisory Board.

Personnel Committee

The Personnel Committee prepares the appointment of members to the Board of Management. It also prepares the long-term succession planning together with the Board of Management, including setting targets for the number of women on the Board of Management. In addition, the Personnel Committee represents the Company in matters concerning the members of the Board of Management, and is responsible for personnel matters involving members of the Board of Management, unless these are issues that are the responsibility of the full Supervisory Board or the Remuneration Committee. This Committee approves loan transactions between the Company and members of the Board of Management and their related parties. The Personnel Committee also decides whether to approve sideline activities of members of the Board of Management, particularly mandates on supervisory boards or similar committees.

Remuneration Committee

The Remuneration Committee is responsible for preparing the Supervisory Board's resolutions on determining, amending, and regularly reviewing the remuneration system for the Board of Management; this Committee also determines and reviews the total remuneration of the individual members of the Board of Management. In addition, the Remuneration Committee prepares the Supervisory Board's resolutions regarding determination of the level of variable remuneration components, determination of the performance criteria and objectives for variable remuneration, the assessment of objectives, and the determination of the variable remuneration to be granted to the individual Board of Management members. The Personnel Committee may be involved in this assessment. Where sustainability (ESG) issues are concerned, the Praesidium and Sustainability Committee may be involved in determining and assessing the performance criteria and objectives for variable remuneration. The Remuneration Committee is also responsible for preparing the Supervisory Board's resolutions regarding remuneration components of the employment contracts of members of the Board of Management, and for remuneration reporting with regard to the remuneration of members of the Board of Management and the Supervisory Board.

Audit Committee

The Audit Committee prepares Supervisory Board resolutions on the adoption of the Company's annual financial statements and approval of the consolidated financial statements. It discusses the Half-Year Financial Report and the material information underlying the quarterly statements, and receives the audit reports, other reports and statements by the external auditor. The Audit Committee also discusses the essential components of the Solvency II reporting with the Board of Management.

This Committee monitors accounting and the financial reporting process. It also monitors the adequacy and effectiveness of the risk management system, the internal control system, the compliance management system and handling of material compliance cases, the actuarial function system and the internal audit system. Furthermore, the Audit Committee is responsible for examining potential claims for breach of duty against members of the Board of Management.

The Audit Committee prepares the procedure for selecting the external auditor, in particular the Supervisory Board's proposal to the Annual General Meeting. The Audit Committee is responsible for assessing performance and monitoring the independence of the external auditor; it also monitors and assesses the quality of the audit and any additional services provided by the external auditor. In particular, it hires the external auditor for the Company and Group financial statements as well as for any voluntary external audit of the combined non-financial statement. The Audit Committee also defines focal points of the audits and agrees the auditor's fee for the annual audits; the same applies to the review of the Half-Year Financial Report and the review of the solvency balance sheets. Beyond this, the Committee handles the approval and monitoring of non-audit services.

After in-depth deliberations by the Board of Management, the Audit Committee – together with the Board of Management – prepares the annual discussion of the risk strategy by the Supervisory Board, and discusses any changes to or deviations from the risk strategy with the Board of Management during the year.

In this connection, the Audit Committee hears reports not only from the Board of Management but also directly from the General Counsel & Group Chief Compliance Officer, the Group Chief Auditor, the Group Chief Risk Officer, and the Head of the Actuarial Function. Through the Chair of the Audit Committee, every member of the Audit Committee may obtain information from the heads of the central divisions responsible for the accounting process, the internal control system, the risk management system, the internal audit system and the audit of financial statements. Through its Chair, the Audit Committee maintains a regular dialogue with the auditor also in between meetings. The Chair of the Audit Committee regularly discusses the progress of the audit with the auditor and reports thereon to the Audit Committee. The Audit Committee consults with the auditor on a regular basis without the Board of Management.

Nomination Committee

The Nomination Committee is made up exclusively of shareholder representatives.

This Committee provides the Supervisory Board with names of suitable candidates that the latter can nominate for election at the Annual General Meeting. As a basis for this, the shareholder representatives have developed and adopted a list of criteria for the selection of suitable candidates for the Supervisory Board. The Nomination Committee also proposes suitable candidates to the Supervisory Board for the election of shareholder representatives to Supervisory Board committees and as chairs of the respective committees.

Conference Committee

If the first round of voting concerning the appointment or dismissal of members of the Board of Management does not result in the required two-thirds majority, the matter will be addressed by the Conference Committee before a second vote is held on the Supervisory Board.

Remuneration of Supervisory Board members

The remuneration of the members of the Supervisory Board is laid down in the Articles of Association. The remuneration report contains detailed information on the remuneration paid to the members of the Supervisory Board. The resolution of the Annual General Meeting on the system of remuneration for members of the Supervisory Board dated 28 April 2021 and the remuneration report (including the Auditor's opinion) are available at www.munichre.com/supervisory-board.

Other corporate governance practices

Munich Re Code of Conduct

Our business activities are embedded in a compliance culture based on our ethical principles. Our Munich Re Code of Conduct defines our guidelines for responsible and compliant behaviour.

More specifically, the Munich Re Code of Conduct describes our fundamental standards for fair and responsible behaviour – by preventing corruption, for instance – to foster an inclusive and diverse working environment as well as a culture of trust and transparency. In addition, the Munich Re Code of Conduct lays out our commitment to sustainability and human rights, in alignment with the principles of the UN Global Compact.

Further information can be found on our website at www.munichre.com/code-of-conduct.

UN Global Compact

To make clear our understanding of important values inside and outside our Group, Munich Re joined the United Nations Global Compact in 2007. The ten principles of this declaration (covering human rights, labour standards, environmental protection and combating corruption) form the heart of our sustainability strategy.

Principles for Responsible Investment (PRI)

Munich Re was one of the first signatories of the PRI in 2006. We implement the principles for sustainable investment through our Group investment function GIM and our asset manager MEAG, for example.

Net-Zero Asset Owner Alliance (NZAOA)

Beyond the PRI, we joined the NZAOA in 2020. We have committed to moving our investment portfolio towards a net-zero climate target by 2050 in the spirit of meeting the Paris climate targets.

Principles for Sustainable Insurance (PSIs)

The PSIs – which Munich Re committed to in 2012 as one of the first signatories – reflect our commitment to anchoring environmental, social and governance (ESG) aspects in our core business. We also release annual progress reports, detailing our dedication to the four fundamental principles.

Further information on these voluntary commitments is available on our Sustainability Portal at www.munichre.com/sustainability.

Equal participation of men and women in management positions

As at 31 December 2023, the percentage of women on the Board of Management was 20%; with 13.2% at the first management level and 28.6% at the second management level. The targets set as part of implementing the German Act on Equal Participation of Men and Women in Private-Sector and Public-Sector Management Positions (FüPoG) – 25% at Board of Management level, 15% at the first and 35% at the second management level, all to be achieved by 31 December 2025 – have thus not yet been met. At the second management level, the percentage has continued to increase.

The management levels are defined as follows: A manager at the first management level reports to a member of the Board of Management. A manager at the second management level reports to a manager at the first management level. For these purposes, only staff members with disciplinary responsibility are categorised as managers.

We aim to increase female representation in management positions by taking targeted measures and providing a variety of offerings. These include women's networks, mentoring, training and coaching programmes, career counselling, and childcare as well as part-time and parental leave offerings. The share of women in management positions is monitored on a quarterly basis throughout the Group, with a special focus on the process of staffing management positions at the first and second management levels, in order to keep track of developments and identify potential issues.

To make the pool of female candidates for management positions as large as possible, we take care to ensure that women and men are equally represented in our talent programmes. Women make up 44% of the Group Management Platform (the top Group-wide talent programme). Moreover, 46% of Hydrogen and 50% of Oxygen participants are women (talent programmes in reinsurance). And women constitute 50% of people in Grow (ERGO), and 53% in MEAG's Leadership Journey (as at 31 December 2023).

This focused approach is bearing fruit. Globally, the share of women in management positions within the Group has continued to increase, amounting to 39.5% as at 31 December 2023. We are thus getting ever closer to our commitment of achieving a 40% share of women across all management levels worldwide.

Moreover, in accordance with legislation and the objectives concerning the composition of the Supervisory Board, at least 30% of seats on the Supervisory Board of Munich Reinsurance Company must be filled by women, and at least 30% by men.

In accordance with the Co-Determination Agreement, the employee and shareholder representatives ensure separate compliance with the statutory gender quotas on the Supervisory Board.

On 31 December 2023, 60% of seats on the Supervisory Board of Munich Reinsurance Company were occupied by men and 40% by women – four women were shareholder representatives and four were employee representatives. The minimum requirements are thus met by both sets of representatives on the Supervisory Board.

Diversity concepts for the Board of Management and Supervisory Board

Diversity is taken into account when filling management positions in the Company and in the composition of the Board of Management and the Supervisory Board. In addition, diversity is an important part of the Munich Re Group's corporate culture.

Diversity concept for the Board of Management

When appointing members of the Board of Management, the Supervisory Board is mindful of diversity in terms of professional and educational background, internationality, age, and gender. The aim is to ensure that the Board's composition is as diverse as possible, complementary, and strong as a whole. Gender diversity is described in the section entitled "Equal participation of men and women in management positions".

Members of the Board of Management bear individual responsibility for the divisions they head, and joint responsibility for overall management of the Company. In addition to the specific knowledge and experience required for each division, all Board members must have a sufficiently broad range of knowledge and experience in all areas of our business to ensure that they can monitor each other.

To implement the requirements of Solvency II, the Board of Management and Supervisory Board have adopted a Fit and Proper Policy; this policy sets out fitness and propriety requirements for Board members and other persons. Accordingly, it must be ensured that the members of the Board of Management have the necessary qualifications in their respective individual areas of responsibility. The policy also requires the Board of Management overall to have adequate qualifications, experience and expertise at least in the business, economic, market and regulatory environment, as well as the business strategy, business model, governance system and risk model of Munich Reinsurance Company, and financial and actuarial analysis.

The differences between the business models within the Group and between divisions in the reinsurance field of business require that the Board of Management have a broad professional and educational background.

In its current composition, the Board of Management shows a diverse range of professional training and education. It includes graduates of various degrees and vocational training (e.g. business and economics, mathematics, physics, and political science). The CVs of the individual members of the Board of Management have different focuses – in operative business, in certain markets, or in specialist areas. The diverse careers and personalities within the Board of Management express the versatility of our business model, and reflect the complex requirements faced by the Board.

The internationality of the Board is also taken into account. The global business activities of Munich Re mean that all members of the Board of Management have international management experience.

The average age of the members of the Board of Management at the end of the 2023 financial year was 52; the youngest Board member was 39, and the oldest was 58. The age limit for membership of the Board of Management is 67; members of the Board of Management must leave the Board no later than the end of the calendar year in which they turn 67. The requirements for age limits are thus met.

First-time appointments of members of the Board of Management are as a rule for a period of three years. A reappointment more than one year before the end of the appointment period with simultaneous cancellation of the current appointment will only be made in special circumstances. With the exception of aspects relating to remuneration, which are dealt with by the Remuneration Committee, preparation for the appointment of members of the Board of Management is the responsibility of the Personnel Committee of the Supervisory Board, which provides suggestions for suitable candidates to the full Supervisory Board. The Personnel Committee is guided by the Fit and Proper Policy, the specific requirements of the relevant function, and the above-mentioned diversity considerations. In conjunction with the Board of Management, the Personnel Committee is also responsible for succession planning. Succession planning for the Board of Management is systematic and geared to the strategic objectives and future challenges of the Group. A new and uniform Group-wide process was launched in 2023 to help identify particularly talented senior managers. This approach provides a comprehensive strategic overview of all talented staff throughout the Group; it also fosters the mobility of talented people, while ensuring a robust, diverse and sustainable talent pipeline. Our new process has given rise to the Top Talent Pool, which provides a starting point for Board of Management succession planning.

The CVs of the members of the Board of Management are updated regularly and can be found at www.munichre.com/board-of-management.

Diversity concept for the Supervisory Board/Objectives of the Supervisory Board concerning its composition, competence profile and sets of criteria

The composition of the Supervisory Board also follows a concept of diversity with regard to its members' professional and educational backgrounds, internationality, ethnicity, age, and gender. Gender diversity is described in the section "Equal participation of men and women in management positions". The aim of the diversity concept is to bring a pluralistic wealth of experience to the Supervisory Board through the interaction of members that have different professional and educational backgrounds and are diverse in terms of internationality, ethnicity, age and gender, thereby enhancing the Board's efficiency for the benefit of the Company.

Members of the Supervisory Board of Munich Reinsurance Company must meet fitness and propriety requirements. Overseeing the Company professionally and competently and actively accompanying its development demands an appropriate level of diversity on the Supervisory Board in terms of qualifications, knowledge and relevant experience.

The Supervisory Board has set itself specific objectives concerning its composition and has defined requirements regarding the competences of the Supervisory Board as a whole. Moreover, sets of criteria have been adopted for employee representatives and shareholder representatives, respectively.

In accordance with the competence profile for the Supervisory Board as a whole and both sets of criteria, it must be ensured that – in terms of the professional and educational backgrounds of its members – the Supervisory Board as a whole has adequate knowledge, skills and experience with regard to the markets, business processes, competition and the requirements of reinsurance, primary insurance and investment in order to perform its duties properly.

Appropriate knowledge of the following fields is also required: risk management, accounting, auditing, controlling and internal audit, asset-liability management, law, regulatory supervision, compliance, tax, human resources management and sustainability matters of significance to the Company. The competence profile also includes a good overall understanding of the business model. The members of the Supervisory Board must collectively be familiar with the sector in which the Company operates.

Any additional requirements for specific duties will be defined on a case-by-case basis, in particular taking into account legal requirements and the competence profile. At least one member of the Audit Committee must have expertise in the field of accounting and at least one other member of the Audit Committee must have expertise in the field of auditing. The expertise in the field of accounting shall consist of special knowledge and experience in the application of accounting principles and internal control and risk management systems, and the expertise in the field of auditing shall consist of special knowledge and experience in the auditing of financial statements. Accounting and auditing also include sustainability reporting and its audit and assurance.

When proposing candidates for election to the Supervisory Board, the Supervisory Board generally only considers nominees aged 70 or under (target age limit). The Supervisory Board has deliberately opted for a flexible target age limit, which provides sufficient room for manoeuvre for assessing the circumstances of the individual case. This expands the pool of potential candidates and allows in particular for the re-election of members of the Supervisory Board with many years of experience. Future nominations of candidates for election to the Supervisory Board should also take into account that at the time of election no candidate should already have been on the Supervisory Board for a continuous period of more than ten years. Normally, Supervisory Board members should not serve on the Board for a continuous period of more than twelve years.

The competence profile also includes other personal qualities of Supervisory Board members, such as entrepreneurial and international experience, having sufficient availability to devote to the role, a strong commitment to corporate governance, commitment to the sustainable, long-term value-creating orientation of the Company and its business policy, a solution-oriented approach, strategic expertise and the competence to effect change. As many members as possible of the Supervisory Board must have no relevant (material and not only temporary) conflicts of interest.

The Nomination Committee of the Supervisory Board selects candidates for the shareholder representatives – based on the objectives concerning the composition of the Supervisory Board, the competence profile and the set of criteria for the shareholder representatives – and prepares the Supervisory Board's election proposals to the Annual General Meeting. This Committee draws up a requirements profile to be used in the selection process. Shareholders receive the detailed CVs of the respective candidates when the Annual General Meeting is convened. When selecting candidates, care is taken to achieve diversity in terms of the composition of the Supervisory Board to ensure that the Supervisory Board as a whole fits the required competence profile.

Half of the members of the Supervisory Board are elected representatives of Group employees in the EU/EEA. The employee representatives on the Supervisory Board are governed by special co-determination rules under the Co-Determination Agreement. The Co-Determination Agreement also specifies a corresponding set of diversity criteria for the employee representatives, which serves as a basis for electing employee representatives to the Supervisory Board. The bodies responsible for making election nominations under the Co-Determination Agreement should take these criteria into account within the limits prescribed by applicable regulations to ensure that the diversity criteria and other requirements are met.

In its current composition, the Supervisory Board demonstrates diversity of professional training and education, and also has the overall knowledge, expertise and professional experience necessary for the proper performance of its duties. Members have diverse professional and educational focuses (including law, economics, mathematics, natural sciences, engineering, and commercial and insurance-specific training). The Supervisory Board members also have management experience in various sectors (such as finance and insurance, software, automotive, aviation, pharmaceutical industry), and extensive experience in academia.

Above all, the Chair of the Audit Committee, Maximilian Zimmerer, as well as Ann-Kristin Achleitner and Nikolaus von Bomhard as members of the Audit Committee, and Supervisory Board member Gerd Häusler possess recognised expertise in accounting (special knowledge and experience in the application of accounting principles and internal control and risk management systems) and auditing (special knowledge and experience in the auditing of financial statements). This expertise also includes sustainability reporting and its audit and assurance. The shareholder representatives on the Audit Committee and Supervisory Board member Gerd Häusler thus qualify as financial experts within the meaning of Section 100(5) of the German Stock Corporation Act (AktG) and recommendation D.3 GCGC.

Maximilian Zimmerer has gained his expertise in accounting and auditing during his many years on the Board of Management of Allianz SE, by chairing the Boards of Management of Allianz Lebensversicherungs-AG and Allianz Private Krankenversicherungs-AG, and by being a member of various supervisory boards. Ann-Kristin Achleitner qualifies as a financial expert due to her many years of experience teaching at universities and serving on numerous supervisory board committees and audit committees of listed companies over the years. Nikolaus von Bomhard possesses the requisite knowledge and experience in accounting and auditing due to his thirteen years as Chair of the Board of Management of Munich Reinsurance Company and his many years as Chair of the Supervisory Board of Deutsche Post AG. Gerd Häusler has gained his financial expertise by serving on Board of Management and Supervisory Board committees over many years, and by holding various roles in the global financial services industry, including as Chair of the Board of Management – and later on as Chair of the Supervisory Board – of Bayerische Landesbank, and as Chair of the Board of BHF Kleinwort Benson Group SA. Since 2018, he has also been chairing the Audit Committee of listed company Auto1 Group SE. In addition, the members of the Audit Committee – Ann-Kristin Achleitner (since 2016), Maximilian Zimmerer (since 2019; attended meetings as a guest in 2018) and Nikolaus von Bomhard (since 2019) – have expanded and deepened their relevant expertise during their many years as members of the Company's Audit Committee. The above members of the Audit Committee and Supervisory Board member Gerd Häusler keep track of current developments in the fields of accounting, auditing and sustainability reporting.

In addition, Maximilian Zimmerer, Ann-Kristin Achleitner, Nikolaus von Bomhard and Gerd Häusler possess recognised sustainability expertise.

As a result, all shareholder representatives in the Audit Committee and in the Praesidium and Sustainability Committee are both financial experts and sustainability experts.

Qualification matrix of the members of the Supervisory Board[1]

		von Bomhard	Horstmann	Achleitner	Booth	Brown
Tenure	Joined Board in	2019	2014	2013	2016	2019
Personal suitability	Regulatory requirement (Fit & Proper)	✓	✓	✓	✓	✓
	Independence[2]	✓	n.a.	✓	✓	n.a.
	No overboarding[2]	✓	✓	✓	✓	✓
Diversity	Gender	Male	Female	Female	Male	Female
	Year of birth	1956	1970	1966	1954	1959
	Nationality	German	German	German	British/German	British
	International experience	✓	–	✓	✓	✓
	Educational background	Lawyer	Lawyer	Lawyer/ Economist	Economist	Joint Honours Degree in French and German
Professional suitability	Actuarial experience[3]	✓	–	✓	✓	✓
	Investment management[4]	✓	✓	✓	✓	–
	Accounting[5]	✓	✓	✓	–	–
	Auditing	✓	✓	✓	–	–
	Risk management[6]	✓	✓	✓	✓	–
	Internal model[7]	✓	–	✓	✓	–
	Corporate governance and control[8]	✓	✓	✓	✓	–
	Human resources	✓	✓	✓	✓	✓
	Sustainability	✓	✓	✓	✓	–
Special expertise[9]	Financial expert per Section 100(5) AktG	✓	–	✓	–	–
	Accounting expert	✓	–	✓	–	–
	Audit expert	✓	–	✓	–	–
	Digital transformation/ Information technology	–	–	✓	–	–
	Cyber security and information security	–	–	–	–	–
	Climate change/ Climate risks	✓	–	✓	✓	–
	Natural sciences	–	–	–	–	–
	Engineering	–	–	–	–	–

See the end of the table for footnotes.

→		Eberl	Fassin	Gather	Häusler	Herzog
Tenure	Joined Board in	2019	2009	2014	2014	2021
Personal suitability	Regulatory requirement (Fit & Proper)	✓	✓	✓	✓	✓
	Independence[2]	n.a.	n.a.	✓	✓	n.a.
	No overboarding[2]	✓	✓	✓	✓	✓
Diversity	Gender	Male	Male	Female	Male	Female
	Year of birth	1970	1959	1953	1951	1961
	Nationality	German	German	German	German	German
	International experience	–	–	✓	✓	–
	Educational background	Graduate in commercial studies	Graduate in education studies	Mathematician/ Statistician	Lawyer/ Economist	Florist diploma
Professional suitability	Actuarial experience[3]	✓	–	✓	✓	–
	Investment management[4]	✓	–	✓	✓	✓
	Accounting[5]	✓	–	✓	✓	–
	Auditing	✓	–	✓	✓	–
	Risk management[6]	–	✓	✓	✓	–
	Internal model[7]	–	–	✓	–	–
	Corporate governance and control[8]	✓	✓	✓	✓	✓
	Human resources	✓	✓	✓	✓	✓
	Sustainability	✓	✓	✓	✓	–
Special expertise[9]	Financial expert per Section 100(5) AktG	–	–	–	✓	–
	Accounting expert	–	–	–	✓	–
	Audit expert	–	–	–	✓	–
	Digital transformation/ Information technology	–	–	✓	–	✓
	Cyber security and information security	–	–	✓	–	–
	Climate change/ Climate risks	–	✓	–	✓	–
	Natural sciences	–	–	✓	–	–
	Engineering	–	–	✓	–	–

See the end of the table for footnotes.

→		Jungo Brüngger	Kaindl	Knoche-Brouillon	Mücke	Plottke
Tenure	Joined Board in	2017	2019	2021	2019	2014
Personal suitability	Regulatory requirement (Fit & Proper)	✓	✓	✓	✓	✓
	Independence[2]	✓	n.a.	✓	n.a.	n.a.
	No overboarding[2]	–	✓	✓	✓	✓
Diversity	Gender	Female	Male	Female	Female	Male
	Year of birth	1961	1969	1965	1953	1962
	Nationality	Swiss	German	French/ German	German	German
	International experience	✓	✓	✓	–	–
	Educational background	Lawyer	Mathematician	Pharmacist	Legal assistant	Graduate in insurance business administration
Professional suitability	Actuarial experience[3]	✓	✓	–	✓	✓
	Investment management[4]	✓	✓	✓	✓	✓
	Accounting[5]	✓	✓	✓	✓	✓
	Auditing	✓	✓	✓	✓	✓
	Risk management[6]	✓	✓	✓	✓	✓
	Internal model[7]	–	✓	✓	–	✓
	Corporate governance and control[8]	✓	✓	✓	✓	✓
	Human resources	✓	✓	✓	✓	✓
	Sustainability	✓	✓	✓	✓	–
Special expertise[9]	Financial expert per Section 100(5) AktG	–	–	–	–	–
	Accounting expert	–	–	–	–	–
	Audit expert	–	–	–	–	–
	Digital transformation/ Information technology	✓	–	✓	✓	–
	Cyber security and information security	–	–	–	–	–
	Climate change/ Climate risks	–	–	✓	✓	–
	Natural sciences	–	–	✓	–	–
	Engineering	–	–	–	–	–

See the end of the table for footnotes.

→		Rassy	Spohr	Streibich	Wagner	Zimmerer
Tenure	Joined Board in	2019	2020	2019	2022	2017
Personal suitability	Regulatory requirement (Fit & Proper)	✓	✓	✓	✓	✓
	Independence[2]	n.a.	✓	✓	n.a.	✓
	No overboarding[2]	✓	✓	✓	✓	✓
Diversity	Gender	Male	Male	Male	Male	Male
	Year of birth	1963	1966	1952	1965	1958
	Nationality	German	German	German	German	German
	International experience	✓	✓	✓	–	✓
	Educational background	–	Engineer	Engineer	Insurance Specialist	Lawyer
Professional suitability	Actuarial experience[3]	✓	✓	–	✓	✓
	Investment management[4]	–	✓	✓	✓	✓
	Accounting[5]	✓	✓	✓	–	✓
	Auditing	✓	✓	✓	✓	✓
	Risk management[6]	✓	✓	✓	–	✓
	Internal model[7]	–	–	–	–	✓
	Corporate governance and control[8]	✓	✓	✓	✓	✓
	Human resources	✓	✓	✓	✓	✓
	Sustainability	✓	✓	✓	–	✓
Special expertise[9]	Financial expert per Section 100(5) AktG	–	–	–	–	✓
	Accounting expert	–	–	–	–	✓
	Audit expert	–	–	–	–	✓
	Digital transformation/ Information technology	✓	✓	✓	✓	✓
	Cyber security and information security	–	✓	✓	✓	–
	Climate change/ Climate risks	✓	✓	✓	✓	✓
	Natural sciences	–	–	✓	–	–
	Engineering	–	✓	✓	–	–

1 As at 31 December 2023; ✓ = Fitness: Evaluation as part of the annual self-assessment of the Supervisory Board with “good” or “sound knowledge”. On a scale of A to E, this corresponds to an evaluation of at least B.
2 In conformity with the GCGC (recommendations on independence relate to shareholder representatives only). The members of the Supervisory Board have no relevant (material and not only temporary) conflicts of interest.
3 Skills and experience with regard to the markets, business processes, competition and the requirements of reinsurance and primary insurance (life and non-life).
4 Investment, asset-liability management.
5 Accounting, controlling.
6 Risk management (including internal control processes).
7 Internal model: For calculation of the solvency capital requirement under Solvency II.
8 Law, regulatory supervision, compliance, internal audit, tax.
9 Result of a supplementary query (without a rating scale) as part of the annual self-assessment.

The different personalities within the Supervisory Board and their individual careers reflect the wide range of duties of the Supervisory Board and meet the associated requirements.

Most of the members of the Supervisory Board also have international experience. The members of the Supervisory Board come from a number of different countries, which reflects the Company's international activities.

The average age of members of the Supervisory Board at the end of the 2023 financial year was 62; the youngest Board member was 53, and the oldest was 72. There is therefore a sufficient age mix on the Supervisory Board.

The CVs of the members of the Supervisory Board can be found at www.munichre.com/supervisory-board. They are updated as required, at least once a year.

Independence

The shareholder representatives on the Supervisory Board aim to ensure that, as far as possible, all candidates whom they propose to the Annual General Meeting for election are independent.

In implementing the German Corporate Governance Code, the shareholder representatives have set themselves the objective of having at least eight independent shareholder representatives on the Supervisory Board.

Taking into account the ownership structure, the shareholder representatives are of the opinion that all ten shareholder representatives meet the independence criteria of the German Corporate Governance Code. Specifically, the Chair of the Supervisory Board, the Chair of the Audit Committee, and the Chair of the committee that addresses the remuneration of the Board of Management are thus independent within the meaning of the GCGC. In their assessment, the shareholder representatives took into particular account whether the member of the Supervisory Board or a close relative of the member of the Supervisory Board (i) is related to a member of the Board of Management, (ii) was a member of the Board of Management of the Company in the two years preceding the appointment to the Supervisory Board, (iii) may derive benefits that are influenceable by the Board of Management as a consequence of their membership on the Supervisory Board (for instance through a consultancy contract), (iv) represents in particular a specific group that pursues individual or special interests, (v) holds a major direct or indirect stake in the Company or represents a shareholder/group that holds such a stake or its interests, (vi) held a board or consultancy function in the year preceding the appointment, in particular for competitors, clients, suppliers or creditors of the Company or for an entity dependent on these which might lead to a relevant, i.e. material and not only temporary, conflict of interest in their view or in the view of the Company, (vii) has been a partner or employee of the auditors during the past three years and/or (viii) has been a member of the Supervisory Board for more than 12 years.

Consolidated financial statements and notes

Consolidated balance sheet as at 31 December 2023[1, 2]

Assets

	Notes		31.12.2023	Prev. year		Change	1.1.2022
		€m	€m	€m	€m	%	€m
A. Intangible assets							
I. Goodwill	(8)	3,184		3,240	–57	–1.7	3,092
II. Other intangible assets	(9)	900		1,043	–143	–13.7	1,007
			4,084	**4,284**	**–200**	**–4.7**	**4,099**
B. Reinsurance contracts held that are assets	**(10)**		**4,014**	**3,892**	**121**	**3.1**	**3,581**
C. Insurance contracts issued that are assets	**(26)**		**7,193**	**5,977**	**1,216**	**20.3**	**6,878**
D. Investments							
I. Non-financial investments							
1. Investment property	(11)	9,384		9,618	–234	–2.4	9,385
2. Property, plant and equipment	(12)	511		547	–36	–6.5	946
3. Intangible assets	(13)	128		0	128	–	0
4. Biological assets	(14)	828		735	94	12.7	494
5. Inventories		0		0	0	0.0	0
6. Investments in affiliated companies, associates and joint ventures	(15)	6,895		5,945	951	16.0	3,635
Thereof: Associates and joint ventures accounted for using the equity method		6,409		5,491	918	16.7	3,215
		17,747		**16,845**	**902**	**5.4**	**14,460**
II. Financial investments	(16)	200,715		191,120	9,595	5.0	227,206
			218,462	**207,965**	**10,498**	**5.0**	**241,666**
E. Investments for unit-linked life insurance	**(17)**		**8,280**	**7,470**	**810**	**10.8**	**8,582**
F. Insurance-related financial instruments	**(18)**		**9,872**	**18,298**	**–8,427**	**–46.1**	**18,474**
G. Receivables							
I. Current tax receivables		1,920		695	1,225	176.4	715
II. Financial receivables	(19)	3,841		4,044	–203	–5.0	1,963
III. Other receivables	(20)	1,382		1,451	–68	–4.7	1,835
			7,143	**6,189**	**954**	**15.4**	**4,513**
H. Cash and cash equivalents	**(21)**		**5,595**	**6,439**	**–844**	**–13.1**	**5,413**
I. Deferred tax assets	**(22)**		**2,743**	**2,862**	**–119**	**–4.2**	**3,021**
J. Other assets	**(23)**		**5,962**	**5,622**	**340**	**6.0**	**4,764**
K. Non-current assets held for sale	**(5)**		**446**	**392**	**54**	**13.7**	**505**
Total assets			**273,793**	**269,391**	**4,402**	**1.6**	**301,496**

1 Previous year's figures adjusted due to initial application of IFRS 17 and changes made to presentation and classification; see Notes to the consolidated financial statements > Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.
2 You can download this information as an Excel file; please refer to the Financial Supplement under www.munichre.com/results-reports.

Equity and liabilities

	Notes		31.12.2023	Prev. year		Change	1.1.2022
		€m	€m	€m	€m	%	€m
A. Equity	**(24)**						
I. Issued capital and capital reserve		7,424		7,422	2	0.0	7,432
II. Retained earnings		18,216		15,380	2,836	18.4	13,764
III. Other reserves		–597		–1,022	425	41.6	4,220
IV. Net result attributable to Munich Reinsurance Company equity holders		4,606		5,313	–706	–13.3	2,933
V. Non-controlling interests		122		152	–30	–19.8	116
			29,772	**27,245**	**2,527**	**9.3**	**28,466**
B. Subordinated liabilities	**(25)**		**4,713**	**4,748**	**–35**	**–0.7**	**5,055**
C. Reinsurance contracts held that are liabilities	**(10)**		**436**	**262**	**174**	**66.2**	**17**
D. Insurance contracts issued that are liabilities	**(26)**						
I. Liability for remaining coverage	(27)	132,979		128,771	4,209	3.3	154,697
II. Liability for incurred claims	(28)	81,167		76,283	4,884	6.4	78,932
III. Other technical liabilities		7		7	0	–2.0	0
			214,153	**205,061**	**9,092**	**4.4**	**233,629**
E. Other provisions	**(29)**		**2,766**	**2,661**	**105**	**3.9**	**4,960**
F. Liabilities	**(30)**						
I. Derivatives		1,379		1,466	–87	–5.9	808
II. Non-derivative financial liabilities		4,161		4,647	–487	–10.5	4,243
III. Current tax liabilities		2,657		1,569	1,088	69.4	1,845
IV. Other liabilities		11,242		19,840	–8,598	–43.3	19,756
			19,438	**27,522**	**–8,083**	**–29.4**	**26,652**
G. Deferred tax liabilities	**(22)**		**2,241**	**1,751**	**490**	**28.0**	**2,348**
H. Liabilities related to non-current assets held for sale	**(5)**		**274**	**141**	**132**	**93.7**	**370**
Total equity and liabilities			**273,793**	**269,391**	**4,402**	**1.6**	**301,496**

Consolidated income statement for the 2023 financial year[1, 2]

	Notes	2023	Prev. year		Change
		€m	€m	€m	%
1. Insurance revenue from insurance contracts issued	(32)	57,884	55,385	2,500	4.5
2. Insurance service expenses from insurance contracts issued					
Claims expenses		–41,481	–40,393	–1,089	–2.7
Changes from underlying items		48	–208	256	–
Administration and acquisition costs		–8,617	–7,807	–810	–10.4
Other insurance service expenses		0	0	0	–
	(33)	–50,051	–48,408	–1,643	–3.4
3. Insurance service result from insurance contracts issued (1+2)		**7,834**	**6,977**	**857**	**12.3**
4. Insurance revenue ceded from reinsurance contracts held	(32)	–1,577	–1,610	33	2.0
5. Income from reinsurance contracts held	(33)	788	1,412	–624	–44.2
6. Insurance service result from reinsurance contracts held (4+5)		**–789**	**–198**	**–592**	**–299.3**
7. Insurance service result (3+6)		**7,045**	**6,779**	**265**	**3.9**
8. Result from insurance-related financial instruments	(34)	501	291	210	72.2
9. Total technical result (7+8)		**7,545**	**7,070**	**475**	**6.7**
10. Investment result	(35)	5,374	2,983	2,391	80.2
Thereof:					
Interest revenue		5,029	4,262	767	18.0
Income from associates and joint ventures accounted for using the equity method		356	52	304	588.7
11. Currency result		–292	1,067	–1,359	–
12. Investment result for unit-linked life insurance	(36)	816	–1,140	1,956	–
13. Insurance finance income or expenses from insurance contracts issued	(37)	–5,490	–1,083	–4,407	–406.9
14. Insurance finance income or expenses from reinsurance contracts held	(37)	99	23	76	327.8
15. Insurance finance income or expenses (13+14)		**–5,391**	**–1,060**	**–4,331**	**–408.6**
16. Net financial result (10+11+12+15)		**507**	**1,850**	**–1,343**	**–72.6**
17. Other operating income	(38)	1,316	1,089	228	20.9
18. Other operating expenses	(38)	–3,667	–3,197	–470	–14.7
19. Operating result (9+16+17+18)		**5,702**	**6,812**	**–1,111**	**–16.3**
20. Net finance costs	(39)	–168	–179	11	5.9
21. Taxes on income	(40)	–936	–1,324	388	29.3
22. Net result (19+20+21)		**4,597**	**5,309**	**–712**	**–13.4**
Thereof:					
Attributable to Munich Reinsurance Company equity holders		4,606	5,313	–706	–13.3
Attributable to non-controlling interests		–9	–3	–6	–172.7
				€	%
Earnings per share	**(66)**	**33.88**	**38.12**	**–4.24**	**–11.1**

1 Previous year's figures adjusted due to initial application of IFRS 17 and changes made to presentation and classification; see Notes to the consolidated financial statements > Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.
2 You can download this information as an Excel file; please refer to the Financial Supplement under www.munichre.com/results-reports.

Consolidated statement of comprehensive income for the 2023 financial year[1]

€m	2023	Prev. year
Net result	**4,597**	**5,310**
Foreign currency translation		
Gains (losses) recognised in equity	–433	738
Recognised in profit or loss	0	0
Unrealised gains and losses on financial investments		
Gains (losses) recognised in equity	4,110	–26,176
Recognised in profit or loss	804	–107
Change resulting from cash flow hedges		
Gains (losses) recognised in equity	2	–23
Recognised in profit or loss	0	0
Change resulting from equity method measurement		
Gains (losses) recognised in equity	27	24
Recognised in profit or loss	0	0
Change resulting from reinsurance contracts held		
Gains (losses) recognised in equity	–774	–465
Recognised in profit or loss	0	0
Change resulting from insurance contracts issued		
Gains (losses) recognised in equity	–2,631	21,095
Recognised in profit or loss	0	0
I. Items where income and expenses recognised in other comprehensive income are reclassified to profit or loss	**1,105**	**–4,913**
Remeasurements of defined benefit plans	–111	791
II. Items where income and expenses recognised in other comprehensive income are not reclassified to profit or loss	**–111**	**791**
Income and expenses recognised in other comprehensive income (I+II)	**994**	**–4,122**
Total comprehensive income	**5,591**	**1,187**
Thereof:		
Attributable to Munich Reinsurance Company equity holders	5,600	1,201
Attributable to non-controlling interests	–9	–14

1 Previous year's figures adjusted due to initial application of IFRS 17 and changes made to presentation and classification; see Notes to the consolidated financial statements > Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.

Consolidated statement of changes in equity for the 2023 financial year

€m	Issued capital	Capital reserve
31.12.2021 (as originally reported)	**588**	**6,845**
Effect from the initial application of IFRS 17	0	0
Effect from the application of the classification overlay approach	0	0
Effect from the application of the fair value model for certain properties	0	0
Balance at 1.1.2022	**588**	**6,845**
Allocation to retained earnings	0	0
Net result	0	0
Income and expenses recognised in other comprehensive income	0	0
Foreign currency translation	0	0
Unrealised gains and losses on financial investments	0	0
Change resulting from cash flow hedges	0	0
Change resulting from equity method measurement	0	0
Change resulting from reinsurance contracts held	0	0
Change resulting from insurance contracts issued	0	0
Remeasurement of defined benefit plans	0	0
Total comprehensive income	**0**	**0**
Other changes	0	0
Dividend payments	0	0
Purchase and retirement of own shares	–10	0
Balance at 31.12.2022 (adjusted)	**577**	**6,845**
Effect from the initial application of IFRS 9	0	0
Consequential effect of the initial application of IFRS 9 on insurance contracts with direct participation features[1]	0	0
Balance at 1.1.2023	**577**	**6,845**
Allocation to retained earnings	0	0
Net result	0	0
Income and expenses recognised in other comprehensive income	0	0
Foreign currency translation	0	0
Unrealised gains and losses on financial investments	0	0
Change resulting from cash flow hedges	0	0
Change resulting from equity method measurement	0	0
Change resulting from reinsurance contracts held	0	0
Change resulting from insurance contracts issued	0	0
Remeasurements of defined benefit plans	0	0
Total comprehensive income	**0**	**0**
Other changes	0	0
Dividend payments	0	0
Purchase and retirement of own shares	2	0
Balance at 31.12.2023	**580**	**6,845**

1 Additional information can be found in the Notes to the consolidated financial statements > Explanatory information > Notes to the consolidated balance sheet – Equity and liabilities > 24 Equity.

Equity attributable to Munich Reinsurance Company equity holders						Non-controlling interests	Total equity
Retained earnings	Other reserves				Net result		
	Fair value measurement	Measurement of insurance contracts	Currency translation	Hedging relationships			
13,822	**5,784**	**0**	**848**	**11**	**2,933**	**116**	**30,945**
−3,275	−1,554	−10,432	0	0	0	1	−15,260
1,277	9,563	0	0	0	0	0	10,840
1,940	0	0	0	0	0	0	1,940
13,765	**13,793**	**−10,432**	**848**	**11**	**2,933**	**116**	**28,466**
1,392	0	0	0	0	−1,392	0	0
0	0	0	0	0	5,313	−3	5,310
825	−26,295	20,630	740	−11	0	−11	−4,122
0	0	0	740	0	0	−2	738
0	−26,272	0	0	0	0	−10	−26,283
0	0	0	0	−23	0	0	−23
35	−23	0	0	12	0	0	24
0	0	−465	0	0	0	0	−465
0	0	21,094	0	0	0	1	21,095
790	0	0	0	0	0	0	791
2,217	**−26,295**	**20,630**	**740**	**−11**	**3,921**	**−14**	**1,187**
−6	−305	0	0	0	0	58	−253
0	0	0	0	0	−1,541	−8	−1,549
−595	0	0	0	0	0	0	−605
15,380	**−12,808**	**10,198**	**1,588**	**0**	**5,313**	**152**	**27,245**
1,310	−1,711	0	−1	0	0	−1	−403
−1,077	0	1,077	0	0	0	0	0
15,613	**−14,519**	**11,275**	**1,587**	**0**	**5,313**	**151**	**26,842**
3,730	0	0	0	0	−3,730	0	0
0	0	0	0	0	4,606	−9	4,597
−66	4,904	−3,405	−431	−8	0	0	994
0	0	0	−431	0	0	−3	−433
0	4,911	0	0	0	0	2	4,914
0	0	0	0	2	0	0	2
46	−8	0	0	−10	0	0	27
0	0	−774	0	0	0	0	−774
0	0	−2,632	0	0	0	0	−2,631
−112	0	0	0	0	0	0	−111
3,664	**4,904**	**−3,405**	**−431**	**−8**	**877**	**−9**	**5,591**
−16	−16	0	0	16	0	−18	−34
0	0	0	0	0	−1,583	−2	−1,585
−1,044	0	0	0	0	0	0	−1,041
18,217	**−9,631**	**7,870**	**1,156**	**8**	**4,606**	**122**	**29,772**

Consolidated cash flow statement for the 2023 financial year[1]

€m	2023	Prev. year
Net result	**4,597**	**5,309**
Net change in reinsurance contracts held	–92	–225
Net change in insurance contracts issued	101	–8,976
Change in non-financial investments	–1,629	–2,386
Change in financial investments	–3,286	6,361
Change in investments for unit-linked life insurance	–53	–67
Change in insurance-related financial instruments	–290	–441
Change in receivables and liabilities (excluding bonds and notes issued and liabilities to credit institutions)	–79	–1,407
Change in other provisions	–59	–1,236
Change in other balance sheet items	90	–1,484
Fair-value changes recognised in profit or loss	2,594	4,981
Depreciation/amortisation, impairment losses, reversals of impairment losses, and changes in expected credit losses	317	2,873
Gains/losses resulting from the disposal of consolidated subsidiaries, other intangible assets, and property, plant and equipment	13	–7
Other non-cash income and expenses	321	677
I. Cash flows from operating activities	**2,543**	**3,972**
Inflows from losing control of consolidated subsidiaries	19	23
Outflows from obtaining control of consolidated subsidiaries	–48	14
Inflows from the sale of other intangible assets	4	5
Outflows from the acquisition of other intangible assets	–198	–209
Inflows from the sale of property, plant and equipment	36	46
Outflows from the acquisition of property, plant and equipment	–148	–140
Inflows and outflows from other investing activities	5	–8
II. Cash flows from investing activities	**–329**	**–270**
Inflows from increases in capital and from non-controlling interests	0	0
Purchase of own shares	–1,041	–605
Dividend payments	–1,583	–1,549
Inflows from the issue of subordinated liabilities	0	0
Outflows from the redemption of subordinated liabilities	–134	–457
Inflows and outflows from other financing activities	–225	–92
III. Cash flows from financing activities	**–2,983**	**–2,702**
Cash flows for the financial year (I+II+III)[2]	**–770**	**1,000**
Effect of exchange-rate changes on cash and cash equivalents	–47	35
Cash at 1 January	6,439	5,413
Cash at 31 December	5,621	6,448
Thereof:		
Cash not attributable to disposal group[3]	5,595	6,439
Cash attributable to disposal group	26	9
Restricted cash	95	59
Additional information		
Income tax paid (net) – included in the cash inflows from operating activities	51	–604
Dividends received	419	1,132
Interest received	6,030	4,881
Interest paid	–366	–325

1 Previous year's figures adjusted due to initial application of IFRS 17 and changes made to presentation and classification; see Notes to the consolidated financial statements > Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.
2 Cash mainly comprises cash at banks.
3 For a definition of the disposal group, see Notes to the consolidated financial statements > Accounting policies > Assets > K Non-current assets held for sale.

Notes to the consolidated financial statements

Basis of preparation

Application of International Financial Reporting Standards (IFRSs)

Munich Re's consolidated financial statements have been prepared on the basis of the International Financial Reporting Standards (IFRSs), as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e(1) of the German Commercial Code (HGB).

Presentation of figures

Munich Re's presentation currency is the euro (€). Amounts are rounded to million euros. As a result, there may be minor deviations in totals and percentages. Figures in brackets refer to the comparative period. We only add plus or minus signs where it is not clear from the context whether the amount is an expense/outflow or income/inflow.

Comparative information

Munich Re is applying IFRS 9, Financial Instruments, and IFRS 17, Insurance Contracts, for the first time with effect from 1 January 2023. In the initial application of IFRS 9, we have made use of the option not to restate comparative information, except when we apply the classification overlay approach permissible under IFRS 17. For insurance contracts within the scope of IFRS 17, however, the transition date is the beginning of the financial year prior to the date of initial application. The comparative information for insurance items recognised in accordance with IFRS 17 has therefore been restated.

In connection with the initial application of IFRS 17, we have restated the comparative information for some of our investment property or owner-occupied property. These are assets previously recognised at amortised cost, which back insurance contracts with direct participation features. Further comments can be found under Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17.

Otherwise, the comparative information was calculated on the same basis as in the 2023 financial year.

In connection with the initial application of the new accounting standards, the structure of the consolidated balance sheet has been revised, the names of the statements and line items adapted, and changes made to the consolidated cash flow statement. Comparative figures have been reclassified accordingly. Further comments can be found under Accounting policies > Changes in accounting policies and other adjustments > Change in presentation and classification.

Accounting policies

Use of judgements and estimates in recognition and measurement

In preparing the consolidated financial statements, preparers must use their judgement in applying accounting policies, and make specific estimates and assumptions that affect the items shown in the consolidated balance sheet, the consolidated income statement and the disclosures on contingent liabilities.

Our internal processes are geared to determining amounts as accurately as possible, taking into account all the relevant information to the best of the management's knowledge. Nevertheless, it is in the nature of these items that estimates may have to be adjusted in the course of time to take account of new knowledge.

Discretionary judgements and estimates are of significance for the following items in particular. Further information can be found in the relevant disclosures under "Consolidation", "Overarching accounting policies", "Assets" and "Equity and liabilities", and under Explanatory information > Notes to the financial instruments and fair value disclosures on assets and liabilities.

Discretionary judgements

Determining the basis of consolidation
When determining whether an entity should be included in the consolidated group, we assess whether Munich Re exercises control or a significant influence, or has joint control, over that entity. An investor is deemed to control an investee if the following three criteria are met:

- power over the investee;
- exposure on account of rights to variable returns from involvement with the investee;
- the ability to use its power over the investee to affect the amount of the investor's returns.

An assessment of these criteria requires that a certain degree of judgement be exercised. Aside from considering the purpose and design of the investee, we must also analyse in particular what its relevant activities are, how decisions about those activities are made and whether our existing rights give us the current ability to direct the relevant activities. In addition to our share of the voting rights in the investee, we also consider other circumstances and facts, the assessment of which in turn often requires the application of judgement. This is particularly the case when evaluating contractual rights and, when assessing the need to consolidate shares in investment funds, the degree of variability in the remuneration of the fund manager, dismissal rights, and the role of the investors in committees and bodies of the investment fund. In addition, in assessing whether control exists for structured entities, we take into account factors including the agency relationships between the parties.

Classification and impairment of financial assets

The classification of financial assets is based on the business model in which the financial assets are managed and the SPPI test. The business model is determined based on several factors, such as the risks that affect the performance of the business model and the way in which those risks are managed as well as how the performance is evaluated and reported to management. In some instances, determining the business model under which certain financial assets are managed requires the exercise of judgement. In addition, when assessing whether contractual cash flows are solely payments of principal and interest on the principal amount outstanding and are compatible with a basic lending arrangement, depending on the structure of the financial asset, such an assessment also requires the use of judgement.

The recognition of loss allowances under the expected credit-loss model requires that criteria be defined to determine whether the credit risk on a financial asset has increased significantly since initial recognition. The definition of such criteria relies on a certain degree of judgement.

Classification of insurance contracts

In the course of conducting our risk transfer test, we assess whether contracts transfer a significant insurance risk. In cases where it is found that a significant insurance risk is transferred, the contracts are accounted for in accordance with the provisions of IFRS 17. Otherwise, the contracts usually represent financial instruments which fall under the scope of IFRS 9. We regularly exercise judgement when performing the risk transfer test and when assessing whether it is necessary to separate certain contractual components (investment components, non-insurance service components and embedded derivatives).

Measurement of insurance contracts

Insurance contracts falling under the scope of IFRS 17 are measured at the level of groups of insurance contracts. To a certain extent, judgement is exercised when identifying portfolios and defining groups of insurance contracts based on the profitability of those contracts. In addition, determining the procedures to set the discount rates and the risk adjustment for non-financial risks requires the use of judgement. Furthermore, a certain degree of judgement must be exercised when systematically allocating certain fixed and variable overheads to groups of insurance contracts and establishing coverage units.

IFRS 17 transition approaches

Certain transition approaches are applied upon initial application of IFRS 17, depending on the availability of the information required. In certain instances, it is necessary to exercise judgement when determining which transition approaches to apply, including an assessment as to whether reasonable and supportable information is available for the application of the fully retrospective approach or the modified retrospective approach.

Estimates and assumptions

Impairment of intangible assets

For certain intangible assets, the assessment as to whether there is indication of impairment is performed at the level of the cash-generating unit. This relates in particular to goodwill impairment testing. Value in use, which serves as the basis for calculating the recoverable amount of the cash-generating units, is determined based on estimated distributable target results, taking into account a number of assumptions. The cost-of-equity rate, derived from the capital asset pricing model (CAPM), is used as the discount rate. The valuation is thus based on the risk-free rate, the beta factor, and a market risk premium – and an additional risk premium, if necessary.

Impairment of financial instruments

The key parameters for calculating expected credit losses are the probability of default, the loss given default and the exposure at default.

The probability of default is the basis for specifying a stage of the impairment model. In addition, the probability of default is considered whenever expected credit losses are calculated. During our internal rating process, the probability of default is calculated on the basis of historical data, current market conditions, and assumptions about the future.

The loss given default and the exposure at default are likewise factored into calculations of expected credit losses. In this context, the loss given default is derived from the recovery and default studies published by rating agencies. The exposure at default corresponds to the gross carrying amount as at the reporting date.

Measurement of insurance contracts
The measurement of insurance contracts is subject to substantial estimates based on the assumptions used. In particular, estimates are made when determining the fulfilment cash flows. This is particularly the case when it comes to determining the future cash flows which will arise when the insurance contracts are fulfilled, as well as when determining discount rates and the risk adjustment for non-financial risks.

Estimates of future cash flows are based on reasonable and supportable information that is available without undue cost or effort. Internal and external sets of historical data as well as current conditions are considered when portraying expectations as to future developments. The purpose of estimating future cash flows is to determine the expected value (probability-weighted mean) for the entire range of potential events. Estimates of future cash flows are made on the basis of assumptions such as those with regard to mortality, disability, policyholder behaviour and participation, as well as claims payments and settlement costs.

Estimates of future cash flows are discounted to reflect the time value of money. The discount rates selected must be as consistent as possible with the overall cash flow characteristics of the groups of insurance contracts. We determine discount rates by using a bottom-up approach, with the Solvency II interest-rate curves published by the supervisory authority EIOPA (European Insurance and Occupational Pensions Authority) serving as the starting point for risk-free interest rates. If relevant, we factor in the effect of illiquidity premiums on the interest-rate curves to take account of the differences in liquidity between the insurance liabilities and the liquid reference instruments used in determining risk-free interest rates.

In order to account for the uncertainty arising from non-financial risk pertaining to the amount and the timing of cash flows, the estimate of the present value of future expected cash flows is subject to an explicit risk adjustment to reflect non-financial risk. We determine the risk adjustment for non-financial risk using a cost-of-capital method and on the basis of our internal risk model, taking into account Group-wide risk diversification. More specifically, we apply a cost-of-capital rate of 6% to the amount of capital required as at each future reporting date on a going-concern basis, and we discount the result using the risk-free rates adjusted for illiquidity.

Calculation of fair values of assets and liabilities
The calculation of fair values of assets and liabilities is based in particular on estimates and assumptions which rely in part on unobservable inputs which have a significant impact on the market valuation (Level 3 of the fair value hierarchy). The parameters used reflect the assumptions regarding the factors that market players would consider in their pricing.

Provisions for post-employment benefits
The measurement of provisions for post-employment benefits requires that assumptions be made as to future development and is therefore subject to estimation uncertainty. In the measurement, recognised biometric actuarial assumptions are applied, particularly with respect to life expectancy, together with further actuarial assumptions. These above all concern the actuarial interest rate, future entitlement and salary increases, and future pension and cost trends.

Deferred tax assets
Deferred tax assets are recognised with respect to temporary differences between the amounts reported in the consolidated balance sheet and the tax accounts. Also included are tax assets deriving from tax loss carry-forwards. Deferred tax assets are recognised if there are sufficient taxable temporary differences which are expected to reverse in the same period as the deductible temporary differences. For any additional deductible temporary differences, deferred tax assets are only recognised if it is considered probable that future profits will be available in the same period in which the deductible temporary differences are expected to reverse. This means that estimates and assumptions as to the future availability of profits must be made when accounting for deferred tax assets.

Contingent liabilities
In the case of contingent liabilities, judgements and estimates are necessary for assessing whether a present obligation exists, an outflow of resources is regarded as likely, and whether it is possible to make a sufficiently reliable estimate for an obligation. This is the case, for example, with respect to contingent liabilities in legal disputes.

Consolidation

Consolidation principles

Fully consolidated entities
The consolidated financial statements include Munich Reinsurance Company and all the entities over which Munich Reinsurance Company directly or indirectly exercises control (subsidiaries).

Munich Reinsurance Company directly or indirectly holds all, or a clear majority of, the voting rights in most of the entities included in the consolidated group.

We include a small number of entities in the consolidated group on the basis that contractual rights are taken into consideration that result in determination of control over the relevant business activities. In assessing the need to consolidate shares in investment funds, we take particular account of the degree of variability in the remuneration of the fund manager, of dismissal rights, and of the role of the investors in committees and bodies of the investment fund. As a result, an assessment that we do exercise control sometimes occurs even though the shareholding is below 50%.

In assessing whether control exists for structured entities, we focus our analysis on the remaining decisions within the corresponding unit and on the agency relationships between the parties. For structured entities used by us to issue catastrophe bonds, we focus above all on our relationship to the trustees and our possibilities to influence their decision-making. Generally, we do not control such structured entities, even if we hold their bonds.

A list of all our shareholdings can be found in the section "List of shareholdings as at 31 December 2023 pursuant to Section 313(2) of the German Commercial Code (HGB)".

Associates and joint ventures
Entities and special funds are considered associates if we are able to significantly influence their financial and operating policies. We regularly operate on this assumption if we hold between 20% and 50% of the voting power or similar rights, unless the financial and operating policies of the entity or special fund are largely pre-determined.

Entities and special funds are considered joint ventures if we are able to determine their relevant operations solely by unanimous agreement of all parties entitled to joint control, and we only have rights to their net assets.

Joint operations
A joint operation exists if its relevant operations can only be determined by unanimous agreement of all parties entitled to joint control, and these parties – due to the legal form of the joint operation, contractual provisions or other circumstances – have rights to assets and obligations for the liabilities of the joint operation, instead of rights to net assets.

We recognise our share of assets, liabilities, income and expenses of joint operations in which we have joint control in the balance sheet in accordance with the relevant IFRSs.

General remarks on structured entities

Structured entities are entities that have been conceived in a way that voting or comparable rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant business activities are directed by means of contractual arrangements.

Overarching accounting policies

Financial instruments

Our financial instruments are presented under the following items in the consolidated balance sheet:

- Financial assets: D.II. Financial investments, E. Investments for unit-linked life insurance, F. Insurance-related financial instruments, G.II. Financial receivables, and H. Cash and cash equivalents

- Financial liabilities: B. Subordinated liabilities, F.I. Derivatives, F.II. Non-derivative financial liabilities, and F.IV. Other liabilities (primarily consists of financial instruments)

For information on specific items, please refer to "Assets" and "Equity and liabilities".

We began recognising financial instruments as per IFRS 9 in the 2023 financial year.

Financial assets

Recognition and derecognition
We recognise a financial asset in the consolidated balance sheet at the time when we become a party to the contractual provisions of the financial instrument.

When the contractual rights to receive the cash flows from a financial asset have expired, we derecognise that asset. If a financial asset is transferred, we evaluate whether the derecognition requirements of IFRS 9 are met. In this process, we take into account the extent to which we retain the risks and rewards of ownership of the financial asset and – if applicable – whether we retain control. Depending on the outcome of this evaluation, we derecognise the financial asset, or we continue to recognise it in full or to the extent of our continuing involvement. Financial liabilities are recognised and derecognised as at the trade date.

Classification
For the purpose of subsequent measurement, financial assets are classified as measured at "amortised cost", "fair value through other comprehensive income" or "fair value through profit or loss".

The classification is determined on the basis of the business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

Business model
An entity's business model refers to how the entity manages the financial assets in order to generate cash flows. The business model is determined by management at the level of groups of financial assets; it is based on several factors, such as the risks that affect the performance of the business model and the way in which those risks are managed as well as how the performance is evaluated and reported to management. A distinction is made between the following business models:

In the business model "hold to collect", the financial assets are managed with the objective to collect contractual cash flows. The sale of financial assets is not part of the management strategy, but is, under certain circumstances, not incompatible with the application of this business model, for example if there is an increase in the financial asset's credit risk.

The objective of the business model "hold to collect and sell" is achieved by both collecting contractual cash flows and selling financial assets. The sale of assets is a key aspect of the management of the portfolio.

The business model "other" applies to financial assets that are managed neither under the "hold to collect" nor under the "hold to collect and sell" business models. This is the case, for example, if the objective of the business model is in particular to realise cash flows by selling assets, or if a group of financial assets is managed on the basis of their fair value.

Contractual cash flow characteristics
If financial assets are held within the business model "hold to collect" or "hold to collect and sell", an additional assessment as to whether they pass the solely payments of principal and interest (SPPI) test is necessary for the classification for subsequent measurement.

Contractual cash flows that are solely payments of principal and interest on the principal amount outstanding are consistent with a basic lending arrangement and pass the SPPI test. In a basic lending arrangement, compensation for the time value of money and for the credit risk are typically the most significant elements of interest. In addition, interest may include compensation for other basic lending risks (such as the liquidity risk) and costs (such as administration costs) as well as an appropriate profit margin consistent with a basic lending arrangement.

Measurement

Measurement on initial recognition
On initial recognition at the trade date, financial assets are recognised at the transaction price or fair value. For financial assets that are not subsequently measured at fair value through profit or loss, directly attributable transaction costs must be included in addition.

Subsequent measurement
The measurement of a financial asset after initial recognition is based on the classification in accordance with the business model and the result of the SPPI test.

Financial assets managed within the business model "hold to collect" that pass the SPPI test are measured at amortised cost. At Munich Re, this includes in particular financial receivables and cash and cash equivalents.

Financial assets subject to the business model "hold to collect and sell" that pass the SPPI test are measured at fair value through other comprehensive income. This includes the major part of our financial investments. They are mostly used to back insurance liabilities and are managed as part of our asset-liability management on the basis of their duration and risk profile. This means that the management strategy is aimed at both collecting contractual cash flows and selling financial assets.

Financial assets that are managed under the business model "other" or that do not pass the SPPI test are measured at fair value through profit or loss. In view of the business model, at Munich Re, this includes in particular the investments for unit-linked life insurance and the insurance-related financial instruments – such as insurance contracts that do not transfer significant insurance risk.

Derivatives and equity instruments are generally measured at fair value through profit or loss. Munich Re does not make use of the option to designate equity instruments as "measured at fair value through other comprehensive income". We present investments in affiliated companies, associates and joint ventures that are not consolidated because they are immaterial under non-financial investments and, in the interest of simplicity, measure them in the same way as equity instruments. Accordingly, on transition to IFRS 9, we now measure these investments at "fair value through profit or loss" and no longer at "fair value through other comprehensive income".

Contracts with embedded derivatives where the host contract is not a financial asset within the scope of IFRS 9 may under certain circumstances be designated as measured at "fair value through profit or loss".

Munich Re uses this fair value option especially for certain insurance contracts with embedded derivatives (which themselves are not insurance contracts within the scope of IFRS 17) unless they do not significantly change the contractual cash flows or separation of the embedded derivatives would not be permissible.

In addition, financial assets may be irrevocably designated as measured at “fair value through profit or loss” on initial recognition if this eliminates or significantly reduces accounting mismatches. This is of minor significance for Munich Re.

Impairment

IFRS 9 calls for using an expected credit loss model to recognise impairment losses, under which expected credit losses are anticipated before they arise and must be recognised as an expense. These impairment requirements primarily affect financial assets measured at amortised cost or at fair value through other comprehensive income, as well as lease receivables.

A three-stage impairment model is used to recognise and measure impairment losses on financial assets.

Stage 1: On initial recognition, financial instruments are always assigned to Stage 1 of the impairment model and they remain at Stage 1 if their credit risk has not increased significantly since they were initially recognised. The loss allowance is measured at an amount equal to the 12-month expected credit losses, which represents the expected credit losses that result from default events that may occur within 12 months of the reporting date.

Stage 2: If the credit risk of a financial instrument has increased significantly since initial recognition but there is no objective evidence of impairment, the loss allowance at Stage 2 of the impairment model is measured at an amount equal to the lifetime expected credit loss.

Stage 3: If in addition to a significant increase in credit risk, there is objective evidence of impairment, the instrument is allocated to Stage 3 of the impairment model (credit-impaired financial assets). As in Stage 2, the loss allowance is measured at an amount equal to the lifetime expected credit losses. Interest revenue is calculated by applying the effective interest method – unlike in Stage 1 and Stage 2 – on the basis of the net carrying amount of the financial asset (i.e. after deducting the loss allowance).

As a matter of principle, a significant increase in credit risk is assumed if this risk (measured in terms of the probability of default) has increased by more than two percentage points since the financial instrument was initially recognised.

We assume that the credit risk of a financial instrument has not increased significantly if it has low credit risk as at the reporting date (low credit risk exception).

For financial instruments with an internal MEAG rating, we generally assume that changes in the risk of a default occurring over the next 12 months are a reasonable approximation of the changes in the lifetime risk of a default occurring. If there are indications that only an assessment based on the entire lifetime of the financial instrument is appropriate, such an assessment is made.

We generally make use of the rebuttable presumption that the credit risk has increased significantly since initial recognition if a contractual payment is more than 30 days past due, unless we have evidence to the contrary.

Objective evidence of credit impairment includes but is not limited to:

- significant financial difficulty of the borrower;
- a breach of contract (such as a default or past due event);
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- the disappearance of an active market for the financial asset because of financial difficulties.

To measure expected credit losses, we use the probability of default, the loss given default and the exposure at default.

Expected credit losses are equal to the discounted product of these three components. The calculation includes probability-weighted scenarios that take account of reasonable and supportable information that is available without disproportionate cost or effort as at the reporting date and incorporates past events, current conditions and forecasts of future economic conditions.

Financial assets are written off if, based on a reasonable assessment, it must be assumed that these assets are not recoverable. Indicators for this include a debtor lacking sufficient assets to service their debts or failing to commit to a repayment schedule. Upon completion of insolvency proceedings against a debtor, the financial assets are likewise deemed to be no longer recoverable and are fully derecognised. Such write-offs do not have an impact on profit or loss since the amounts are reflected in the loss allowance and therefore have already been recognised previously through profit or loss.

Our investment guidelines do not provide for the acquisition of purchased or originated credit-impaired financial assets.

We do not exercise the option to measure loss allowances on lease receivables using the simplified approach, i.e. at an amount equal to lifetime expected credit losses.

Financial liabilities

Recognition and derecognition

We recognise financial liabilities in the consolidated balance sheet at the time when we become a party to the contractual provisions of the financial instrument.

We derecognise financial liabilities when they are extinguished, i.e. when the obligations specified in the contract are discharged, are cancelled, or expire. Financial liabilities are recognised and derecognised as at the trade date.

Classification

For subsequent measurement, IFRS 9 specifies that financial liabilities must be classified as "measured at amortised cost" or "measured at fair value through profit or loss".

Measurement

Measurement on initial recognition

On initial recognition on the trade date, financial liabilities are recognised at the transaction price or fair value. For financial liabilities that are not subsequently measured at fair value through profit or loss, directly attributable transaction costs must also be included.

Subsequent measurement

Most of our financial liabilities are measured at amortised cost using the effective interest method. This includes primarily the subordinated liabilities reported separately in the consolidated balance sheet and bonds as well as liabilities to credit institutions presented under non-derivative financial liabilities.

The category of financial liabilities at fair value through profit or loss at Munich Re includes predominantly the derivative liabilities reported separately in the consolidated balance sheet. In addition, we have made loan commitments to a small extent. Since the financial instruments arising from these loan commitments are subsequently measured at fair value, we recognise the loan commitments at fair value through profit or loss.

Moreover, most financial liabilities resulting from insurance contracts that do not transfer significant insurance risk are managed on a fair value basis. Changes in fair value are considered when evaluating the performance of these contracts, which then serves as the basis for reporting to management. For these contracts, we exercise the option to designate them as measured at "fair value through profit or loss".

In addition, contracts with embedded derivatives where the host contract is not a financial asset within the scope of IFRS 9 may under certain circumstances be designated as measured at "fair value through profit or loss".

Munich Re uses this fair value option especially for certain insurance contracts with embedded derivatives (which themselves are not contracts within the scope of IFRS 17) unless they do not significantly change the contractual cash flows or separation of the embedded derivatives would not be permissible.

Embedded derivatives

In financial assets within the scope of IFRS 9, embedded derivatives are not separated from the host contract. Instead, the financial asset is classified on the basis of the entire hybrid contract and in accordance with the general rules based on the business model and SPPI criteria.

Some of our insurance contracts and financial liabilities contain embedded derivatives. In these cases, the embedded derivatives are assessed at initial recognition of the instruments and separated from the host contract if:

- their economic characteristics and risks are not closely related to those of the host contract;
- a separate instrument with the same terms would meet the definition of a derivative; and
- the hybrid contract is not measured at fair value through profit or loss.

If embedded derivatives are separated from the host contract, they are measured at fair value through profit or loss.

Offsetting financial assets and liabilities
Provided that we have a legally enforceable right to offset, and we intend to both realise the affected financial assets and concurrently to settle the associated liabilities, or instead to settle on a net basis, we offset the affected financial assets and liabilities.

We chiefly offset derivatives. Our other business transactions generally do not meet the requirements for offsetting.

Additional information can be found under Explanatory information > Notes to the financial instruments and fair value disclosures on assets and liabilities > 45 Offsetting of financial assets and liabilities.

Transfers of financial assets
We assess the recognition of our repurchase agreements and our securities lending transactions in line with the requirements for the derecognition of financial assets and liabilities.

Under repurchase agreements we, as the repurchase buyer, acquire securities with the obligation to sell them back to the repurchase seller at a later date. As the risks and rewards from the securities remain with the repurchase seller, the amounts paid are not posted as such in our accounts; they are instead presented under financial receivables as a receivable from the repurchase seller. Interest income from these transactions is recognised in the investment result. Similarly, securities sold by us as the repurchase seller are not derecognised, and the amount received from the repurchase buyer is shown as a liability in our accounts.

Securities that we lend by way of securities lending continue to be recognised in our consolidated balance sheet, as the main risks and rewards remain with Munich Re; securities that we have borrowed are accordingly not recognised in the consolidated balance sheet. Fees from securities lending are recognised in the investment result.

Hedge accounting
Hedge accounting is of minor significance for Munich Re.

Munich Re enters into cash flow hedges to a small extent, hedging in particular the cash flow risk from variable interest payments. In this process, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income. The ineffective portion of the hedge, on the other hand, is recognised in profit or loss. In the period in which the hedged cash flows affect profit or loss, the cumulated amount recognised in other comprehensive income is reclassified to the consolidated income statement. Munich Re mainly uses interest-rate swaps for this type of hedging.

Additional information can be found under Explanatory information > Notes to the financial instruments and fair value disclosures on assets and liabilities > 47 Hedge accounting.

Fair value

IFRS 13, Fair Value Measurement, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. All financial instruments and other assets and liabilities that are recognised at fair value – and such financial instruments and other items for which fair values are disclosed in the Notes to the consolidated financial statements – are allocated to one of the three fair value hierarchy levels of IFRS 13.

The allocation of an instrument to a level indicates the extent to which observable market inputs helped to measure the instrument. If market prices are available, these constitute the most objective yardstick for measurement at fair value and are to be used. If measurement is carried out using a model, any available inputs observable in the market are used first. If necessary, these inputs are supplemented with unobservable inputs.

In the case of Level 1, valuation is based on quoted prices in active markets for identical financial instruments which Munich Re can refer to at the valuation date. The financial instruments we have allocated to this level mainly comprise equities, equity funds and exchange-traded derivatives.

Assets allocated to Level 2 are valued using models based on observable market data. The inputs used for valuation must be observable throughout the instrument's contract period. In addition, Level 2 includes assets and liabilities for which valuation and the market data required for valuation are provided by price quoters, but for which it is not possible to completely determine to which extent the data used is observable in the market. The financial instruments we have allocated to Level 2 mainly comprise bearer bonds, bond funds, promissory note loans, covered bonds, subordinated securities, specified credit structures, derivatives not traded on the stock market and subordinated liabilities. Moreover, we have allocated a majority of our financial receivables and liabilities to Level 2.

We allocate to Level 3 assets and liabilities for which unobservable market inputs have a significant impact on valuation. The inputs used reflect Munich Re's assumptions regarding the factors which market players would consider in their pricing. To this end, we use the best available market information, supplemented with internal company data. The assets allocated to this level of the fair value hierarchy largely comprise investment property, owner-occupied property, and real estate funds. Funds that mainly invest in theoretically valued instruments, and investments in infrastructure and in private equity are also allocated to Level 3, along with investments in subsidiaries, associates and joint ventures measured at fair value, and insurance-related financial instruments.

In the case of instruments not traded on an active market, we determine on a case-by-case basis to which level of the fair value hierarchy to allocate the respective fair values.

Additional information on measurement models and measurement processes can be found under Explanatory information > Notes to the financial instruments and fair value disclosures on assets and liabilities > 43 Fair value hierarchy for assets and liabilities.

Insurance contracts

Our insurance contracts are presented under the following items at a portfolio level in the consolidated balance sheet:

- Assets: B. Reinsurance contracts held that are assets, and C. Insurance contracts issued that are assets
- Liabilities: C. Reinsurance contracts held that are liabilities, and D. Insurance contracts issued that are liabilities

For information on specific items, please refer to "Assets" and "Equity and liabilities".

We began recognising insurance contracts as per IFRS 17 in the 2023 financial year.

Classification as an insurance contract

A contract is classified as an insurance contract within the scope of IFRS 17 if it transfers significant insurance risk. We make this assessment as part of risk transfer testing. We classify an insurance risk as significant if an insured event could cause the payment of additional amounts that are significant in any single scenario, excluding scenarios that have no commercial substance, and there is a possibility of a loss on a present-value basis. Alternatively, we classify contracts as insurance contracts if they transfer to the reinsurer substantially all the insurance risk relating to the reinsured portions of the underlying insurance contracts. Contracts that do not transfer significant insurance risk are generally financial instruments and are accounted for in accordance with IFRS 9 requirements. An exception here are investment contracts with discretionary participation features, which fall under the scope of IFRS 17.

Separation of components

Insurance contracts can contain one or more of the following components:

- embedded derivatives;
- investment components;
- non-insurance services.

If an insurance contract contains embedded derivatives that are themselves not contracts within the scope of IFRS 17, IFRS 9 requirements are applied when assessing the obligation to separate components and accounting for the given derivative. We refer to the comments in this chapter under Financial instruments > Embedded derivatives.

Distinct investment components and distinct non-insurance services are separated from the insurance contract and accounted for in accordance with IFRS 9 and/or IFRS 15 requirements. They are of minor significance for Munich Re. Munich Re has not identified any significant distinct investment components to date.

Level of aggregation

Recognition and measurement occur at the level of groups of insurance contracts. We begin by including insurance contracts in a portfolio that are subject to similar risks and managed together. If there are insurance contracts in different currencies but with similar risk profiles, these can be in the same portfolio and in the same group of insurance contracts if they are managed together. In a second step, we assign each portfolio – based on its profitability – to one of the following three groups of insurance contracts:

- group of contracts that are onerous at initial recognition;
- group of contracts that at initial recognition have no significant possibility of becoming onerous subsequently; and
- group of the remaining contracts in the portfolio.

We classify an insurance contract as onerous at initial recognition if the risk-adjusted present value of all the expected cash flows for contract fulfilment results in a net cash outflow. Due to changes in estimates relating to future service, a group of insurance contracts can become onerous upon subsequent measurement. This nevertheless does not affect the classification into different groups at initial recognition. In other words, the composition of the groups is not reassessed.

We also ensure that all the contracts within a group were issued within one year. We thus do not make use of the option of exempting groups of insurance contracts from the annual cohort requirement (annual cohort exemption in accordance with Regulation (EU) 2021/2036 from 19 November 2021).

Recognition

A group of insurance contracts issued is recognised from the earliest of the following:

- the beginning of the coverage period of the group of contracts;
- the date when the first payment from a policyholder in the group becomes due; or
- for a group of onerous contracts, when the group becomes onerous.

Measurement

IFRS 17 provides a consistent accounting model for all insurance contracts. The basic approach consists in applying the general measurement model (GMM), which is mainly used in life reinsurance and in parts of property-casualty primary insurance business. In view of the GMM's high complexity, IFRS 17 provides the option of using – primarily for short-term contracts – a simplified measurement model known as the premium allocation approach (PAA). We apply this simplified measurement approach particularly for our property-casualty reinsurance business and for a substantial part of our property-casualty primary insurance business. IFRS 17 also provides for a modified measurement model, the variable fee approach (VFA), for certain participating primary insurance contracts. We apply the VFA for eligible life and health primary insurance contracts.

For all measurement models, there is a distinction between a pre-claims stage (liability for remaining coverage – LRC) and a claims stage after the occurrence of an insured event (liability for incurred claims – LIC). Please see below for more detailed explanations of the starting points for the valuation approaches.

General Measurement Model (GMM)

Procedure

The GMM is based on a building block approach that consists of four blocks. The expected future cash flows for contract fulfilment form the basis for measuring our assets and liabilities from insurance business (building block 1). Cash flows are discounted in order to reflect the time value of money and the financial risks (building block 2). Comparing the present value of expected cash inflows against the present value of expected cash outflows results in the present value of the net cash flows relevant for the measurement. This present value is subjected to a risk adjustment to reflect the uncertainty arising from non-financial risk pertaining to the amount and the timing of cash flows (building block 3). For groups of insurance contracts classified as profitable at initial recognition, we recognise a contractual service margin which represents the unearned profit (building block 4). The latter is recognised over time as insurance contract services are provided over the coverage period.

By contrast, for groups of insurance contracts where the sum of the present value of future cash outflows and the risk adjustment for non-financial risk exceeds the present value of expected future cash inflows, a loss component that reflects the expected loss on initial recognition is recognised directly as an expense.

For subsequent measurement of the LRC, building blocks 1, 2 and 3 are remeasured using updated assumptions and inputs. The contractual service margin is adjusted to reflect changes in non-financial assumptions of future coverage and new business margins, among other things, and is amortised as insurance contract services are provided over time. The carrying amount of the LRC is – at the end of each reporting period – the sum of the present value of expected future net cash flows, the risk adjustment for non-financial risk and the contractual service margin.

Cash flows (building block 1)

The starting point for measuring groups of insurance contracts is based on a current estimate of all cash flows required to fulfil the contract within the contract boundary.

Cash flows that need to be taken into account include premium payments, expenses for claims and benefits, acquisition and administration costs, and loss adjustment expenses. The cash flows included in the measurement model reflect our current estimates and expectations regarding the fulfilment of our insurance obligations at each reporting date. All cash inflows from the insurance contracts are included irrespective of the payment method, i.e. also if they are received indirectly via an intermediary. We include in the cash flows an allocation of certain fixed and variable overheads that can be directly attributed to the fulfilment of insurance contracts.

Discounting (building block 2)
Under the GMM, future cash flows are discounted using current discount rates. Measurement thus considers the time value of money, so that cash flows expected to occur at different times are made comparable. In this context, we select discount rates that are as consistent as possible with the overall cash flow characteristics of the groups of insurance contracts, and make use of observable market inputs wherever possible. Discount rates are determined using a bottom-up approach, with the Solvency II interest-rate curves published by the supervisory authority EIOPA (European Insurance and Occupational Pensions Authority) serving as the starting point for risk-free interest rates. We ensure that credit spreads have no effect on the discounting of the cash flows or the risk adjustment for non-financial risk. The discount rates we use do not take into consideration any type of default risk. But if relevant, an illiquidity premium may be added to the discount-rate curve to take account of the differences in liquidity between the insurance liabilities and the liquid reference instruments used in determining the risk-free interest rate. We do this for the relevant portfolios in life primary insurance business, in particular.

At each reporting date, the fulfilment cash flows for the LRC and LIC are remeasured using current discount rates. IFRS 17 provides for the option, applied at portfolio level, to recognise the impact of changes in discount rates and financial inputs in other comprehensive income rather than in the consolidated income statement. We make use of this option for the majority of our insurance portfolio, irrespective of the measurement model used. In the general measurement model, we present changes to the financial inputs in full in the liability for remaining coverage, excluding the loss component.

Risk adjustment for non-financial risk (building block 3)
Cash flows arising from insurance contracts usually involve a high degree of uncertainty regarding the point in time an insured event occurs and the amount of a claim. In addition, there may be changes to the assumptions made about the insurance business as a result of changes in policyholder behaviour, e.g. related to exercising available options. To take this uncertainty into consideration, IFRS 17 provides for a third building block: an explicit risk adjustment for non-financial risk that represents compensation for bearing the risk. The sum of the risk adjustment for non-financial risk and the present value of net cash flows represents the fulfilment cash flows specific to a party that are relevant for measurement.

The risk adjustment for non-financial risk is determined in accordance with our internal risk model, taking Group-wide risk diversification into account. We apply a cost-of-capital method for determining the risk adjustment for non-financial risk. More specifically, we apply a cost-of-capital rate of 6% to the amount of capital required as at each future reporting date on a going-concern basis, and we discount the result using the risk-free rates adjusted for illiquidity. The level of risk adjustment for non-financial risk used by Munich Re corresponds to a confidence level of 88% (87%) over a one-year period. Like the present value of the cash flows, the risk adjustment for non-financial risk is reviewed at each reporting date and updated to reflect the current conditions.

IFRS 17 provides for the option of splitting the change in risk adjustment for non-financial risk into insurance service result and insurance finance income or expenses. We report the full change in risk adjustment for non-financial risk as part of the insurance service result unless it is due to changes in the time value of money.

Contractual service margin (building block 4)
The contractual service margin represents the unearned profit at initial recognition that is spread over the coverage period as insurance contract services are provided. If at initial recognition the present value of expected inflows exceeds the present value of expected outflows plus the risk adjustment for non-financial risk, the expected profit from the insurance cover is initially recognised as a contractual service margin, and taken into account when measuring the liability for remaining coverage. The initial recognition of profitable groups of insurance contracts thus does not affect profit or loss. If additional profitable contracts are added to a group of insurance contracts within an annual cohort over time, the expected profit from the new business is added to the contractual service margin at initial recognition. On subsequent measurement, the change in the contractual service margin is recognised in the consolidated income statement as part of insurance revenue. The amount of the contractual service margin to be recognised in profit or loss for each period is determined by coverage units. These are used to determine the quantity of services provided for the in-force insurance contracts in the current reporting period in relation to the expected total insurance contract services provided over the whole of the coverage period. For all of our insurance business, we define the coverage units in such a way as to ensure that they reflect the services provided as accurately as possible. We generally use volume-based coverage units such as the sum insured, which may be adjusted to reflect the specific characteristics of the (re)insurance business concerned.

By contrast, if we expect a loss at initial recognition, we identify a corresponding portion of the present value of the expected net cash flows plus the risk adjustment for non-financial risk as a loss component. We recognise the expected loss in the consolidated income statement at initial recognition of the group of contracts, or as soon as we become aware that the group of insurance contracts is onerous. When aggregating insurance contracts into groups, we ensure that onerous insurance contracts are not combined with profitable ones. At subsequent measurement, our control procedures are also designed to identify at an early stage any groups of insurance contracts that are to be classified as onerous in terms of future coverage. A loss component will always reflect the expected loss from the insurance contract services still to be provided at a given point in time. We systematically amortise the loss component based on the remaining cash flows and the risk adjustment for non-financial risk until the end of the coverage period.

An initially profitable group of insurance contracts within an annual cohort may become onerous on subsequent measurement. In this case, a loss component has to be recognised. Conversely, a group of insurance contracts classified as onerous can become profitable on subsequent measurement, giving rise to a contractual service margin. In both instances, the loss component and the contractual service margin have been completely amortised in profit or loss by the end of the coverage period.

Premium Allocation Approach (PAA)

Scope of application

We use the PAA for all groups of insurance contracts that meet the requirements for applying the simplified measurement model. This is always the case if the coverage period of such contracts is one year or less – or, if the coverage period is longer, it can be reasonably expected that applying the simplified measurement model will produce a measurement of the LRC for the group that would not differ materially from the measurement that would result from applying the requirements of the GMM. The length of the coverage period is mainly determined by the concept of contract boundaries. At present, we largely apply the PAA for our property-casualty reinsurance business. One exception relates to groups of insurance contracts for which the coverage period had expired at the transition date and which are in the settlement period. The GMM is applied to such groups of insurance contracts. While there was no valuation difference between the GMM and the PAA at the transition date, it was no longer possible to verify the applicability of the PAA to insurance contracts that were initially recognised in the distant past.

In addition to our property-casualty reinsurance business, we generally also use the PAA for a substantial part of our property-casualty primary insurance business and for health primary insurance contracts not similar to life insurance.

Procedure

On initial recognition of a group of insurance contracts, we recognise an LRC, equal to the premiums received less acquisition costs paid. For business classified as profitable, neither the present value of the future net cash flows nor the risk adjustment for non-financial risk nor the contractual service margin is explicitly determined and recognised. If the coverage period of the contracts in the group is one year or less, any acquisition costs incurred may be recognised directly as an expense. We use this option for a substantial part of our property-casualty primary insurance business. Moreover, IFRS 17 provides for utilisation of the PAA to simplify the discounting of future cash flows when compared to the GMM. If there is no significant financing component and if claims settlement is expected within a year of the occurrence of loss, no discounting is required. We currently do not apply this option. In order to provide for maximum transparency and comparability in measuring our business, we consistently consider the time value of money also when using the PAA.

If we are aware of any indications that contracts should be classified as onerous under the GMM, we compare the insurance liability determined under the PAA with the result of the measurement under the GMM. If the comparison shows that the carrying amount of the LRC (fulfilment cash flows) under the GMM exceeds the carrying amount determined under the PAA, we directly recognise the balance as an expense in the form of a loss component. To this end, we explicitly calculate the present value of the net cash flows and the risk adjustment for non-financial risk to facilitate a comparison with the GMM. Our onerosity testing is geared to identifying onerous contracts as soon as possible and ensures adequate reserving at all times.

For subsequent measurement of a profitable group of insurance contracts, the carrying amount of the LRC is updated as follows. First, the carrying amount is either increased with no impact on profit or loss by adding the further premium payments received, or decreased by subtracting directly attributable acquisition costs paid – provided that we do not make use of the option to recognise the acquisition costs as an expense. The LRC is reduced by the amount of insurance revenue earned as insurance contract services are provided. We earn the insurance revenue by spreading the expected total premium for the coverage period within the contract boundaries over the accounting periods in a risk-commensurate manner. Again, for subsequent measurement of profitable groups of insurance contracts, the present value of the net cash flows, the risk adjustment for non-financial risk and the contractual service margin are not explicitly determined, so that the PAA provides for effective simplification. By contrast and consistent with the GMM, we explicitly determine risk-adjusted net cash flows for onerous groups of insurance contracts, and following the occurrence of an insured event.

Also for the PAA, a distinction is made between the LRC and the LIC. Likewise, a risk adjustment for non-financial risk needs to be determined for the LIC when using the PAA.

Insurance contracts with direct participation features measured using the variable fee approach (VFA)

Scope of application

Under an insurance contract, the insurer may not only be liable to pay for a claim after the occurrence of an insured event, but may also have to give policyholders a share in the profits.

Contracts with direct participation features are chiefly measured using the VFA. Contracts fall within the VFA scope if they provide for policyholder participation in the performance of a reference value for the underlying items. This is the case for our German participating life and health primary insurance business and a substantial part of our international life and health primary insurance contracts. Unit-linked life insurance is another case for application of the VFA. However, both reinsurance contracts held and reinsurance contracts issued are excluded from the scope of this measurement approach.

Procedure

Because of the special characteristics of insurance contracts with direct participation features, we consider our share of the income from the underlying items to be a variable fee, which we recognise in accordance with the requirements of the VFA. This variable fee comprises our share of the fair value of the underlying items, and is our compensation for administering and managing them.

While the initial measurement of participating contracts is the same as under the GMM, special rules apply under IFRS 17 for subsequent measurement. For example, we offset against the contractual service margin any and all effects that have an impact on the fair value of the underlying items and consequently on our variable fee.

For German life and health (similar to life) primary insurance business, profit participation provides for policyholders essentially sharing in the investment result, risk result and cost result. The value of the underlying items is based on this profit participation, and reflects the present value of both future payments and payments made in current and prior periods. We use the fair values of the net assets covering our liabilities, including the assets covering equity, to measure the fair value of the underlying items. Because of the mechanics of German profit participation in particular, all financial and insurance effects and assumption changes have an impact on profit participation – and thus also on our variable fee. As a result, developments such as changes in the fair value of assets backing our liabilities, current loss experience, effects related to policyholder lapse behaviour and other changes in financial and non-financial assumptions are initially offset against the contractual service margin.

The fulfilment cash flows for German life primary insurance business and health primary insurance business (similar to life insurance) are determined on a market-consistent basis in line with the contractual options and guarantees, applying a risk-neutral measurement where risk-free interest rates only can be generated under the no-arbitrage principle. The actual returns generated from the underlying items are usually higher, and the company's share in any excess return over the risk-neutral measurement is included in the contractual service margin under the VFA. The recognition of the contractual service margin takes account of the effects resulting from the expected excess return from the performance of the underlying items attributable to the reporting period. This achieves the appropriate recognition of services provided under insurance contracts over the coverage period and accounts for the fact that the underlying items tend to generate higher returns than based on a risk-neutral perspective. The assumptions regarding the expected excess return are based on requirements taken from corporate planning before the beginning of the financial year. For participating contracts, we take into account that we provide not only insurance services, but also investment-related services in managing the assets backing our liabilities.

Another difference compared with the GMM relates to the option of recognising the effect of changes in financial inputs on the measurement either in profit or loss in the consolidated income statement or directly in equity in other comprehensive income. This effect is not explicitly captured when using the VFA. Instead, because of the special link to the asset side, the result of the underlying item recognised in profit or loss for the liability side is mirrored in the consolidated income statement. A positive investment result is offset by corresponding finance expenses from insurance contracts issued. Changes in the fair value of assets that are part of the underlying items and do not have an impact on profit or loss are recognised as insurance finance income or expenses directly in other comprehensive income. This value corresponds to the amounts recognised for the investments in other comprehensive income plus off-balance-sheet valuation reserves.

Foreign currency translation

Our subsidiaries largely recognise differences resulting from the translation into their respective functional currencies in profit or loss. The thus converted net assets of foreign subsidiaries whose functional currency is not the euro are translated using the year-end exchange rates, and results using quarterly average exchange rates. Any exchange differences arising in the process are recognised in equity.

For groups of insurance contracts that include cash flows in several currencies, we calculate the fulfilment cash flows, including the contractual service margin, in different currencies within the group. Changes in exchange rates for the different currencies result in an adjustment to the individual fulfilment cash flows at Group level, which is then translated into the functional currency of the Group company concerned.

Assets

A Intangible assets

Goodwill
Goodwill resulting from the first-time consolidation of subsidiaries is tested for impairment at least annually. We carry out additional impairment tests during the year if there are indications of impairment.

For impairment testing, the goodwill is allocated to the cash-generating units that derive benefit from the synergies of the business combinations. At the same time, the unit to which the goodwill is allocated represents the lowest level at which goodwill is monitored for internal management purposes. Goodwill is allocated in reinsurance to divisions, and in primary insurance to the ERGO segment Property-casualty Germany, and to legal entities. We regard amounts of 10% or more of total Group goodwill as significant.

Other intangible assets
Other intangible assets largely include software assets, as well as acquired distribution networks and client bases.

Software assets are carried at cost and are amortised on a straight-line basis over a useful life of three to five years. Amortisation is recognised in other operating expenses in the consolidated income statement. If necessary, impairment losses on the assets are recognised or reversed up to a maximum of the amortised cost.

Client bases and distribution networks are carried at cost and are amortised on a straight-line basis over a useful life of eight to twenty years. If necessary, impairment losses are recognised or reversed up to a maximum of the amortised cost.

Intangible assets related to our investments in infrastructure and renewable energies are reported separately under non-financial investments. We refer to the notes in this chapter under D Investments > Non-financial investments.

B Reinsurance contracts held that are assets

The recognition and measurement of reinsurance contracts held generally follows the requirements for insurance contracts issued. For details, please refer to the information under Overarching accounting policies > Insurance contracts. Significant differences to the recognition and measurement requirements for insurance contracts issued are set out below.

A group of reinsurance contracts held is recognised from the earlier of the following:

- the beginning of the coverage period of the group of contracts, or
- the date when an onerous group of underlying insurance contracts is recognised.

With respect to a group of reinsurance contracts held that provide proportionate coverage (for example proportional reinsurance contracts), the group is not recognised until the date on which any underlying insurance contract is recognised – if that date is later than the beginning of the coverage period of the group of reinsurance contracts held.

We apply the PAA for most of our reinsurance contracts held in property-casualty business, and the GMM in life and health business. Conversely, the VFA is not applied to reinsurance contracts held.

The estimates of future cash flows and their discounting are determined at the reporting date on the basis of current assumptions, which are in line with the assumptions we made for measuring the underlying insurance contracts issued.

We determine the risk adjustment for non-financial risk of reinsurance contracts held as the proportion of the risks that is effectively transferred to the reinsurer, with the net risk capital after retrocession serving here as the basis. We ensure in this context the best possible consistency when determining the risk adjustment for non-financial risk as regards the underlying gross business.

In contrast to insurance contracts issued, the contractual service margin for reinsurance contracts held can be positive or negative. Within this context, a positive contractual service margin is referred to as a net gain and a negative contractual service margin as a net cost. In the case of prospective reinsurance coverage, it is necessary upon purchasing reinsurance to defer both a net gain and a net cost over the coverage period. We offset against the contractual service margin any changes in the fulfilment cash flows, provided that the changes relate to future service. However, if the changes in estimates are attributable to changes that do not adjust the contractual service margin of the group of reinsured insurance contracts, we recognise their impact on the measurement of the reinsurance contract held in profit or loss. In this way, we achieve a consistent presentation of gross business and reinsurance contracts held. As part of subsequent measurement, the contractual service margin is spread out over the remaining coverage period on the basis of the coverage units.

In the case of retroactive reinsurance contracts held, which provide coverage against adverse development of claims after the occurrence of an insured event, we recognise the net cost of purchasing reinsurance as an expense in profit or loss. Conversely, an expected net gain is spread over the settlement period of the underlying contracts in a contractual service margin on the basis of coverage units.

If a loss is recognised for an onerous group of underlying insurance contracts, we set up a loss-recovery component. In proportion to the anticipated recoveries, we thus match the loss component of the underlying gross business recognised as an expense with a loss-recovery component recognised as income. As a consequence, effective reinsurance coverage is thus offset in the financial statements and only the effects of losses from the underlying gross business that are not covered by reinsurance are recognised in profit or loss in the respective period. Reversals of the loss-recovery component adjust the contractual service margin, provided that the reversals are not changes in the fulfilment cash flows of the group of reinsurance contracts held.

The loss-recovery component is calculated by multiplying the recognised loss by the percentage of claims on the underlying insurance contracts that are expected to be recoverable. Upon subsequent measurement, the loss-recovery component is adjusted to reflect the changes in the underlying loss component of the underlying insurance contracts. The loss-recovery component is of minor significance for Munich Re.

C Insurance contracts issued that are assets

Insurance contracts issued that are recognised as assets under the accounting policies are presented separately from the liabilities at a portfolio level in the consolidated balance sheet.

The recognition and measurement of insurance contracts issued that are assets follows the same procedure as for insurance contracts issued that are liabilities. Please refer to the information found under Overarching accounting policies > Insurance contracts, and under Equity and liabilities > D Insurance contracts issued that are liabilities.

D Investments

Non-financial investments

Investment properties are measured using the cost model or – if they are held as underlying items for insurance contracts with direct participation features under the VFA – in accordance with the fair value model.

When measurement is based on the cost model, structural measures equivalent to 5% or more of the historical cost of a building are generally assessed with regard to whether they have to be capitalised. Buildings are depreciated on a straight-line basis in accordance with the component approach, depending on the weighted useful life for their specific building class. The underlying weighted-average useful life amounts to around 38 years. If the recoverable amount of land and buildings falls below their carrying amount, the carrying amount is written down to the recoverable amount. Maintenance expenses are recognised as an expense.

If investment properties are held as underlying items for insurance contracts with direct participation features under the VFA, we recognise these properties at fair value. These properties cover underwriting liabilities whose amount is determined directly by the fair value of the properties. The properties are measured at cost, including incidental expenses, on initial recognition. Subsequent measurement is at fair value, recording any changes in value in the net result.

The **property, plant and equipment** reported under non-financial investments include, in particular, our investments in renewable energies and are measured at amortised cost. They are depreciated on a straight-line basis over a useful life of 20–30 years, but mostly over 20 years. Based on the annual impairment test, impairment losses are recognised or reversed up to a maximum of the amortised cost.

Intangible assets related to our investments in infrastructure and renewable energies are generally accounted for as described in this chapter under A Intangible assets > Other intangible assets in the paragraph on client bases and distribution networks. These assets relate primarily to licences, concessions and right-of-use assets relating to the operation of investments in renewable energies.

We report our forestry investments under **biological assets**. These investments are measured at fair value less costs of disposal, with impact on profit or loss.

Investments in affiliated companies, associates and joint ventures that are not material for assessing the Group's financial position are generally accounted for at fair value. We report any changes in the fair value in the consolidated income statement. For the consolidated financial statements, material investments in associates and joint ventures are measured using the equity method, i.e. with our share of their equity. Our share in the earnings is included in the investment result. As a rule, the equity and annual result from the most recent individual or consolidated financial statements of the associate or joint venture are used. In the case of financial statements of important associates or joint ventures, appropriate adjustments are made to ensure they conform with Munich Re's accounting policies, and significant transactions or other events are recognised in the same reporting period.

Financial investments

Financial investments make up the lion's share of our financial assets. Their classification for the purposes of subsequent measurement is determined on the basis of the business model for managing the financial asset and the contractual cash flow characteristics of the financial asset.

Financial investments are mostly used to back insurance liabilities and are managed as part of our asset-liability management on the basis of their duration and risk profile. This means that the management strategy is aimed at both collecting contractual cash flows and selling financial assets. As a result, these financial investments are managed within the business model "hold to collect and sell".

If the investments managed within the business model "hold to collect and sell" pass the SPPI test, they are measured at fair value through other comprehensive income. This is the case for the bulk of our financial investments. These investments include bonds and loans in particular.

By contrast, bonds and loans that do not pass the SPPI test are measured at fair value through profit or loss just like equities, investment fund units and derivatives.

Deposits with banks are managed within the business model "hold to collect" and pass the SPPI test, meaning that they are measured at amortised cost. For further details on the classification and measurement of financial investments, including impairment, please refer to Overarching accounting policies > Financial instruments.

Accounting policies for the comparative information pursuant to IAS 39

In the context of the initial adoption of IFRS 9, we make use of the option, applying the classification overlay approach, not to restate comparative information as a matter of principle, but rather to continue to present it in accordance with IAS 39. The section below summarises the significant accounting policies for those financial instruments reported in accordance with IAS 39 in the comparative period.

In addition to the first-time application of IFRS 9, changes were made to the presentation and classification of items in the consolidated balance sheet in accordance with IAS 1.41. This means that the IAS 39 measurement categories set out below no longer match the line items. For details, please refer to the section entitled "Changes in accounting policies and other adjustments".

Under IAS 39, loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They were measured at amortised cost in accordance with the effective interest method.

Fixed-interest or non-fixed-interest securities available for sale that were not designated as at fair value through profit or loss or recognised under loans were accounted for at fair value under IAS 39, with resulting changes in value recognised in other comprehensive income with no effect on profit or loss. Unrealised gains or losses were calculated taking into account interest accrued and, after deduction of deferred taxes, were recognised directly in equity under "Other reserves".

Securities measured at fair value through profit or loss under IAS 39 comprise securities held for trading and securities classified as "measured at fair value through profit or loss". At Munich Re, securities held for trading mainly included all derivative financial instruments with positive fair values which we have acquired to manage and hedge risks but which do not meet the requirements of IAS 39 for hedge accounting. The securities that were designated as "at fair value through profit or loss" under IAS 39 included embedded derivatives that had to be separated. In addition, loan portfolios were managed based on the fair value of the entire portfolio, which is why it was designated as "measured at fair value through profit or loss".

Investments for unit-linked life insurance contracts were also measured at fair value through profit or loss under IAS 39. Similarly, other insurance-related financial instruments were largely measured at fair value through profit or loss.

Deposits with banks were measured at amortised cost using the effective interest method, and cash and cash equivalents were carried at their nominal value.

The investment result under IAS 39 comprised regular income; income from write-ups; gains and losses on the disposal of investments; other income, write-downs of – and impairment losses on – investments; and management expenses, interest charges and other expenses. Regular income and expenses from investments not measured at fair value through profit or loss were calculated in accordance with the effective interest method.

Under the IAS 39 rules, we assessed at each reporting date whether there was any substantial objective evidence of impairment in a financial asset or group of financial assets. As the recognition of impairments – both on the merits and in terms of amount – was based on discretionary judgement and estimates, we had established a process that guaranteed that at every reporting date all investments that might be subject to impairment would be identified and tested for impairment. On the basis of these test results, a list of investments was prepared for which an impairment must be recognised; this list was then verified once again with the involvement of management.

IAS 39.59 contains a list providing objective evidence of impairment of financial assets. In addition, IAS 39.61 states that, for equity investments, a significant or prolonged decline in the fair value of the investment below its acquisition cost is objective evidence of impairment. These rules were given more concrete form by means of internal guidelines. For equities quoted on the stock exchange, we assumed a significant decline in fair value if the market value at the review date was at least 20% below the average purchase price, or had been lower than this amount for at least six months. In the case of fixed-interest securities and loans, the main basis for establishing impairment was an indication of substantial financial difficulty on the part of the issuer, the current market situation or media reports on the issuer.

There are no differences between IFRS 9 and IAS 39 regarding the recognition and offsetting of financial instruments, or repurchase agreements and securities lending.

The accounting policies for financial liabilities under IAS 39 match those under IFRS 9 except that, if the fair value option is applied, value changes attributable to a change in the entity's own credit risk are not recognised in other comprehensive income under IAS 39.

E Investments for unit-linked life insurance

Investments for unit-linked life insurance are managed within the business model "other", meaning they are measured at fair value through profit or loss.

For further details on classification and measurement and other overarching accounting policies, please refer to Overarching accounting policies > Financial instruments.

F Insurance-related financial instruments

Insurance-related financial instruments are not utilised for asset-liability management. Instead, they are managed based on their fair value within the business model "other", meaning they are measured at fair value through profit or loss.

In particular, insurance-related financial instruments include insurance derivatives, derivative components of variable annuities, derivatives for hedging variable annuity contracts and loans. In the case of loans, contractual wording largely waives the right to reimbursement triggered by the occurrence of insurance events. The item also includes financial instruments directly linked to insurance business that are similar in nature to equity instruments. Insurance-linked derivatives include retrocessions in the form of derivatives, individually structured insurance-linked derivatives and derivative components which are separated from their host insurance contract. Insurance-related financial instruments also include insurance contracts that do not transfer significant insurance risk.

For further details on classification and measurement and other overarching accounting policies, please refer to Overarching accounting policies > Financial instruments.

G Receivables

The receivables included in this item comprise current tax receivables, financial receivables and other receivables.

Current tax receivables are accounted for in accordance with local tax regulations and other receivables at amortised cost. Current tax receivables comprise current taxes on income of the individual companies, based on their respective national taxation. Other tax receivables are shown under "Other receivables".

The financial receivables are financial instruments. As they are managed within the business model "hold to collect", they are measured at amortised cost provided they pass the SPPI test. In such cases, they are subject to the IFRS 9 impairment model. Otherwise, they are subsequently measured at fair value through profit or loss. For further details on classification and measurement and other overarching accounting policies, please refer to Overarching accounting policies > Financial instruments.

The impairment test of our non-financial receivables that are not carried at fair value in subsequent periods is performed in a two-stage process, firstly at the level of individual items, and then on the basis of groups of similar receivables. The impairment is recognised as an expense. If, in a subsequent period, the reasons for the impairment cease to apply, the impairment is reversed, with impact on the income statement. The resultant carrying amount may not exceed the cost.

H Cash and cash equivalents

Cash and cash equivalents are financial instruments and are managed within the business model "hold to collect". As a result, they are measured at amortised cost, or at their nominal value due to their short-term nature. If they do not pass the SPPI test, they are measured at fair value through profit or loss. For further details on classification and measurement and other overarching accounting policies, please refer to Overarching accounting policies > Financial instruments.

I Deferred tax assets

Deferred tax assets must be recognised in cases where asset items have to be valued lower, or liability items higher, in the consolidated balance sheet than in the tax accounts of the Group company concerned and these differences will be eliminated at a later date with a corresponding effect on taxable income (temporary differences). Also included are tax assets deriving from tax loss carry-forwards. Deferred tax assets are recognised if there are sufficient taxable temporary differences which are expected to reverse in the same period as the deductible temporary differences. For any additional deductible temporary differences, deferred tax assets are only recognised if it is considered probable that future profits will be available in the same period in which the deductible temporary differences are expected to reverse. As a rule, a five-year forecast period is considered. We take into account the tax rates of the countries concerned and the consolidated company's respective tax situation; in some cases, for purposes of simplification, we use uniform tax rates for individual circumstances or subsidiaries. Changes in tax rates and tax legislation that have already been adopted by the government at the balance sheet date are taken into account.

Deferred tax assets and deferred tax liabilities are reported on a net basis, provided that they refer to the same taxable entity and the same tax authority. Netting out is done here if it is generally possible to offset the underlying tax assets and tax liabilities.

J Other assets

Other assets mainly include property, plant and equipment not related to our investments in infrastructure and renewable energies (in particular owner-occupied property) and are generally measured at amortised cost (cost model). Depreciations mainly occur on a straight-line basis; the weighted-average useful life of the owner-occupied buildings is about 44 years. Impairment losses are recognised for owner-occupied land and buildings, operating and office equipment accounted for using the cost model if the recoverable amount has fallen below the carrying amount on the reporting date. If necessary, impairment losses are reversed up to a maximum of the amortised cost.

If owner-occupied land and buildings are held as underlying items for insurance contracts with direct participation features under the VFA, we recognise these using the fair value model. They are measured at cost, including incidental expenses, on initial recognition. Subsequent measurement is at fair value, recording any changes in value in the net result.

Right-of-use assets are also reported under other assets. These comprise lease liabilities, lease payments made at the time or before the asset is made available for use, initial direct costs, and restoration obligations. Right-of-use assets are depreciated on a straight-line basis over the term of the lease.

K Non-current assets held for sale

Non-current assets held for sale are assets that can be sold in their current condition and whose sale is highly probable. The item may comprise individual assets or groups of assets. Non-current assets held for sale are recognised at the lower of the carrying amount and fair value less costs to sell. They are no longer depreciated. Measurement of financial instruments remains unchanged; the only difference is how they are disclosed.

Equity and liabilities

A Equity

The item **Issued capital and capital reserve** contains the amounts that the equity holders of Munich Reinsurance Company have paid in on shares.

Under **Retained earnings**, we show the profits which consolidated companies have earned and retained since becoming part of Munich Re. In addition, the adjustment amount resulting from changes in accounting policies for earlier periods not included in the consolidated financial statements is recognised in the opening balance of the retained earnings for the earliest prior period reported. Retained earnings also include the effects from remeasurement of defined benefit plans.

Own shares are deducted from equity. The purchase, sale or retirement of these shares is recognised in equity items, without impact on profit or loss.

We use the item **Other reserves** to report unrealised gains and losses resulting from the measurement of financial investments at fair value through other comprehensive income. In addition, they include unrealised gains and losses from the measurement of associates and joint ventures using the equity method. We report insurance finance income or expenses for the majority of our insurance portfolio in "Other reserves", under the changes from the measurement of insurance contracts. This is to recognise the impact of changes in discount rates and other financial inputs. Differences resulting from the currency translation of foreign subsidiaries' figures, and remeasurement gains/losses from hedging relationships are also presented under "Other reserves".

IFRS 9, Financial Instruments, and IFRS 17, Insurance Contracts, were applied for the first time with effect from 1 January 2023. Effects from the initial application of IFRS 17 are recognised in equity as at 1 January 2022, with effects from the initial application of IFRS 9 recognised in equity as at 1 January 2023. For further details on the impact of the initial application of IFRS 9 and IFRS 17, please refer to the information under "Changes in accounting policies and other adjustments" and under Explanatory information > Notes to the consolidated balance sheet – Equity and liabilities > 24 Equity.

B Subordinated liabilities

Subordinated liabilities are liabilities which, in the event of liquidation or insolvency, are only satisfied after the claims of other creditors. They are measured at amortised cost using the effective interest method.

For further details on classification and measurement and other overarching accounting policies, please refer to Overarching accounting policies > Financial instruments.

C Reinsurance contracts held that are liabilities

Reinsurance contracts held that are recognised as liabilities due to application of the accounting policies are presented separately from the assets at a portfolio level in the consolidated balance sheet.

The recognition and measurement of reinsurance contracts held that are liabilities follows the same procedure as for reinsurance contracts held that are assets. Please refer to the information under Assets > B Reinsurance contracts held that are assets.

D Insurance contracts issued that are liabilities

In the case of insurance contracts issued that are liabilities, we present the following items separately in the consolidated balance sheet: the LRC, the LIC, and other technical liabilities. The section below describes how the individual items are reported based on the various measurement models. The general accounting policies for insurance contracts issued that are liabilities are set out in Overarching accounting policies > Insurance contracts.

Liability for remaining coverage

The LRC comprises the payment obligations for insured events that have not yet occurred and for other insurance contract services that have not yet been provided. Under the GMM, the LRC is the sum of the present value of the risk-adjusted future cash flows (fulfilment cash flows – consisting of building blocks 1, 2 and 3) and the contractual service margin (building block 4). For detailed explanations of the building blocks and their measurement, please refer to Overarching accounting policies > Insurance contracts. We remeasure the estimated present value of the future cash flows and the risk adjustment for non-financial risk at each reporting date on the basis of updated assumptions. In addition, we recognise the expected profit attributable to the provision of insurance coverage for a group of insurance contracts as a contractual service margin, and thus explicitly as part of the liability for remaining coverage. We adjust the contractual service margin for any changes in fulfilment cash flows relating to future services, or establish a loss component and recognise it as an expense as soon as the contractual service margin has been depleted.

Under the PAA, in the case of profitable business the LRC is recognised upon initial measurement in a simplified way as the sum of premiums received less the acquisition cash flows paid, provided that the latter are not recognised directly as an expense. In other words, neither the present value of the future cash flows nor a risk adjustment for non-financial risk nor a contractual service margin is determined. Conversely, in the case of onerous groups of insurance contracts a loss component is recognised in line with the GMM and recognised under this balance sheet item. As part of subsequent measurement, we consider the time value of money and consequently achieve the greatest possible consistency with the application of the GMM. The liability for remaining coverage is adjusted on the basis of historical yield curves as determined on initial recognition.

The LRC for groups of insurance contracts measured under the VFA consists of the sum of the present value of the risk-adjusted future cash flows and the contractual service margin. The determination of both the present value of the future cash flows and the risk adjustment for non-financial risk at initial measurement generally follows the requirements under the GMM. Special rules apply under IFRS 17 for subsequent measurement as per the VFA; please refer to Overarching accounting policies > Insurance contracts.

Liability for incurred claims

The LIC comprises the payment obligations for incurred claims that have not yet been settled, and for other insurance contract services already provided. It is measured by applying the first three building blocks of the GMM, i.e. by calculating the present value of the risk-adjusted future cash flows. We start by determining, based on our actuarial estimate, the requisite present value of the cash outflows expected to occur by the time the insured event has been definitively settled. The present value of the cash outflows reflects both the expected payments to the policyholder as well as our claims settlement expenses and administration costs. We add a risk adjustment for non-financial risk to the present value of the cash outflows to account for any remaining uncertainty as to the ultimate amount of claims or their payout dates.

In the context of estimates and in line with the LRC, we consider past experience and assumptions about future developments, including social, economic or technological factors. By applying our actuarial projection methods, we ensure appropriate reserving for incurred claims at all times, near the upper end of adequate expected values.

We use current discount rates when discounting future risk-adjusted cash outflows and use the option to recognise the effect of changes in financial inputs on measurement in "Other comprehensive income" in equity. When determining the fulfilment cash flows for the liability for incurred claims using the general measurement model and when using the PAA, we use the discount rates at the date of the incurred claim. However, we base subsequent measurement on different discount rates depending on the measurement model used. Under the general measurement model, changes to the financial inputs for the liability for incurred claims compared to the ones used at initial recognition of the liability for remaining coverage are presented in "Other comprehensive income". Under the PAA, changes to the financial inputs for the liability for incurred claims compared to the ones used at initial recognition of the liability for incurred claims are presented in "Other comprehensive income". When applying the PAA, we do not make use of the option to refrain from discounting under certain circumstances. The date of loss needs to be estimated because cedants use aggregated claims data. We have prepared these estimates on a quarterly basis since 2023 (2022: annual basis).

Changes in the measurement of the LIC arising from updated actuarial estimates or updated costs are recognised in profit or loss.

Particularly for participating life and health primary insurance business, the LIC primarily concerns payments to customers. We do not distinguish in our balance sheet presentation of technical liabilities between unit-linked life insurance contracts and other insurance contracts in the VFA scope.

Other technical liabilities

Under the balance sheet item "Other technical liabilities" we present measurement components regarding groups of insurance contracts for which the recognition criteria have not yet been met. This mainly includes premiums received before the first payment due date and the beginning of the coverage period.

E Other provisions

This item includes **Provisions for post-employment benefits and similar obligations**. Under defined contribution plans, the companies pay fixed contributions to an insurer or a pension fund. This fully covers the companies' obligations. Under defined benefit plans, the staff member is promised a particular level of retirement benefit either by companies or by pension funds. The companies' contributions needed to finance this are not fixed in advance. If pension obligations are covered by assets held by a legally separate entity (e.g. a fund or a contractual trust arrangement in the form of a two-way trust) – assets that may only be used to cover the pension commitments given and are not accessible to creditors – the pension obligations are shown less the amount of these plan assets. If the fair value of the assets exceeds the related outsourced pension commitments, this reimbursement right must be recognised and is presented under "Other receivables".

Pension obligations are recognised in accordance with IAS 19, Employee Benefits, using the projected unit credit method. The calculation includes not only the pension entitlements and current pensions known at the end of the reporting period, but also their expected future development. The assumptions for the future development are determined on the basis of the circumstances in the individual countries.

The discount rate applied to the pension obligations is based on the yields for long-term, high-quality corporate bonds.

The item also includes miscellaneous provisions, which we establish in the amount of the probable requirement. Such amounts are not discounted if the interest-rate effect is insignificant.

F Liabilities

Liabilities include derivatives, non-derivative financial liabilities, current tax liabilities and other liabilities.

The derivatives, non-derivative financial liabilities and the bulk of other liabilities are financial instruments. The latter include insurance-related liabilities. The general accounting policies for financial liabilities are set out in Overarching accounting policies > Financial instruments.

Lease liabilities are included in "Non-derivative financial liabilities". The lease liability represents the present value of the payment obligations entered into. As a rule, lease payments are discounted at the incremental borrowing rate. Lease payments are discounted at the interest rate on which the lease is based, provided that this rate can be determined.

Current tax liabilities comprise current taxes on income of the individual companies, based on their respective national taxation. Other tax liabilities are shown under "Other liabilities".

G Deferred tax liabilities

Deferred tax liabilities must be recognised if asset items have to be valued higher, or liabilities items lower, in the consolidated balance sheet than in the tax accounts of the reporting company, and these differences will be eliminated at a later date with a corresponding impact on taxable income (temporary differences), see Assets > I Deferred tax assets.

H Liabilities related to non-current assets held for sale

Liabilities to be transferred together with disposal groups are recognised in this item, see Assets > K Non-current assets held for sale.

Consolidated income statement

A Insurance service result

Insurance revenue is defined so as to facilitate comparisons with revenue in other industries; it also distinguishes between various sources of revenue with respect to the GMM and the VFA. Insurance revenue is the consideration we are expected to receive for the insurance contract services we provide; investment components are excluded from insurance revenue. An investment component is the amount that an insurance contract requires us to repay to the policyholder in all circumstances – regardless of whether an insured event occurs, e.g. either as a claims payment or as a participation in profit. An investment component is not recognised as insurance revenue and also the repayment of this amount is recognised with no impact on profit or loss. Particularly surrender values in primary insurance as well as performance-related or fixed commissions and profit commissions in reinsurance are investment components in our business, provided that we first receive the premium before such repayments are made to the policyholder. Excluding investment components from insurance revenue does not affect the insurance service result, as there are corresponding reductions in the insurance service expenses.

When applying the PAA, we recognise as insurance revenue the amount of expected premium receipts allocated to the period, while excluding any investment components and adjusted to reflect the time value of money. We allocate the expected premium receipts to each period on the basis of the expected pattern of release of risk during the coverage period.

The insurance service expenses comprise claims expenses in particular (without repayment of any investment components). We present administration and acquisition costs separately under "Insurance service expenses" in the consolidated income statement. Acquisition costs are recognised in insurance service expenses in the same amount as used to determine insurance revenue based on systematic allocation to the appropriate periods of the coverage period. We furthermore present changes in the underlying items separately under "Insurance service expenses" when applying the VFA.

Within the insurance service result, income or expenses from reinsurance contracts held are presented separately (insurance revenue ceded from reinsurance contracts held and income from reinsurance contracts held) and thus separately from insurance revenue and the insurance service expenses from insurance contracts issued.

B Result from insurance-related financial instruments

The result from insurance-related financial instruments includes regular income and expenses, changes in the fair value of financial instruments, expenses for the management of investments and other income and expenses.

C Investment result

The investment result comprises regular income, income from write-ups, gains and losses on the disposal of investments, other income, expected credit losses on financial investments not measured at fair value through profit or loss, write-downs of, and impairment losses on, non-financial investments, management expenses, interest charges and other expenses. Regular income and expenses from financial investments not measured at fair value through profit or loss are calculated using the effective interest method, i.e. any premiums or discounts are amortised over the period of maturity, with impact on profit or loss.

The interest revenue recognised separately in the consolidated income statement relates to our financial assets measured at fair value through other comprehensive income, and is calculated using the effective interest method.

D Investment result for unit-linked life insurance

The gains or losses from changes in the fair value of investments for unit-linked life insurance are included in the investment result for unit-linked life insurance. They are matched by corresponding changes from the measurement of the LRC for unit-linked life insurance that are included in insurance finance income or expenses.

E Insurance finance income or expenses

Insurance finance income or expenses include the effect from the accretion of interest on the present value of the net cash flows, the risk adjustment for non-financial risk and the contractual service margin. Conversely, we recognise the impact of changes in interest rates in "Other comprehensive income" in equity for the majority of our insurance portfolio.

Changes in accounting policies and other adjustments

Standards to be applied for the first time

The application of recognition, measurement and disclosure methods generally follows the principle of consistency.

As from financial year 2023, application of the following new or amended IFRSs was mandatory for the first time:

- IFRS 9 (7/2014), Financial Instruments: IFRS 9 supersedes the previous IAS 39 requirements relating to the recognition and measurement of financial instruments with effect from 1 January 2023. We apply IFRS 9, including all amendments incorporated into EU law by 31 December 2022.

- IFRS 17 (5/2017), Insurance Contracts, as well as all other IFRSs amended by IFRS 17 (IAS 16 and IAS 40 in particular): IFRS 17 supersedes IFRS 4, Insurance Contracts, with effect from 1 January 2023; it is used for the recognition and measurement of insurance contracts (including reinsurance contracts) issued, reinsurance contracts held and investment contracts with discretionary participation features. We apply IFRS 17, including all amendments incorporated into EU law by 31 December 2022.

- Amendments to IAS 1 (rev. 2/2021), Presentation of Financial Statements, and to IFRS Practice Statement 2: Making Materiality Judgements – Disclosure of Accounting Policies

- Amendments to IAS 8 (rev. 2/2021), Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates

- Amendments to IAS 12 (rev. 5/2021), Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction

- Amendments to IAS 12, (rev. 5/2023), Income Taxes: International Tax Reform – Pillar Two Model Rules

IFRS 9 and IFRS 17 have led to significant changes in the classification and measurement of financial instruments and in the recognition, measurement and presentation of insurance contracts. Moreover, the adoption of these standards has far-reaching implications for the disclosures in the Notes to the consolidated financial statements.

The Organisation for Economic Co-operation and Development (OECD) has published model rules on Pillar Two – Global Minimum Tax. These are being transposed into local tax law in some of the countries where Munich Re does business. Munich Re observes and complies with the legal changes. These regulations have already been implemented in Germany and entered into force on 1 January 2024. Due to the new requirements of global minimum taxation, the IASB adopted amendments to IAS 12 in May 2023, including a mandatory exemption from the obligation to recognise deferred tax assets and liabilities in connection with Pillar Two.

The additional amendments to existing standards listed above have no effect or no material effect on Munich Re.

A more detailed explanation of the effects from the initial application of IFRS 9 and IFRS 17 follows below. For a general summary of the accounting policies applied, please refer to “Overarching accounting policies”.

Effects from the initial application of IFRS 9

Retrospective application and comparative information

We have applied the requirements of IFRS 9 for the classification and measurement of financial instruments retrospectively as of 1 January 2023. Initial application is made in accordance with the transition requirements of IFRS 9.

As a general principle, we use the option not to restate comparative information, but continue to present it in accordance with IAS 39. However, in connection with the initial application of IFRS 17, we make use of the classification overlay approach for certain financial instruments (especially loans) in order to avoid accounting mismatches when transitioning to IFRS 17. This approach allows us to present comparative information for these financial instruments as if the classification and measurement requirements of IFRS 9 had already been applied. When applying the classification overlay approach, we do not make use of the concept for recognising expected credit losses under IFRS 9. Further comments can be found in this section under Effects from the initial application of IFRS 17 > Comparative information.

Classification and measurement of financial instruments

The classification of financial assets is based on the business model under which the financial assets are managed and on the “solely payments of principal and interest” (SPPI) criteria.

Our financial assets will mainly be measured at fair value through other comprehensive income, particularly bonds and loans that are managed within the business model “hold to collect and sell” and also pass the SPPI test. In contrast to IAS 39, under IFRS 9 a higher overall percentage of our financial assets will be measured at fair value through other comprehensive income.

There is a lower proportion of financial assets measured at amortised cost (AC) and a higher percentage of financial assets measured at fair value through profit or loss than under IAS 39 measurement. Financial assets measured at fair value through profit or loss include, in particular, fixed-interest securities and loans that do not pass the SPPI test, equities, investment fund units, and derivatives.

Material reclassifications of financial assets with an impact on subsequent measurement involve in particular the following:

Reclassifications from the IAS 39 category of “loans and receivables” (LaR) to the IFRS 9 classification of “at fair value through other comprehensive income” (FVOCI): this involves mortgage loans, registered bonds and promissory note loans that are managed within the business model “hold to collect and sell” and pass the SPPI test.

Financial debt instruments that do not pass the SPPI test are reclassified from the IAS 39 category of “loans and receivables” (LaR) to the IFRS 9 classification of “at fair value through profit or loss” (FVPL); the same applies to insurance contracts that do not transfer significant insurance risk, since they are managed within the business model “other”.

Reclassification from the IAS 39 category of “available for sale” (AfS) to the IFRS 9 classification of “at fair value through profit or loss” (FVPL) involves primarily participations and shares. This reclassification also affects insurance-related bonds and equity instruments. We do not exercise the option to designate equity instruments as measured at fair value through other comprehensive income.

Reclassification from the IAS 39 category of "designated as at fair value through profit or loss" (FVPL option) to the IFRS 9 classification of "at fair value through other comprehensive income" (FVOCI) relates to certain bonds with extension options that contain embedded derivatives that must be separated under IAS 39 and were designated as at fair value through profit or loss. Under IFRS 9, they no longer meet the requirements for applying the fair value option. Where the bonds pass the SPPI test, they are classified as "at fair value through other comprehensive income".

IFRS 9 does not provide for any material changes to the classification requirements for financial liabilities. Most of our financial liabilities continue to be measured at amortised cost using the effective interest method. Before the initial application of IFRS 9 and IFRS 17, the liabilities related to insurance contracts that do not transfer significant insurance risk were measured at amortised cost. Under IFRS 9, these contracts are considered financial instruments; they are measured at fair value through profit or loss, exercising the fair value option. In addition, loan commitments that have thus far been accounted for in accordance with IAS 37 are now classified as "at fair value through profit or loss" provided the financial instruments added later are accounted for at fair value.

The following table presents the reconciliation of measurement categories from IAS 39 to IFRS 9 for financial assets and the impact on retained earnings following reclassification and/or remeasurement. The carrying amounts as at 31 December 2022 include corresponding remeasurement effects anticipated during application of the classification overlay approach. Additional information on the classification overlay approach can be found under Basis of preparation > Comparative information, and in this chapter under Effects from the initial application of IFRS 17 > Measurement at the transition date.

Reconciliation of measurement categories from IAS 39 to IFRS 9 – Financial assets

€m	IAS 39 measurement category	Carrying amount at 31.12.2022	IFRS 9 measurement category	Reclassification	Remeasurement	Carrying amount at 1.1.2023	Effects on retained earnings
Financial investments							
Instruments subject to equity risk							
	AfS	9,711	FVPL	–9,711	0	9,711	164
	FVPL	310	FVPL	–310	0	310	0
	FVPL option	1	FVPL	–1	0	1	0
		10,022		**–10,022**	**0**	**10,022**	**164**
Instruments subject to interest-rate and credit risk[1]							
	LaR	2,887	AC	–2,887	0	2,887	0
	LaR	34,412	FVOCI	–34,412	–5	34,406	–33
	LaR	5,433	FVPL	–5,433	–124	5,309	–202
	AfS	118,935	FVOCI	–118,935	0	118,935	–79
	AfS	3,224	FVPL	–3,224	0	3,224	–13
	FVPL	12	FVOCI	–12	0	12	0
	FVPL	1,771	FVPL	–1,771	0	1,771	0
	FVPL option	1,316	FVOCI	–1,316	0	1,316	69
	FVPL option	306	FVPL	–306	0	306	0
	n/a (IAS 37)	0	FVPL	0	2	2	2
	n/a (hedge accounting)	1	n/a (hedge accounting)	–1	0	1	0
		168,297		**–168,297**	**–128**	**168,169**	**–256**
Alternative investments							
	LaR	3,913	FVOCI	–3,913	–230	3,683	–8
	LaR	88	FVPL	–88	27	115	27
	AfS	1,646	FVOCI	–1,646	0	1,646	–38
	AfS	6,613	FVPL	–6,613	0	6,613	1,722
	FVPL	27	FVPL	–27	0	27	0
	FVPL option	229	FVPL	–229	0	229	0
	n/a (IAS 37)	0	FVPL	0	5	5	5
		12,516		**–12,516**	**–198**	**12,318**	**1,708**
Subtotal		**190,835**		**–190,835**	**–326**	**190,509**	**1,616**

Investments for unit-linked life insurance							
	FVPL option	7,470	FVPL	–7,470	0	7,470	0
		7,470		**–7,470**	**0**	**7,470**	**0**
Insurance-related financial instruments[1, 2]							
	LaR	6,193	FVPL	–6,193	–37	6,155	–37
	LaR	9	FVPL option	–9	–2	6	–2
	AfS	508	FVPL	–508	0	508	26
	FVPL	1,895	FVPL	–1,895	0	1,895	0
	FVPL option	998	FVPL	–998	0	998	0
	FVPL option	38	FVPL option	–38	0	38	0
	FVPL	2	FVPL option	–2	0	2	0
		9,643		**–9,643**	**–40**	**9,604**	**–14**
Receivables							
Financial receivables							
	LaR	3,817	AC	–3,817	1	3,817	1
		3,817		**–3,817**	**1**	**3,817**	**1**
Cash and cash equivalents							
	LaR	6,439	AC	–6,439	0	6,439	0
		6,439		**–6,439**	**0**	**6,439**	**0**
Total		**218,204**		**–218,204**	**–365**	**217,839**	**1,603**
			Total effects on retained earnings before tax				1,603
			Effects from deferred tax				–423
			Total effects on retained earnings after tax				**1,179**

1 Under IAS 39, in certain structured products the host contract and the embedded derivative were accounted for separately. With the entry into force of IFRS 9, such instruments are accounted for on a uniform basis. For the sake of simplicity, we therefore present embedded derivatives that need to be accounted for separately under IAS 39 together with the host contract in the "Previous year" column of the reconciliation table.
2 For certain insurance contracts that do not transfer significant insurance risk, financial assets and liabilities were recognised prior to the initial application of IFRS 9. For the sake of clarity, the effects from the transition to IFRS 9 for these contracts are presented on a combined basis in the reconciliation table.

The following table presents the reconciliation of measurement categories from IAS 39 to IFRS 9 for financial liabilities.

Reconciliation of measurement categories from IAS 39 to IFRS 9 – Financial liabilities

€m	IAS 39 measurement category	Carrying amount at 31.12.2022	IFRS 9 measurement category	Reclassification	Remeasurement	Carrying amount at 1.1.2023	Effects on retained earnings
Subordinated liabilities							
	AC	4,748	AC	–4,748	0	4,748	0
		4,748		**–4,748**	**0**	**4,748**	**0**
Liabilities							
Derivatives							
	FVPL	1,454	FVPL	–1,454	0	1,454	0
	n/a (hedge accounting)	11	n/a (hedge accounting)	–11	0	11	0
	n/a (IAS 37)	4	FVPL	–4	26	29	–26
		1,468		**–1,468**	**26**	**1,494**	**–26**
Non-derivative financial liabilities							
Bonds	AC	300	AC	–300	0	300	0
Liabilities to credit institutions	AC	1,047	AC	–1,047	0	1,047	0
Other financial liabilities	AC	2,923	AC	–2,923	0	2,923	0
		4,271		**–4,271**	**0**	**4,271**	**0**
Other liabilities							
Insurance-related liabilities[1]							
	AC	46	FVPL	–46	2	49	–2
	AC	703	AC	–703	0	703	0
	AC	728	FVPL option	–728	9	737	–9
	FVPL	2,508	FVPL	–2,508	0	2,508	0
	FVPL option	11	FVPL	–11	0	11	0
	FVPL	1	FVPL option	–1	0	1	0
	FVPL option	594	FVPL option	–594	0	594	0
		4,590		**–4,590**	**11**	**4,602**	**–11**
Subtotal		**10,330**		**–10,330**	**37**	**10,367**	**–37**
Total		**15,077**		**–15,077**	**37**	**15,115**	**–37**
			Total effects on retained earnings before tax				–37
			Effects from deferred tax				13
			Total effects on retained earnings after tax				**–24**

1 For certain insurance contracts that do not transfer significant insurance risk, financial assets and liabilities were recognised prior to the initial application of IFRS 9. For the sake of clarity, the effects from the transition to IFRS 9 for these contracts are presented on a combined basis in the reconciliation table.

The following table contains information on the fair values of, and unrecognised fair value gains/losses on, financial instruments which, in the context of the initial application of IFRS 9, were reclassified from the IAS 39 category of "at fair value through profit or loss" (FVPL). There were no reclassifications from the category "available for sale".

Reclassifications from the category "measured at fair value through profit or loss"

€m	Reclassification from the category	Reclassification to the category	Fair value at 31.12.2023	Gains/losses not recognised due to reclassification and arising from changes in fair value in 2023: In the consolidated income statement	In other reserves
Bonds with embedded derivatives	FVPL option	FVOCI	1,074	57	n/a
Other	FVPL	FVOCI	7	0	n/a
Total			**1,081**	**57**	**n/a**

The following table contains information on the interest revenue of financial instruments which, in the context of the initial application of IFRS 9, were reclassified from the IAS 39 category of "measured at fair value through profit or loss" (FVPL).

Interest revenue resulting from reclassifications from the category "measured at fair value through profit or loss"

			2023
€m	Reclassification from the category	Reclassification to the category	Interest revenue recognised in the reporting period
Bonds with embedded derivatives	FVPL option	FVOCI	41
Other	FVPL	FVOCI	0
Total			**41**

Impairment

IFRS 9 specifies the use of an expected credit loss model for the recognition of impairment losses; this requires recognising a loss allowance equal to the amount of expected credit losses when a financial asset is initially recognised. The model is applied to recognise impairment losses on financial assets measured at amortised cost or at fair value through other comprehensive income, as well as on lease receivables.

The following table shows the reconciliation of impairment losses under IAS 39 to loss allowances under IFRS 9.

Reconciliation of impairment losses under IAS 39 (31.12.2022) to loss allowances under IFRS 9 (1.1.2023)

€m	IAS 39 measurement category 31.12.2022	IFRS 9 measurement category 1.1.2023	Impairment loss 31.12.2022[1]	Reclassification	Remeasurement of loss allowance	Loss allowance 1.1.2023
Financial investments						
Instruments subject to equity risk						
	AfS	FVPL	–647	647	647	0
			–647	**647**	**647**	**0**
Instruments subject to interest-rate and credit risk						
	LaR	FVOCI	–62	62	–9	–72
	AfS	FVOCI	–223	223	–117	–339
	AfS	FVPL	–48	48	48	0
	FVPL	FVOCI	0	0	0	0
	FVPL option	FVOCI	0	0	–3	–3
			–333	**333**	**–81**	**–414**
Alternative investments						
	LaR	FVOCI	–148	148	–10	–158
	AfS	FVOCI	0	0	–38	–38
	AfS	FVPL	–107	107	107	0
			–255	**255**	**58**	**–197**
Subtotal			**–1,234**	**1,234**	**623**	**–611**
Receivables						
Financial receivables						
	LaR	AC	–2	2	0	–3
			–2	**2**	**0**	**–3**
Total			**–1,236**	**1,236**	**623**	**–613**

1 Includes impairment losses under IAS 39.

Impact on equity

The new requirements for classifying financial assets and financial liabilities have overall led to a reduction in equity by €440m as at 1 January 2023. However, most of the classification effect on equity had already been anticipated by applying the classification overlay approach in connection with the initial application of IFRS 17.

Further comments on the impact of the initial application of IFRS 9 can be found in the tables showing the reconciliation of measurement categories from IAS 39 to IFRS 9 in this chapter. Additional information on the classification overlay approach can be found under Basis of preparation > Comparative information, and in this chapter under Effects from the initial application of IFRS 17 > Measurement at the transition date.

The effects on "Retained earnings" amounted to €1,155m in total and are presented in the above tables showing the reconciliation of measurement categories from IAS 39 to IFRS 9.

By contrast, "Other reserves" were reduced by €1,595m. However, this decline was largely attributable to the new classification requirements for financial assets, which led to reclassifications within equity between "Retained earnings" and "Other reserves". This was the result of reclassifications from the IAS 39 category "available for sale" to the IFRS 9 category "measured at fair value through profit or loss" and from the IAS 39 category "at fair value through profit or loss" to the IFRS 9 category "at fair value through other comprehensive income".

The initial application of the impairment requirements under the expected credit loss model as at 1 January 2023 resulted in a slight decrease in equity by €1m. This decrease is minor primarily because just a very small proportion of financial assets are measured at amortised cost under IFRS 9; moreover, these assets are generally of high credit quality. The vast majority of financial assets are measured at fair value through other comprehensive income; any change in value including a change in loss allowance is recognised under "Other reserves" in equity. Accordingly, the additional recognition of expected credit losses on the above-mentioned financial assets as at the transition date merely resulted in a reclassification of €178m from "Retained earnings" to "Other reserves" within equity.

The initial application of IFRS 9 as at 1 January 2023 had no material impact on earnings per share.

Effects from the initial application of IFRS 17

Measurement at the transition date

We apply IFRS 17 retrospectively with effect from 1 January 2023 unless this is impracticable. Initial application is made in accordance with the transition requirements of IFRS 17. Depending on the availability of the information required, we use one of the following three transition approaches for the initial application of IFRS 17 to our in-force business.

We apply the full retrospective approach to remeasure insurance contracts to the extent that this was practicable based on the information available as at the transition date. To this end, we identify and measure groups of contracts as if IFRS 17 had always been applied, without making use of transition simplifications. The information used for the full retrospective approach is primarily based on existing regular processes and internal reporting.

Where it was impracticable to apply the full retrospective approach, i.e. information required for the full retrospective approach was not fully available, or could not be made available without undue cost or effort, we applied the modified retrospective approach or the fair value approach to transition the contracts in force as at 1 January 2022 to the new accounting regime.

The aim of the modified retrospective approach is to achieve the outcome that is as close as possible to the full retrospective approach using reasonable and supportable information. Under the modified retrospective approach, we use the simplifications and modifications specified in the standard only to the extent that the information required for a full retrospective approach is not available without undue cost or effort. In particular, this applies to simplifications used in identifying and classifying groups of insurance contracts, determining the contractual service margin or the loss component, and determining insurance finance income or expenses.

For certain existing contracts in property-casualty business in both primary insurance and reinsurance as well as for certain parts of our life reinsurance business, we apply the full retrospective approach for the one-off transition to IFRS 17; otherwise, we use the modified retrospective approach or the fair value approach.

In life reinsurance, if the available historical information is insufficient to use the full retrospective approach, we mostly use the fair value approach to measure our insurance contracts, aiming to ensure market consistency as much as possible. In addition, the fair value approach is also used to measure certain contracts in property-casualty reinsurance business – particularly groups of insurance contracts for which the coverage period has expired at the transition date and which are in the settlement period – and in primary insurance in Germany. Among other things, we rely on market analyses to validate the cost of capital used. In terms of the net insurance liabilities as at the transition date, the modified retrospective approach and the fair value approach make up over 90%.

Comparative information

In contrast to restating comparative information as required by IFRS 17, we make use of the option under IFRS 9 to continue measuring the prior-year figures for the financial instruments accounted for under IFRS 9 in accordance with the provisions of IAS 39 instead of restating them. However, restatements are necessary for those items which are included in the measurement of insurance items under IFRS 17. This affects in particular deposits retained as well as accounts receivable and payable on reinsurance business. We report premium receivables from intermediaries where policyholders pay their premiums to the intermediaries and not directly to us as cash flows within insurance contract boundaries and include them, in accordance with IFRS 17, in the measurement of a group of insurance contracts until they have been paid back to us. In addition, we apply the classification overlay approach for some of our financial instruments in order to avoid accounting mismatches when transitioning to IFRS 17. This approach allows us to measure certain financial instruments for the 2022 comparative period in the 2023 consolidated financial statements as if the measurement rules of IFRS 9 had already been applied. We made use of this option for financial instruments which back primary insurance business with direct participation features within the scope of the VFA, and which have previously been accounted for at amortised cost. Because the measurement of our primary insurance contracts with direct participation features is always based on the fair value of the assets, fair value measurement of loans backing our liabilities, in particular, helps us to avoid accounting mismatches and ensures that the presentation of our equity accurately reflects the economic situation. When applying the classification overlay approach, we do not make use of the concept for recognising expected credit losses under IFRS 9.

In connection with the initial application of IFRS 17 as at 1 January 2023, we also measure property held as underlying items for insurance contracts with direct participation features under the VFA in accordance with the fair value model. This approach likewise serves to avoid accounting mismatches. The comparative information has been restated accordingly.

Impact on equity and the result

In applying IFRS 17 for the first time, at the time of transition as at 1 January 2022

- all groups of insurance contracts are identified, recognised and measured in accordance with the requirements of IFRS 17;
- balances that would not exist in accordance with the requirements of IFRS 17 are derecognised; and
- the resulting net difference is recognised in equity.

Initial application of IFRS 17 had the following impacts on equity as at 1 January 2022:

Impact of the initial application of IFRS 17 on equity

€bn	2022
Equity (IFRS 4) at 1 January	**30.9**
Change in equity	
Modified measurement basis	25.3
Contractual service margin	–22.3
Risk adjustment for non-financial risk	–5.6
Loss component	–1.4
Deferred taxes	1.5
	–2.5
Equity (IFRS 17) at 1 January	**28.5**

Equity as at 1 January 2022 was €2.5bn lower when compared to the application of IFRS 4. This is due in particular to the fact that for business with direct participation features, unrealised valuation reserves from investments previously recognised in equity are taken into account in determining the insurance liabilities related both to future services and to the contractual service margin. The effects of the classification overlay approach and the effects of discounting have a contrary impact.

As a component of insurance contracts issued and held that are assets or liabilities, the contractual service margin reflects the unearned profits at initial recognition and is recognised in profit or loss over time as insurance contract services are provided. At €22.3bn, the contractual service margin clearly exceeded the overall decrease in equity resulting from the initial application of IFRS 17 as at 1 January 2022. In particular, our life reinsurance business and our life and health primary insurance business contribute to the amount of the contractual service margin. It should be noted that insurance contracts that are accounted for using the PAA do not include a contractual service margin under IFRS 17.

The risk adjustment for non-financial risk is taken into account in the measurement of insurance contracts. We base the risk adjustment for non-financial risk on the risk capital requirements of our internal risk model. The risk adjustment for non-financial risk is closely aligned with the calculation of the non-financial risk in accordance with Solvency II. Solvency II requires the value at risk of basic own funds to be calculated with a confidence level of 99.5% over a one-year period. The level of risk adjustment for non-financial risk used by Munich Re corresponds to a confidence level of approximately 90% (at the time of transition) over a one-year period. The risk adjustment for non-financial risk is lower in this instance than the risk margin under Solvency II as at 31 December 2021. This is due to the fact that – unlike in the calculation of the risk margin – the Group-wide risk diversification is included in the calculation of the risk adjustment for non-financial risk. It should also be noted that neither operational nor credit risks are taken into account in the calculation of the risk adjustment for non-financial risk under IFRS 17, and that there are also differences in the classification of insurance contracts and financial instruments compared with Solvency II. To determine the risk adjustment for non-financial risk, we applied a cost-of-capital method with a cost-of-capital rate of 6%, in the same way as we do under Solvency II.

The loss component reduces equity and reflects the expected loss from services still to be provided under insurance contracts issued. It is amortised over the coverage period. The loss component is primarily attributable to our property-casualty reinsurance business and reflects the generally consistent continuation of our reserving approach to date regarding the application of assumptions to both future cash flows and the risk adjustment for non-financial risk as well as the use of a granular level of aggregation when identifying groups of insurance contracts. The loss component can balance out over time and contribute to run-off profits.

In addition to the above-mentioned effects on equity as at 1 January 2022, initial application of IFRS 17 had the following impacts on the result for the 2022 financial year:

Initial application of IFRS 17 resulted in an increase in the result for the 2022 financial year amounting to €1.9bn.

The result under IFRS 17 was affected by the interest-rate levels as at the transition date 1 January 2022 and by the interest-rate developments in 2022. Due to the comparatively very low interest-rate levels as at 1 January 2022 there were minor unwinding-of-discount effects on the insurance portfolio overall. By contrast, losses that occurred in the 2022 financial year were discounted at higher discount rates for the 2022 accident year as a result of the substantial rise in interest rates over the course of 2022. This mainly affected the property-casualty reinsurance segment and – including the positive effect from the primarily interest-rate-induced reduction in the loss component in the 2022 financial year – had a positive effect of around €1.5bn on the result for the 2022 financial year.

The services we rendered in the comparative period and the associated recognition in profit or loss of the contractual service margin resulted in an earlier recognition of profits in life reinsurance than under IFRS 4.

Insurance revenue is considerably lower than gross premiums written because amounts that are repaid to policyholders under all circumstances, regardless of whether an insured event occurs (investment components), are not recognised as insurance revenue under IFRS 17. This relates in particular to commissions and profit commissions in reinsurance business. The reduction in revenue does not affect the insurance service result, as the insurance service expenses are likewise reduced.

The cumulative amounts contained in other comprehensive income from insurance contracts measured as at the transition date by applying the modified retrospective and fair value approaches came to €450m. At the end of the financial year, these amounts stood at −€1,165m (−€1,885m). The cumulative amounts contained in other comprehensive income from investments measured at fair value that are essentially to be allocated to the insurance contracts mentioned above came to €3,741m. At the end of the financial year, these amounts stood at −€2,569m (−€3,604m). The cumulative amounts of other comprehensive income relating to financial assets include all changes arising from additions and disposals of financial assets in the financial year and at the end of the previous year.

The transition to IFRS 17 has not affected the economic opportunities and risks of the insurance business for Munich Re as such. Detailed information about this can be found in our 2022 Solvency and Financial Condition Report (SFCR).

In the consolidated income statement, IFRS 17 requires a disaggregation between the insurance service result and insurance finance income or expenses. More information on presentation in the consolidated income statement is available under Accounting policies > Consolidated income statement > A Insurance service result, and under E Insurance finance income or expenses.

Presentation in the consolidated balance sheet and in the consolidated income statement

With the introduction of IFRS 17, certain items that have previously been presented separately in our financial statements will be omitted, since the resulting cash flows are now recognised as part of the measurement models. This mainly concerns the items deferred acquisition costs and insurance-related receivables and liabilities such as accounts receivable and payable. Following the application of IFRS 17, deposits retained are also no longer presented separately, but are included in the insurance items.

More information on presentation in the consolidated balance sheet is available under "Overarching accounting policies" and under Equity and liabilities > D Insurance contracts issued that are liabilities.

Change in presentation and classification

Consolidated balance sheet structure

In addition to the change in the presentation of certain items resulting from the new IFRS 17 accounting policies by including these items in the cash flows of the insurance contracts (see the information in this chapter under Effects from the initial application of IFRS 17 > Presentation in the consolidated balance sheet and in the consolidated income statement), changes were made to the presentation and classification of items in the consolidated balance sheet in accordance with IAS 1.41. As part of the application of the new accounting policies, among other things, we now present non-financial assets and liabilities separately from financial assets and liabilities. The changes include the following matters in particular:

Financial investments are presented separately from non-financial investments, with separate presentation of assets in connection with our investment in infrastructure, renewable energies and forestry investments under non-financial investments (property, plant and equipment; intangible assets; biological assets and inventories). Specifically in this context, we reclassified non-financial investments totalling €1,440m, which were previously presented in B.VI. "Other investments", to the new item D.I. "Non-financial investments".

In addition, investments amounting to €8,582m for unit-linked life insurance contracts previously presented in item C. "Insurance-related investments" have been reclassified to the new item E. "Investments for unit-linked life insurance".

All financial assets resulting from insurance contracts are now presented together in item F. "Insurance-related financial instruments". This mainly relates to derivatives accounted for separately from insurance contracts as well as hybrid contracts with host insurance contracts and embedded derivatives for which the fair value option was exercised. Insurance contracts that do not transfer significant insurance risk totalling €14,774m are also presented under this item.

Financial receivables are presented separately and the previous item E. "Receivables" is broken down into current tax receivables, financial receivables and other receivables under the new item G. "Receivables".

Derivatives are presented separately from non-derivative financial liabilities. The liability item F. "Liabilities" is broken down into derivatives, non-derivative financial liabilities, current tax liabilities and other liabilities.

The change in the presentation and classification of the consolidated balance sheet allows us to present our financial position in a better and more transparent way and to present more reliable and more relevant information on our business activities, in particular with regard to our increased and further increasing activities in the field of alternative assets. The comparative information for the items affected by the changes in presentation and classification has been restated.

The balance sheet structure before and after the changes to the presentation and classification is, as at 1 January 2022, as set out in the table below. The items are measured according to the requirements of IAS 39 and IFRS 17, including the overlay approach applied in relation to the application of IFRS 17 as well as the fair value model in relation to property which is held as underlying items under the measurement model of the VFA.

Balance sheet structure

Assets – Old balance sheet structure				Assets – New balance sheet structure		
€m		1.1.2022				1.1.2022
B.	**Investments**		**D.**	**Investments**		
I.	Land and buildings, including buildings on third-party land	9,385	I.	Non-financial investments		14,460
II.	Investments in affiliated companies, associates and joint ventures	3,635	II.	Financial investments		227,206
III.	Loans	58,426				**241,666**
IV.	Other securities		**E.**	**Investments for unit-linked life insurance**		**8,582**
1.	Available for sale	162,468	**F.**	**Insurance-related financial instruments**		**18,474**
2.	At fair value through profit or loss	2,950	**G.**	**Receivables**		
		165,418	I.	Current tax receivables		715
V.	Deposits retained on assumed reinsurance	0	II.	Financial receivables		1,963
VI.	Other investments	4,803	III.	Other receivables		1,835
		241,666				**4,513**
C.	**Insurance-related investments**	**27,056**	**H.**	**Cash and cash equivalents**		**5,413**
E.	**Receivables**		**J.**	**Other assets**		**4,764**
I.	Current tax receivables	715				
II.	Other receivables	3,798				
		4,513				
F.	**Cash at banks, cheques and cash in hand**	**5,413**				
I.	**Other assets**	**4,764**				

Equity and liabilities – Old balance sheet structure			Equity and liabilities – New balance sheet structure		
€m		1.1.2022			1.1.2022
B.	**Subordinated liabilities**	**5,055**	**B.**	**Subordinated liabilities**	**5,055**
F.	**Liabilities**		**F.**	**Liabilities**	
I.	Bonds and notes	293	I.	Derivatives	808
II.	Deposits retained on ceded business	0	II.	Non-derivative financial liabilities	4,243
III.	Current tax liabilities	1,845	III.	Current tax liabilities	1,845
IV.	Other liabilities	24,513	IV.	Other liabilities	19,756
		26,652			**26,652**

Names of statements and line items

In addition, certain statements and line items were renamed to align with the terms used in the relevant IFRSs in order to enhance presentation and understandability. The renaming has no impact on the composition of the statements and line items, including their measurement. No restatements of the comparative information were therefore necessary. The changes to the names affect the following statements or line items:

– The "Statement of recognised income and expense" has been renamed "Consolidated statement of comprehensive income". In addition, "Other comprehensive income" and "Total comprehensive income" are used as (sub-)totals in the consolidated statement of comprehensive income.

– The balance sheet item "Land and buildings including buildings on third-party land" has been renamed "Investment property".

Consolidated cash flow statement

As a consequence of including certain items, previously accounted for separately, in the cash flows of the measurement models in accordance with IFRS 17 and the changes to the balance sheet structure as noted above, names and presentation of affected line items in the consolidated cash flow statement have been changed. In addition, in line with our insurance business model, we now present cash flows from investment activities under cash flows from operating activities. Previously, these cash flows were presented under cash flows from investing activities. The previous years' figures were adjusted and the cash flows from the acquisition, sale and maturity of investments (€11,823m) and from the acquisition, sale and maturity of insurance-related investments (–€547m) reclassified to the items "Change in financial investments" and "Change in insurance-related financial instruments".

New standards and amendments to standards that are not yet effective

Unless otherwise stated, Munich Re intends to initially apply all new standards or amendments to standards that are not yet effective as at the mandatory effective date for entities whose registered office is in the European Union. The IASB published amendments to the following standards, which have been adopted into European law – with the exception of the amendments to IAS 7, IAS 21 and IFRS 7:

- Amendments to IAS 1, Presentation of Financial Statements – Classification of Liabilities as Current or Non-current (rev. 1/2020); Deferral of Effective Date of these Amendments (rev. 7/2020)
- Amendments to IAS 1, Presentation of Financial Statements (rev. 10/2022) – Non-current Liabilities with Covenants
- Amendments to IAS 7, Statement of Cash Flows, and to IFRS 7, Financial Instruments: Disclosures (rev. 5/2023) – Supplier Finance Arrangements
- Amendments to IAS 21, The Effects of Changes in Foreign Exchange Rates (rev. 8/2023) – Lack of Exchangeability
- Amendments to IFRS 16 (rev. 9/2022), Leases – Lease Liability in a Sale and Leaseback

The amendments to IAS 21 will enter into force in 2025; the other amendments will be, according to the IASB, effective from 2024.

The amendments listed above are expected to either have no significance or to be of minor significance for Munich Re.

Explanatory information

Consolidation

1 Business combinations

Munich Re obtained control in the 2022 financial year of ERGO Insurance (Thailand) Public Co. Ltd., Bangkok (ERGO Thailand), formerly named Thaisri Insurance Public Co. Ltd., Bangkok. A provisional valuation of ERGO Thailand's net assets was carried out as at 31 December 2022. The valuation of ERGO Thailand's net assets was completed in Q1 2023. Unlike the provisional valuation as at 31 December 2022, the completed valuation resulted in a negative consolidation difference of €9m, which was released directly to profit or loss and recognised in "Other operating income".

Via its subsidiary ERGO Insurance (Thailand) Public Co. Ltd., Bangkok (ERGO Thailand) – formerly named Thaisri Insurance Public Co. Ltd., Bangkok – Munich Re acquired 75.8% of the voting shares in Nam Seng Insurance Public Co. Ltd. (NSI), Bangkok on 18 January 2023, and thus obtained control over NSI. The purchase price for the shareholding was €61m and was fully paid in cash from own funds.

NSI is a property-casualty insurer in Thailand. ERGO's international growth strategy puts a focus on the attractive property-casualty markets in Southeast Asia. As the product portfolios of ERGO Thailand and NSI complement each other to a significant degree, there is material cross-selling potential between both companies. This transaction puts ERGO Thailand in the position to further expand its market presence and continue to improve its competitive position on the Thai market.

The transaction resulted in intangible assets of €15m and provisional goodwill of €13m. The valuation of NSI's net assets related to insurance business was not yet completed at the reporting date. Non-controlling interests in NSI were provisionally valued at €12m at the acquisition date based on the share of identified net assets.

The provisional fair values of the assets and liabilities of NSI at the acquisition date were as follows: investments of €87m; cash at banks, cheques and cash in hand of €13m; receivables and other asset items of €53m; equity of €52m; and provisions and liabilities of €101m. The fair value of the receivables acquired as part of the transaction largely corresponds to the carrying amount. There were no significant bad debts at the acquisition date. Furthermore, no material contingent liabilities existed at the acquisition date.

For Munich Re, NSI's contributions to the Group's revenue and net result are of secondary importance.

A further 23.67% of the shares were acquired for €19m in the first quarter of 2023, increasing Munich Re's shareholding of NSI to 99.47%.

As part of the integration of NSI, its assets and liabilities were assumed by ERGO Thailand as at 1 September 2023.

2 Changes due to obtaining and losing control and other changes in the consolidated group

Cash flows and net assets from obtaining and losing control of consolidated subsidiaries or other operations are shown in the following tables.

Cash flows arising from obtaining control

€m	2023	Prev. year
Total consideration for obtaining control		
Non-cash consideration for obtaining control	0	0
Cash consideration for obtaining control	–61	–192
	–61	**–192**
Cash over which control was obtained	**13**	**206**
Total	**–48**	**14**

Net assets acquired

€m	31.12.2023	Prev. year
Goodwill/Negative consolidation difference	13	27
Other intangible assets	15	32
Investments	87	97
Cash	13	206
Other assets	53	156
Insurance contracts issued and reinsurance contracts held (net)	0	–91
Other liabilities	–101	–169
Total	**80**	**260**

Cash flows arising from losing control

€m	2023	Prev. year
Total consideration for losing control		
Non-cash consideration for losing control	0	1,871
Cash consideration for losing control	27	84
	27	**1,956**
Cash over which control was lost	**–8**	**–61**
Total	**19**	**1,895**

Net assets disposed of

€m	31.12.2023	Prev. year
Goodwill	0	0
Other intangible assets	–1	–11
Investments	–48	–1,928
Cash	–8	–61
Other assets	–8	–126
Insurance contracts issued and reinsurance contracts held (net)	18	49
Other liabilities	14	142
Total	**–32**	**–1,933**

Our subsidiary D.A.S. Jogvédelmi Biztosíto Részvénytársaság, Budapest, was sold and deconsolidated in Q2 2023. Incurring a loss of €12.7m, the disposal had a negative impact on the net result.

Gains or losses from the disposal of the other subsidiaries sold and deconsolidated in 2023 did not have any material impact on the net result.

On 8 March 2023, Munich Re obtained control of Vier Gas Investments S.à r.l. (Vier Gas), Luxembourg, which had previously been accounted for in the consolidated balance sheet as a joint venture using the equity method. Our co-shareholder left the joint venture as part of a capital reduction and associated transfer of the entity's assets. After the transaction, Munich Re held 100% of the voting shares in Vier Gas. The revaluation of the shares resulted in a gain in the low three-digit million euro range, which was recognised in the investment result.

3 Associates and joint ventures

On 20 February 2023, Munich Reinsurance Company acquired 50% of the shares in Saxon Land B.V., Amsterdam, a real estate company that owns the Fen Court offices in London. The purchase price for the shares was in the mid-triple-digit million euro range.

Via its subsidiaries MR Infrastructure Investment GmbH, Munich; ERGO Private Capital Vorsorge GmbH, Düsseldorf; ERGO Private Capital Gesundheit GmbH, Düsseldorf; and ERGO Private Capital Komposit GmbH & Co. KG, Düsseldorf, Munich Re acquired 50% of the shares in Bionic GmbH & Co. KG, Frankfurt/Main on 26 September 2023 and, on 25 October 2023, capitalised an amount in the low three-digit million euro range for these shares. By acquiring the shares, Munich Re obtained joint control over Bionic GmbH & Co. KG together with PEIF III Luxco III D S.à.r.l., Senningerberg. Via an intermediate holding structure, Bionic GmbH & Co. KG acquired 100% of the shares in WELtec Holding GmbH, Vechta, a leading producer of biogas and biomethane in Germany, on 26 October 2023.

4 Structured entities

Munich Re has interests both in consolidated and in unconsolidated structured entities.

Munich Re classifies unconsolidated structured entities as either investment funds or securitisation vehicles on the basis of the type of structured entity.

A distinction is made between investment funds in which Munich Re invests on its own behalf within the framework of its investment activities and investment funds in which Munich Re invests as part of its insurance-related investments and investments for unit-linked life insurance. Investment funds are mainly financed by issuing redeemable shares or units. Some of the investment funds are managed by MEAG, others by fund managers outside the Group. In the table below, we also report under “Investment funds” all investments in infrastructure, forestry, private equity and other investments.

Munich Re invests in asset-backed securities that are issued by securitisation vehicles which are not set up by Munich Re. Furthermore, Munich Re uses securitisation vehicles to issue catastrophe bonds, and it also invests in third-party catastrophe bonds. Securitisation vehicles are self-financed by issuing securities.

In order to protect its own portfolio, Munich Re uses alternative risk transfer in addition to traditional retrocession. Under this process, underwriting risks are transferred to the capital markets with the assistance of securitisation vehicles.

Munich Re also invests in the area of catastrophe risks, for example in various securities whose repayment and interest is generally linked to the occurrence of natural catastrophes. The securities are issued by securitisation vehicles which as a matter of general policy are not set up by Munich Re.

For investment funds, including investments in infrastructure, forestry, private equity and other investments, as well as insurance-related investments and investments for unit-linked life insurance, the carrying amount gives an indication of the size of the structured entity. For asset-backed securities and the securitisation of underwriting risks, the emission volume (nominal value) is used as an indicator for measuring the size of the structured entity. The size of the funds refers to both the issued volume of the securitisation vehicles set up by Munich Re and that of those securitisation vehicles in which Munich Re has invested.

With the exception of investment funds relating to investments for unit-linked life insurance, the maximum exposure to loss is the carrying amount of the respective items on the assets side. Therefore, for the items on the assets side, there is usually no difference between the carrying amount of interests in unconsolidated structured entities and the maximum exposure to loss. The maximum exposure to loss for underwriting risks is the carrying amount, unless the aggregation of insurance contracts results in the recognition of negative carrying amounts which were netted against positive carrying amounts. In instances where the recognised carrying amount is negative, the maximum exposure to loss is set at zero. Because of this, the maximum exposure to loss for the securitisation vehicles for underwriting risks can be greater overall than the carrying amounts of each of the respective asset and liability items on the consolidated balance sheet.

Normally, the maximum exposure to loss for investments for unit-linked life insurance is also the carrying amount of the interests. However, this investment is held for the benefit of policyholders who bear the investment risk.

MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH also manages fund assets for private clients and institutional investors, for which it receives a management fee. The management fees are recognised as income in the consolidated income statement.

The maximum exposure to loss relates to the loss of future management fees. Fund management activities generated income of €53m (52m) in the financial year. The value of fund assets under management provides information about the size of the unconsolidated structured entities. As at 31 December 2023, the managed fund assets amounted to €5,007m (4,501m), and Munich Re itself also holds a small interest in these funds.

Unconsolidated structured entities

						2023
			Investment funds		Securitisation vehicles	Total
€m	Munich Re investments	Investments for unit-linked life insurance	Insurance-related financial instruments	Asset-backed securities	Under-writing risks	
Reinsurance contracts held that are assets	0	0	0	0	128	128
Insurance contracts issued that are assets	0	0	0	0	0	0
Investments – Financial investments	7,343	0	0	5,357	0	12,700
Investments for unit-linked life insurance	0	8,943	0	0	0	8,943
Insurance-related financial instruments	0	0	351	0	161	512
Non-current assets held for sale	14	0	0	0	0	14
Total assets	**7,357**	**8,943**	**351**	**5,357**	**289**	**22,297**
Reinsurance contracts held that are liabilities	0	0	0	0	0	0
Insurance contracts issued that are liabilities[1]	0	0	0	0	–872	–872
Liabilities – Derivatives	0	0	0	0	0	0
Total equity and liabilities	**0**	**0**	**0**	**0**	**–872**	**–872**
Size of structured entities	7,357	8,943	351	121,593	7,863	146,107

1 The recognition of groups of insurance contracts in accordance with IFRS 17 results in the recognition of a negative figure here.

Unconsolidated structured entities

		Investment funds		Securitisation vehicles		Prev. year Total
€m	Munich Re investments	Investments for unit-linked life insurance	Insurance-related financial instruments	Asset-backed securities	Under-writing risks	
Reinsurance contracts held that are assets	0	0	0	0	187	187
Insurance contracts issued that are assets	0	0	0	0	0	0
Investments – Financial investments	6,955	0	0	3,625	0	10,580
Investments for unit-linked life insurance	0	7,244	0	0	0	7,244
Insurance-related financial instruments	0	0	451	0	286	737
Non-current assets held for sale	90	0	0	0	0	90
Total assets	**7,044**	**7,244**	**451**	**3,625**	**473**	**18,837**
Reinsurance contracts held that are liabilities	0	0	0	0	0	0
Insurance contracts issued that are liabilities[1]	0	0	0	0	–913	–913
Liabilities – Derivatives	0	0	0	0	22	22
Total equity and liabilities	**0**	**0**	**0**	**0**	**–891**	**–891**
Size of structured entities[2]	7,044	7,244	451	116,709	8,517	139,965

1 The recognition of groups of insurance contracts in accordance with IFRS 17 results in the recognition of a negative figure here.
2 Previous year figure for "Securitisation vehicles – Underwriting risks" adjusted.

5 Non-current assets and disposal groups held for sale or sold during the reporting period

Composition of the non-current assets and disposal groups held for sale

€m	31.12.2023	Prev. year
Assets		
Non-financial investments	130	74
Thereof: Investment property	130	74
Financial investments	182	280
Other assets of the disposal group	135	39
Total assets	**446**	**392**
Liabilities		
Insurance contracts issued that are liabilities	231	104
Other liabilities of the disposal group	43	37
Total liabilities	**274**	**141**

Property portfolios in Wiesbaden and Cologne were classified as held for sale in Q3 2023. No value adjustments were required as a result of the classification. The properties in Wiesbaden were sold in Q4 2023, and those in Cologne were sold in Q1 2024.

We classified property units located in Hamburg, London and Cologne as held for sale in Q4 2023. No value adjustments were required. The properties are expected to be sold in the first half of 2024.

The properties are all allocated to the ERGO Life and Health Germany segment.

A property of Munich Reinsurance Company was classified as held for sale in Q4 2022. This did not result in any value adjustments. The property was sold in Q1 2023.

A group of three Dutch subsidiaries – DAS Holding N.V., Amsterdam; DAS Legal Finance B.V., Amsterdam; and DAS Nederlandse Rechtsbijstand Verzekeringmaatschappij N.V., Amsterdam – was classified as held for sale in Q1 2021. As the planned sale did not materialise and there is currently no intention to sell them, the subsidiaries were reclassified in Q2 2023.

Our Hungarian subsidiary D.A.S. Jogvédelmi Biztosíto Részvénytársaság, Budapest, was classified as held for sale in Q4 2022. No significant value adjustments resulted from the classification. The company was deconsolidated in Q2 2023.

Our subsidiary American Digital Title Insurance Company, Brighton, Colorado, was still classified as held for sale at the reporting date. No value adjustments resulted from the classification.

In July 2023, we sold Globality S.A., Munsbach, to Foyer S.A., a financial group from Luxembourg. No value adjustments resulted from the classification as held for sale. Deconsolidation occurred in Q3 2023. There is still a strategic partnership between Globality, Foyer and ERGO.

In Q2 2023, we classified DAS UK Holdings Limited, Bristol – with its subsidiaries DAS Services Limited, DAS Legal Expenses Insurance Company Limited, and DAS Law Limited – as held for sale. No significant value adjustments were required. The disposal took place in Q1 2024.

Further information on disposals due to loss of control can be found in this chapter under “Consolidation”.

The other reserves of Group equity include an amount of €13m for disposal groups, of which €3m is attributable to unrealised losses on fixed-interest securities and €10m to unrealised losses on the currency translation reserve.

In our segment reporting, we disclose how the non-current assets held for sale are allocated between the segments. Transactions between the disposal group and the Group’s continuing operations continued to be fully eliminated.

Financial investments are allocated to Level 1 and Level 2 of the fair value hierarchy.

Segment disclosures

6 Segment reporting

In accordance with the management approach, the segmentation of our business operations is based on the way in which Munich Re's business is managed internally.

We have identified five reporting segments:

- Life and health reinsurance (global life and health reinsurance business)
- Property-casualty reinsurance (global property-casualty reinsurance business)
- ERGO Life and Health Germany (German life and health primary insurance business, global travel insurance business and Digital Ventures business)
- ERGO Property-casualty Germany (German property-casualty primary insurance business, excluding Digital Ventures)
- ERGO International (ERGO's primary insurance business outside Germany)

Certain primary insurers whose business requires special solution-finding competence are coupled to reinsurance as the risk carrier. We therefore transact their business from within reinsurance and consequently allocate them to the reinsurance segments. The IFRS result contributions are the basis of planning and strategy in all segments, hence the IFRS segment result is the uniform assessment basis for internal management.

Assets and liabilities in connection with intra-Group loans are presented on an unconsolidated basis in accordance with the way they are managed internally, and income and expenses from such loans are likewise presented on an unconsolidated basis in the segment income statement. All other items are presented after elimination of intra-Group transactions and shareholdings.

Segment assets[1, 2]

	Reinsurance			
	Life and health		Property-casualty	
€m	31.12.2023	Prev. year	31.12.2023	Prev. year
A. Intangible assets	292	313	2,129	2,349
B. Reinsurance contracts held that are assets	667	700	2,518	2,522
C. Insurance contracts issued that are assets	6,473	5,473	116	32
D. Investments	20,882	21,879	69,505	62,736
Thereof: Associates and joint ventures accounted for using the equity method	0	0	4,610	3,905
E. Investments for unit-linked life insurance	0	0	0	0
F. Insurance-related financial instruments	8,598	16,834	862	1,085
G. Non-current assets held for sale	0	4	22	119
H. Other segment assets	4,340	3,708	9,592	9,334
Total segment assets	**41,251**	**48,911**	**84,743**	**78,176**

Segment equity and liabilities[1, 2]

	Reinsurance			
	Life and health		Property-casualty	
€m	31.12.2023	Prev. year	31.12.2023	Prev. year
A. Subordinated liabilities	483	1,057	4,217	3,678
B. Reinsurance contracts held that are liabilities	112	99	148	46
C. Insurance contracts issued that are liabilities				
I. Liability for remaining coverage	10,659	12,059	–1,799	–3,745
II. Liability for incurred claims	6,724	5,685	63,504	60,682
III. Other technical liabilities	0	0	0	0
	17,383	17,744	61,705	56,937
D. Other provisions	163	148	638	585
E. Liabilities related to non-current assets held for sale	0	0	1	1
F. Other segment liabilities	6,017	15,900	8,767	6,754
Total segment liabilities	**24,159**	**34,949**	**75,476**	**68,002**

1 Previous year's figures adjusted due to initial application of IFRS 17 and changes made to the presentation and classification of the balance sheet items; see Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.
2 You can download this information as an Excel file; please refer to the Financial Supplement at www.munichre.com/results-reports.

						ERGO		Total
		Life and Health Germany		Property-casualty Germany		International		
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
	62	67	1,388	1,374	212	181	4,084	4,284
	16	17	381	311	431	342	4,014	3,892
	287	239	264	174	53	60	7,193	5,977
	103,719	101,010	8,133	7,411	16,224	14,929	218,462	207,965
	563	456	72	59	1,163	1,071	6,409	5,491
	5,778	5,239	0	0	2,502	2,231	8,280	7,470
	412	380	0	0	0	0	9,872	18,298
	137	0	5	0	282	269	446	392
	4,843	5,679	1,360	1,286	1,309	1,105	21,443	21,113
	115,254	**112,631**	**11,532**	**10,556**	**21,013**	**19,117**	**273,793**	**269,391**

						ERGO		Total
		Life and Health Germany		Property-casualty Germany		International		
	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
	0	0	0	0	13	13	4,713	4,748
	2	0	96	77	78	40	436	262
	111,195	107,926	609	565	12,315	11,965	132,979	128,771
	1,900	1,868	5,983	5,319	3,056	2,729	81,167	76,283
	0	0	0	0	7	7	7	7
	113,095	109,794	6,592	5,884	15,378	14,701	214,153	205,061
	845	826	786	534	333	568	2,766	2,661
	0	0	0	0	273	140	274	141
	1,800	2,273	2,812	1,834	2,284	2,512	21,680	29,273
	115,742	**112,894**	**10,287**	**8,329**	**18,358**	**17,973**	**244,021**	**242,146**
					Equity		**29,772**	**27,245**
					Total equity and liabilities		**273,793**	**269,391**

Segment income statement[1, 2]

	Reinsurance			
	Life and health		Property-casualty	
€m	2023	Prev. year	2023	Prev. year
1. Insurance revenue from insurance contracts issued	10,725	11,164	27,061	25,325
2. Insurance service expenses from insurance contracts issued				
Claims expenses	–9,174	–9,957	–18,595	–17,407
Changes from underlying items	0	0	0	0
Administration and acquisition costs	–434	–380	–4,002	–3,725
Other insurance service expenses	0	0	0	0
	–9,608	–10,337	–22,598	–21,132
3. Insurance service result from insurance contracts issued (1+2)	**1,117**	**827**	**4,464**	**4,193**
4. Insurance revenue ceded from reinsurance contracts held	–246	–325	–1,025	–981
5. Income from reinsurance contracts held	202	253	410	881
6. Insurance service result from reinsurance contracts held (4+5)	**–44**	**–72**	**–615**	**–100**
7. Insurance service result (3+6)	**1,073**	**755**	**3,849**	**4,093**
8. Result from insurance-related financial instruments	360	286	119	130
9. Total technical result (7+8)	**1,433**	**1,041**	**3,968**	**4,224**
10. Investment result	608	582	1,824	727
11. Currency result	–53	397	–142	438
12. Investment result for unit-linked life insurance	0	0	0	0
13. Insurance finance income or expenses from insurance contracts issued	–133	–25	–1,682	–449
14. Insurance finance income or expenses from reinsurance contracts held	2	0	88	20
15. Insurance finance income or expenses (13+14)	**–131**	**–25**	**–1,594**	**–429**
16. Net financial result (10+11+12+15)	**424**	**955**	**88**	**736**
17. Other operating income	305	254	533	447
18. Other operating expenses	–476	–527	–1,538	–1,205
19. Operating result (9+16+17+18)	**1,686**	**1,722**	**3,052**	**4,201**
20. Net finance costs	3	–26	–139	–127
21. Taxes on income	–261	–381	–465	–652
22. Net result (19+20+21)	**1,428**	**1,314**	**2,448**	**3,423**

1 Previous year's figures adjusted due to initial application of IFRS 17; see Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 17, and > Change in presentation and classification.
2 You can download this information as an Excel file; please refer to the Financial Supplement at www.munichre.com/results-reports.

Other segment disclosures

	Reinsurance			
	Life and health		Property-casualty	
€m	2023	Prev. year	2023	Prev. year
Interest revenue	1,188	1,015	1,755	1,130
Interest expenses	–35	–26	–215	–49
Depreciation and amortisation	–31	–38	–159	–157
Income from associates and joint ventures accounted for using the equity method	0	0	262	81

					ERGO			Total
		Life and Health Germany		Property-casualty Germany		International		
	2023	Prev. year	2023	Prev. year	2023	Prev. year	2023	Prev. year
	9,942	9,802	4,539	4,227	5,618	4,867	57,884	55,385
	–7,681	–7,293	–2,677	–2,687	–3,354	–3,049	–41,481	–40,393
	52	–156	–2	–10	–2	–42	48	–208
	–1,307	–1,160	–1,335	–1,203	–1,539	–1,340	–8,617	–7,807
	0	0	0	0	0	0	0	0
	–8,936	–8,609	–4,015	–3,899	–4,894	–4,431	–50,051	–48,408
	1,006	**1,193**	**524**	**328**	**723**	**436**	**7,834**	**6,977**
	–9	–8	–68	–99	–229	–198	–1,577	–1,610
	4	3	39	171	133	104	788	1,412
	–5	**–4**	**–29**	**72**	**–96**	**–94**	**–789**	**–198**
	1,001	**1,189**	**495**	**400**	**627**	**343**	**7,045**	**6,779**
	23	–130	0	0	–2	4	501	291
	1,024	**1,059**	**495**	**400**	**625**	**347**	**7,545**	**7,070**
	2,323	1,379	209	113	410	182	5,374	2,983
	–71	253	–11	–12	–15	–9	–292	1,067
	565	–750	0	0	250	–390	816	–1,140
	–2,983	–816	–66	19	–627	188	–5,490	–1,083
	–1	0	2	–1	9	4	99	23
	–2,984	**–816**	**–64**	**18**	**–618**	**192**	**–5,391**	**–1,060**
	–167	**66**	**134**	**118**	**28**	**–25**	**507**	**1,850**
	191	188	109	106	179	95	1,316	1,089
	–851	–871	–341	–323	–461	–271	–3,667	–3,197
	197	**442**	**397**	**301**	**370**	**146**	**5,702**	**6,812**
	53	16	–49	–7	–36	–35	–168	–179
	–67	–152	–96	–121	–48	–18	–936	–1,324
	183	**307**	**252**	**173**	**286**	**92**	**4,597**	**5,309**

					ERGO			Total
		Life and Health Germany		Property-casualty Germany		International		
	2023	Prev. year	2023	Prev. year	2023	Prev. year	2023	Prev. year
	2,733	2,412	209	106	362	290	6,246	4,953
	–82	–37	–74	–10	–52	–6	–458	–128
	–16	–67	–91	–87	–68	–61	–365	–411
	40	15	22	2	32	–46	356	52

Non-current assets by country[1]

€m	31.12.2023	Prev. year
Germany	8,637	9,163
USA	4,880	4,704
France	580	476
United Kingdom	557	620
Netherlands	464	490
Sweden	316	327
Canada	303	302
Belgium	290	222
Spain	271	274
Poland	259	244
Austria	235	243
Australia	207	183
Italy	145	159
Denmark	139	123
Portugal	109	239
Switzerland	95	94
Finland	86	89
Thailand	83	36
New Zealand	67	53
Lithuania	56	54
Greece	52	48
Others	117	109
Total	**17,948**	**18,252**

1 The non-current assets mainly comprise intangible assets; investment property; property, plant and equipment; and biological assets.

Investments in non-current assets per segment[1]

€m	2023	Prev. year
Reinsurance – Life and health	128	108
Reinsurance – Property-casualty	370	217
ERGO Life and Health Germany	327	540
ERGO Property-casualty Germany	144	206
ERGO International	133	133
Total	**1,102**	**1,204**

1 The non-current assets mainly comprise intangible assets; investment property; property, plant and equipment; and biological assets.

Insurance revenue from insurance contracts issued[1]

€m	2023	Prev. year
Europe		
Germany	17,554	19,448
United Kingdom	7,072	5,892
Poland	2,007	1,695
Spain	1,469	1,285
Belgium	1,018	971
Others	3,605	3,626
	32,725	**32,917**
North America		
USA	14,714	12,957
Canada	1,933	1,837
	16,647	**14,794**
Asia and Australasia		
Australia	1,923	1,567
China	1,012	1,215
India	955	757
Japan	587	589
Others	1,166	1,050
	5,644	**5,177**
Africa, Middle East		
United Arab Emirates	489	347
South Africa	475	599
Others	618	625
	1,583	**1,572**
Latin America	**1,285**	**925**
Total	**57,884**	**55,385**

1 Revenue is generally allocated according to the location of the risks insured.

7 Alternative performance measures

In addition to IFRS metrics, Munich Re uses alternative performance measures to measure its financial performance. These alternative performance measures are not defined or set out in IFRSs and provide useful information about our financial position and performance and contribute to the understandability of our results. They serve to supplement, not replace, the metrics defined in the IFRSs. Similarly named alternative performance measures published by other companies have potentially been calculated differently and might therefore not be comparable, or be comparable only to a limited extent.

Gross premiums written

Under IFRS 4, gross premiums written were the key measure of revenue and comprised all premium income due for payment in a financial year. Under IFRS 17, however, the reporting metric is insurance revenue, which is calculated based on the services provided from the groups of insurance contracts. Insurance revenue is substantially lower than gross premiums written because premium amounts that are repaid to policyholders under all circumstances, regardless of whether an insured event occurs (investment component), are not recognised as insurance revenue. This relates in particular to commissions and profit commissions in reinsurance business. Differences also arise from the recognition of insurance revenue based on services provided over the reporting period and adjustments for financing effects, among other factors. In the interest of comparability, we disclose gross premiums written as an alternative performance measure. Gross premiums written are no longer used as a performance indicator for corporate growth. They have been superseded by insurance revenue as a corporate management tool for the Group.

Gross premiums written

				Reinsurance		ERGO
		Life and health		Property-casualty		Life and Health Germany
€m	2023	Prev. year	2023	Prev. year	2023	Prev. year
Insurance revenue from insurance contracts issued	10,725	11,164	27,061	25,325	9,942	9,802
Gross premiums written	13,249	13,676	35,872	34,399	10,349	9,703

Gross premiums written

→				ERGO		Total
		Property-casualty Germany		International		
€m	2023	Prev. year	2023	Prev. year	2023	Prev. year
Insurance revenue from insurance contracts issued	4,539	4,227	5,618	4,867	57,884	55,385
Gross premiums written	4,383	4,198	5,960	5,157	69,814	67,133

Combined ratio

The combined ratio is a regularly used metric for property-casualty business. It is calculated as the percentage ratio of the insurance service expenses and insurance revenue, both of which on a net basis, i.e. after reinsurance cessions. Given that the combined ratio takes into account the time value of money and the uncertainty of future cash flows, it can also be used to assess economic profitability.

Notes on determining the combined ratio

		Reinsurance				ERGO
		Property-casualty		Property-casualty Germany		International[1]
€m	31.12.2023	Prev. year	31.12.2023	Prev. year	31.12.2023	Prev. year
Insurance revenue (net)						
Insurance revenue from insurance contracts issued	27,061	25,325	4,539	4,227	4,426	3,736
Insurance revenue ceded from reinsurance contracts held	−1,025	−981	−68	−99	−195	−177
	26,036	**24,344**	**4,471**	**4,128**	**4,231**	**3,559**
Insurance service expenses (net)						
Insurance service expenses from insurance contracts issued	−22,598	−21,132	−4,015	−3,899	−3,937	−3,495
Income from reinsurance contracts held	410	881	39	171	124	97
	−22,187	**−20,251**	**−3,976**	**−3,729**	**−3,813**	**−3,398**
Combined ratio %	**85.2**	**83.2**	**88.9**	**90.3**	**90.1**	**95.5**

1 Excluding life insurance business and health insurance conducted like life insurance.

Return on equity (RoE)

The return on equity (RoE) is an important profitability KPI, which is of relevance in particular in the medium term. It is calculated on the basis of the Group's IFRS net result in relation to the average IFRS equity at the beginning and end of the year. IFRS equity is adjusted in particular for the fair value reserve, the foreign currency translation reserve, the insurance finance reserve (from the measurement of insurance contracts) and the reserve from hedging relationships. Further adjustments are made to eliminate distortions attributable to intra-Group transactions. IFRS equity is affected by profits as well as by capital measures such as dividend payments and share buy-backs, in particular. The RoE is recognised for the Group and for the reinsurance and ERGO fields of business.

Notes on determining the return on equity (RoE) for the year 2023

	Reinsurance		ERGO		Total	
€m	31.12.2023	31.12.2022	31.12.2023	31.12.2022	31.12.2023	31.12.2022
Segment assets	125,994	127,087	147,799	142,304	273,793	269,391
Segment equity and liabilities	99,634	102,950	144,387	139,196	244,021	242,146
Adjustments used in the calculation of equity						
Other reserves – Fair value measurement, measurement of insurance contracts, currency translation, hedging relationships	189	417	–785	–1,439	–597	–1,022
Adjustment item for material asset transfers between reinsurance and ERGO	940	976	–940	–976	0	0
Adjusted equity	**25,231**	**22,743**	**5,138**	**5,524**	**30,369**	**28,267**
	2023		2023		2023	
Average adjusted equity	23,987		5,331		29,318	
Net result	3,876		721		4,597	
Return on equity (RoE) %	**16.2**		**13.5**		**15.7**	

Notes on determining the return on equity (RoE) for the year 2022

	Reinsurance		ERGO		Total	
€m	31.12.2022	1.1.2022	31.12.2022	1.1.2022	31.12.2022	1.1.2022
Segment assets	127,087	131,256	142,304	170,240	269,391	301,496
Segment equity and liabilities	102,950	105,490	139,196	167,540	242,146	273,030
Adjustments used in the calculation of equity						
Other reserves – Fair value measurement, measurement of insurance contracts, currency translation, hedging relationships	417	4,818	–1,439	–599	–1,022	4,220
Adjustment item for material asset transfers between reinsurance and ERGO	976	1,020	–976	–1,020	0	0
Adjusted equity	**22,743**	**19,928**	**5,524**	**4,318**	**28,267**	**24,246**
	2022		2022		2022	
Average adjusted equity	21,336		4,921		26,257	
Net result	4,737		572		5,309	
Return on equity (RoE) %	**22.2**		**11.6**		**20.2**	

Notes to the consolidated balance sheet – Assets

8 Goodwill

Changes in goodwill

€m	2023	Prev. year
Gross carrying amount at 1 January	4,803	4,655
Accumulated impairment losses at 1 January	–1,563	–1,563
Carrying amount at 1 January	3,240	3,092
Currency translation differences	–65	118
Additions	13	29
Disposals	–5	0
Reclassifications	0	1
Impairment losses	0	0
Carrying amount at 31 December	**3,184**	**3,240**
Accumulated impairment losses at 31 December	–1,563	–1,563
Gross carrying amount at 31 December	4,747	4,803

The Board divisions in the property-casualty reinsurance segment were restructured with effect from 1 January 2023. The corresponding reallocation of the existing goodwill to these divisions did not have any effects on the value.

Impairment tests for cash-generating units to which a significant portion of the goodwill was allocated are based on the assumptions shown below.

Cash-generating units	Global Clients and North America division in the property-casualty reinsurance segment	Global Specialty Insurance division in the property-casualty reinsurance segment	ERGO Property-casualty Germany segment
Allocated goodwill at 31 Dec. 2023 in €m	1,093	864	928
Basis for calculating the recoverable amount	Value in use	Value in use	Value in use
Key assumptions regarding the planning calculation (at the time of planning)	For the detailed planning phase (2 years), we expected a moderate decline in insurance revenue and a stable combined ratio if major losses remained firm. Our general assumption was that there would be moderate upward movement on the equity markets and a stable interest-rate level.	For the detailed planning phase (2 years), we expected a rise in insurance revenue and an improved combined ratio if major losses remained firm. Our general assumption was that there would be moderate upward movement on the equity markets and a stable interest-rate level.	For the detailed planning phase (2 years), we expected a moderate rise in insurance revenue and an improved combined ratio. Our general assumption was that there would be moderate upward movement on the equity markets and a stable interest-rate level.
Growth rates after the detailed planning phase	1.0%	1.0%	1.0%
Discount rates	11.6%	11.6%	12.0%

The calculation of these values in use is based on distributable target results derived from the current market environment and the latest corporate planning approved by management. Prepared in an interactive process involving the operational units, the responsible controlling units and the Board of Management, the corporate plans are reviewed and updated at least every quarter. The target results were determined based on the assumption that the Ukraine war and the current economic situation, including future inflation trends, would not significantly affect the earnings prospects of our business models on a permanent basis. The climate risks inherent in our business model for our insurance business have been taken into account in the distributable target results.

The aforementioned key assumptions regarding insurance revenue development and combined ratios derive from the aggregation of the corporate plans of the individual companies of a cash-generating unit. The key assumptions regarding developments in the equity market and interest-rate level are defined on the basis of the current market environment.

As the detailed planning phase is based on the Group Ambition 2025, it is one detailed planning year shorter than in the previous year. After the detailed planning phase, we estimate the target results to be achievable in the long term on the basis of the last adjusted planning year and taking into account growth rates and RoI derived from macroeconomic forecasts.

Cost-of-equity rates derived using the capital asset pricing model (CAPM) were used as discount rates. In this regard, the rising interest rates observed in the past financial year were taken into account. When deriving discount rates based on capital market data, we assume that the climate risks expected by the capital markets are included in their return expectations. Calculations were made after consideration of normalised taxes. In the table, for disclosure purposes, a corresponding discount rate before tax is given in each case. Sensitivity analyses were performed for the discount rates, growth rates and distributable target results. No impairment was identified.

9 Other intangible assets

Development of other intangible assets

				Software
	Internally developed		Other	
€m	2023	Prev. year	2023	Prev. year
Gross carrying amount at 1 January	628	585	1,936	1,792
Accumulated amortisation and impairment losses at 1 January	–587	–561	–1,259	–1,166
Carrying amount at 1 January	41	24	676	626
Currency translation differences	1	0	3	3
Additions				
Business combinations	1	3	0	8
Other	39	25	158	181
Disposals				
Loss of control	0	0	–1	–3
Other	0	0	–4	–3
Reclassifications[1]	0	24	–1	–24
Impairment losses reversed	0	0	0	0
Amortisation	–18	–22	–121	–112
Impairment losses	–23	–12	–11	0
Carrying amount at 31 December	**41**	**41**	**700**	**676**
Accumulated amortisation and impairment losses at 31 December	–611	–587	–1,361	–1,259
Gross carrying amount at 31 December	653	628	2,060	1,936

→	Acquired brand names		Acquired distribution networks/client bases		Acquired licences/ patents	
€m	2023	Prev. year	2023	Prev. year	2023	Prev. year
Gross carrying amount at 1 January	233	213	763	738	332	344
Accumulated amortisation and impairment losses at 1 January	–192	–187	–676	–642	–163	–141
Carrying amount at 1 January	41	26	88	96	169	203
Currency translation differences	0	2	–1	3	0	–1
Additions						
Business combinations	0	15	15	6	0	0
Other	0	1	0	2	1	0
Disposals						
Loss of control	0	0	0	0	0	–8
Other	–1	0	0	–1	0	0
Reclassifications[1]	0	0	–1	1	–133	0
Impairment losses reversed	0	0	0	0	0	0
Amortisation	–2	–2	–19	–18	–1	–13
Impairment losses	–14	0	–3	0	0	–13
Carrying amount at 31 December	**25**	**41**	**78**	**88**	**37**	**169**
Accumulated amortisation and impairment losses at 31 December	–207	–192	–687	–676	–43	–163
Gross carrying amount at 31 December	231	233	765	763	80	332

Continued on next page

€m	Miscellaneous 2023	Miscellaneous Prev. year	Total 2023	Total Prev. year
Gross carrying amount at 1 January	42	44	3,935	3,715
Accumulated amortisation and impairment losses at 1 January	–14	–12	–2,892	–2,709
Carrying amount at 1 January	28	32	1,043	1,007
Currency translation differences	0	0	3	6
Additions			0	
Business combinations	0	0	16	31
Other	0	0	198	209
Disposals			0	
Loss of control	0	0	–1	–11
Other	0	–1	–5	–5
Reclassifications[1]	–6	–1	–141	0
Impairment losses reversed	0	0	0	0
Amortisation	–2	–3	–163	–170
Impairment losses	0	0	–51	–25
Carrying amount at 31 December	**20**	**28**	**900**	**1,043**
Accumulated amortisation and impairment losses at 31 December	–12	–14	–2,921	–2,892
Gross carrying amount at 31 December	32	42	3,821	3,935

1 See in this section > 13 Intangible assets.

Intangible assets pledged as security and other restrictions on title amounted to €0m (0m). Commitments to acquire intangible assets totalled €8m (38m).

10 Reinsurance contracts held

We apply the general measurement model to life and health reinsurance contracts held because the coverage period tends to be long. We measure the majority of our property-casualty reinsurance contracts held in accordance with the premium allocation approach.

The following tables present the changes during the financial year, broken down by asset components, for reinsurance contracts held that are measured using the general measurement model and the premium allocation approach. The reconciliation tables thus show the changes from opening to closing balances for the assets for remaining coverage and the assets for the recovery of incurred claims. The assets for remaining coverage are broken down further into assets with and without a loss-recovery component. Changes in the asset components arise from the insurance service result, investment components, insurance finance income or expenses, other value changes, changes recognised in other comprehensive income, and changes in cash inflows and outflows. An explanation of the above-mentioned items and the effects on the consolidated income statement can be found under "Notes to the consolidated income statement".

Development of reinsurance contracts held, broken down by asset components

				2023
	Assets for remaining coverage		Assets for the recovery of incurred claims	Total
€m	Excl. loss-recovery component	Loss-recovery component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	140	0	3,753	3,892
Carrying amount at 1 January – Insurance portfolios that are liabilities	–242	0	–21	–262
	–102	**0**	**3,732**	**3,630**
Insurance service result				
Insurance revenue ceded				
Expected recoveries of claims and other expenses in the reporting period	–328			–328
Expected reversal of risk adjustment for non-financial risk for the reporting period	–10			–10
Net cost/gain for the service received in the reporting period	–67			–67
Experience adjustments for premiums and related cash flows	32			32
Expenses for short-term reinsurance contracts held	–1,204			–1,204
	–1,577			**–1,577**
Income from reinsurance contracts held for claims incurred				
Claims and other expenses reimbursed by reinsurers			882	882
Changes that relate to past service			–94	–94
Changes that relate to future service resulting from changes in contracts issued		0		0
		0	**788**	**788**
Subtotal	**–1,577**	**0**	**788**	**–789**
Investment components	**–10**		**10**	**0**
Insurance finance income or expenses from reinsurance contracts held				
Accretion of interest	28	0	72	100
Effects of changes in interest rates	0	0	0	0
	27	**0**	**72**	**99**
Other effects				
Effects from derecognition and changes in consolidated group	0	0	0	0
Effects of currency exchange differences	–48	0	–45	–93
	–48	**0**	**–45**	**–93**
Changes recognised in other comprehensive income				
Effects from changes in market variables	15	0	71	86
Effects from derecognition due to changes in consolidated group	0	0	0	0
	15	**0**	**71**	**86**
Cash flows				
Premiums paid	1,665			1,665
Reimbursements received for claims and other expenses			–1,026	–1,026
Other cash flows	0		–13	–13
	1,665		**–1,039**	**626**
IFRS 5 reclassification	**0**	**0**	**18**	**18**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	380	0	3,634	4,014
Carrying amount at 31 December – Insurance portfolios that are liabilities	–408	0	–28	–436
	–28	**0**	**3,606**	**3,577**

				Prev. year
	Assets for remaining coverage		Assets for the recovery of incurred claims	Total
€m	Excl. loss-recovery component	Loss-recovery component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	203	0	3,378	3,581
Carrying amount at 1 January – Insurance portfolios that are liabilities	–18	0	1	–17
	185	**0**	**3,379**	**3,564**
Insurance service result				
Insurance revenue ceded				
Expected recoveries of claims and other expenses in the reporting period	–418			–418
Expected reversal of risk adjustment for non-financial risk for the reporting period	–12			–12
Net cost/gain for the service received in the reporting period	6			6
Experience adjustments for premiums and related cash flows	–59			–59
Expenses for short-term reinsurance contracts held	–1,127			–1,127
	–1,610			**–1,610**
Income from reinsurance contracts held for claims incurred				
Claims and other expenses reimbursed by reinsurers			1,476	1,476
Changes that relate to past service			–63	–63
Changes that relate to future service resulting from changes in contracts issued		0		0
		0	**1,412**	**1,412**
Subtotal	**–1,610**	**0**	**1,412**	**–198**
Investment components	**–38**		**38**	**0**
Insurance finance income or expenses from reinsurance contracts held				
Accretion of interest	1	0	20	21
Effects of changes in interest rates	2	0	0	2
	4	**0**	**20**	**23**
Other effects				
Effects from derecognition and changes in consolidated group	5	0	19	24
Effects of currency exchange differences	–13	0	54	41
	–8	**0**	**74**	**66**
Changes recognised in other comprehensive income				
Effects from changes in market variables	–98	0	–169	–267
Effects from derecognition due to changes in consolidated group	0	0	0	0
	–98	**0**	**–169**	**–267**
Cash flows				
Premiums paid	1,459			1,459
Reimbursements received for claims and other expenses			–1,003	–1,003
Other cash flows	0		–15	–15
	1,459		**–1,019**	**440**
IFRS 5 reclassification	**3**	**0**	**–3**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	140	0	3,753	3,892
Carrying amount at 31 December – Insurance portfolios that are liabilities	–242	0	–21	–262
	–102	**0**	**3,732**	**3,630**

The tables below show the changes in the measurement components of reinsurance contracts held in the financial year that are measured using the general measurement model and the premium allocation approach. The measurement components include all elements of reinsurance contracts held that are measured using the general measurement model. In this reconciliation, the present value of the future net cash flows and the risk adjustment for our insurance portfolios measured using the premium allocation approach only includes the assets for the recovery of incurred claims.

Changes in the measurement components arise from the insurance service result, investment components, insurance finance income or expenses, other value changes, changes recognised in other comprehensive income, and changes in cash inflows and outflows. Consequently, the table reveals which changes in the present values of expected net cash flows and in the risk adjustment for non-financial risk occurred during the year and how these changes affected the net cost/gain.

Development of reinsurance contracts held, broken down by measurement components[1]

				2023
€m	Present value of expected net cash flows	Risk adjustment	Net cost/gain	Total
Carrying amount at 1 January – Insurance portfolios (net)	**3,294**	**122**	**376**	**3,792**
Insurance service result				
Changes that relate to service provided in the reporting period				
Net cost/gain for service in the reporting period			–67	–67
Changes in risk adjustment for non-financial risk for the reporting period		–13		–13
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		–10		–10
Other changes in risk adjustment		–3		–3
Experience adjustments	–11			–11
Claims and other expenses reimbursed by reinsurers from short-term insurance contracts	600	0		599
	589	**–13**	**–67**	**510**
Changes that relate to future service				
Effects of contracts initially recognised in the period	–48	3	45	0
Changes in estimates leading to adjustments to net cost/gain	27	19	–46	0
Changes in estimates not leading to adjustments to net cost/gain			0	0
	–21	**22**	**–1**	**0**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	–95	1		–94
	–95	**1**		**–94**
Subtotal	**474**	**10**	**–68**	**416**
Investment components from short-term contracts	**–1**			**–1**
Insurance finance income or expenses from reinsurance contracts held				
Accretion of interest	68	1	5	74
Effects of changes in interest rates	0	0	0	0
	67	**1**	**5**	**74**
Other effects				
Effects from derecognition and changes in consolidated group	0	0	0	0
Effects of currency exchange differences	–61	–9	–20	–90
	–61	**–9**	**–20**	**–90**
Changes recognised in other comprehensive income				
Effects from changes in market variables	83	3	0	86
Effects from derecognition due to changes in consolidated group	0	0	0	0
	83	**3**	**0**	**86**
Cash flows				
Premiums paid	533			533
Reimbursements received for claims and other expenses	–1,026			–1,026
Other cash flows	–13			–13
	–506			**–506**
IFRS 5 reclassification	**23**	**0**	**–1**	**22**
Carrying amount at 31 December – Insurance portfolios (net)	**3,372**	**127**	**293**	**3,792**

				Prev. year
€m	Present value of expected net cash flows	Risk adjustment	Net cost/gain	Total
Carrying amount at 1 January – Insurance portfolios (net)	**3,139**	**167**	**368**	**3,675**
Insurance service result				
Changes that relate to service provided in the reporting period				
Net cost/gain for service in the reporting period			6	6
Change in risk adjustment for non-financial risk for the reporting period		–11		–11
Thereof:				
Expected reversal of risk adjustment in connection with services provided in the reporting period		–12		–12
Other changes in risk adjustment		1		1
Experience adjustments	–45			–45
Claims and other expenses reimbursed by reinsurers from short-term insurance contracts	1,143	4		1,146
	1,098	**–8**	**6**	**1,097**
Changes that relate to future service				
Effects of contracts initially recognised in the period	–22	3	19	0
Changes in estimates leading to adjustments to net cost/gain	0	–1	1	0
Changes in estimates not leading to adjustments to net cost/gain			0	0
	–22	**2**	**20**	**0**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	–60	–3		–63
	–60	**–3**		**–63**
Subtotal	**1,016**	**–9**	**26**	**1,033**
Investment components from short-term contracts	**1**			**1**
Insurance finance income or expenses from reinsurance contracts held				
Accretion of interest	16	0	3	20
Effects of changes in interest rates	3	0	0	2
	19	**0**	**3**	**22**
Other effects				
Effects from derecognition and changes in consolidated group	17	0	0	17
Effects of currency exchange differences	53	–7	–20	26
	70	**–7**	**–20**	**43**
Changes recognised in other comprehensive income				
Effects from changes in market variables	–237	–30	0	–267
Effects from derecognition due to changes in consolidated group	0	0	0	0
	–237	**–30**	**0**	**–267**
Cash flows				
Premiums paid	351			351
Reimbursements received for claims and other expenses	–1,036			–1,036
Other cash flows	–15			–15
	–701			**–701**
IFRS 5 reclassification	**–13**	**0**	**0**	**–13**
Carrying amount at 31 December – Insurance portfolios (net)	**3,294**	**122**	**376**	**3,792**

1 Assets for remaining coverage for reinsurance contracts held that are measured using the premium allocation approach in the amount of –€215m (–162m) are not included. When applying the premium allocation approach, neither the present value of expected net cash flows nor a risk adjustment for non-financial risk or the net cost/gain for assets for remaining coverage are explicitly determined.

Concluded and acquired reinsurance contracts held, initially recognised in the financial year and measured using the GMM, broke down as follows:

Reinsurance contracts held – Contracts initially recognised in the financial year

			2023
€m	Reinsurance contracts held (concluded)	Reinsurance contracts held (acquired)	Total
Estimated present value of future cash outflows and inflows			
Estimated present value of future cash outflows	–239	0	–239
Estimated present value of future cash inflows	191	0	191
	–48	**0**	**–48**
Risk adjustment	3	0	3
Net cost/gain	45	0	45
Total	**0**	**0**	**0**

			Prev. year
€m	Reinsurance contracts held (concluded)	Reinsurance contracts held (acquired)	Total
Estimated present value of future cash outflows and inflows			
Estimated present value of future cash outflows	–301	0	–301
Estimated present value of future cash inflows	279	0	279
	–22	**0**	**–22**
Risk adjustment	3	0	3
Net cost/gain	19	0	19
Total	**0**	**0**	**0**

The following table presents our forecast of the recognition in profit or loss of the net cost/gain for reinsurance contracts held that are measured using the general measurement model.

Forecast of the recognition in profit or loss of the net cost/gain for reinsurance contracts held

	2023	Prev. year
€m	Net cost/gain	
Carrying amount at 31 December	**293**	**376**
Expected amounts recognised in profit or loss		
Year 1 change	28	35
Year 2 change	23	27
Year 3 change	18	23
Year 4 change	17	20
Year 5 change	16	18
Year 6 change	14	17
Year 7 change	13	16
Year 8 change	12	15
Year 9 change	11	14
Year 10 change	10	13
Year 11 and subsequent change	130	179

The following table presents the effects on the net cost/gain resulting from the initial measurement of reinsurance contracts held that were measured at the transition date applying the full retrospective, modified retrospective and fair value approaches. Insurance revenue is also broken down by the type of transition approach applied.

Breakdown of insurance revenue ceded and reconciliation of net cost/gain by type of transition approach applied

				2023
€m	Contracts measured using the full retrospective approach	Contracts measured using the modified retrospective approach	Contracts measured using the fair value approach	Total
Insurance revenue ceded	**–70**	**–42**	**–202**	**–314**
Carrying amount at 1 January – Net cost/gain	**2**	**49**	**272**	**322**
Net cost/gain for service in the reporting period	–1	–29	–11	–41
Changes in estimates leading to adjustments to net cost/gain	–3	3	–27	–26
Effects of contracts initially recognised in the period	0	0	0	0
Insurance finance income or expenses from reinsurance contracts held	0	2	1	3
Other effects	0	0	–19	–18
Carrying amount at 31 December – Net cost/gain	**–1**	**25**	**216**	**239**

				Prev. year
€m	Contracts measured using the full retrospective approach	Contracts measured using the modified retrospective approach	Contracts measured using the fair value approach	Total
Insurance revenue ceded	**–346**	**–44**	**–337**	**–727**
Carrying amount at 1 January – Net cost/gain	**20**	**57**	**291**	**368**
Net cost/gain for service in the reporting period	–12	–15	–16	–44
Changes in estimates leading to adjustments to net cost/gain	–5	6	12	12
Effects of contracts initially recognised in the period	0	0	0	0
Insurance finance income or expenses from reinsurance contracts held	0	2	0	2
Other effects	0	0	–16	–16
Carrying amount at 31 December – Net cost/gain	**2**	**49**	**272**	**322**

11 Investment property

The development of investment property measured using the cost model was as follows:

Development of investment property (measured using the cost model)

€m	2023	Prev. year
Gross carrying amount at 1 January	4,499	4,480
Accumulated depreciation and impairment losses at 1 January	–797	–754
Carrying amount at 1 January	3,702	3,727
Currency translation differences	–59	101
Additions		
Subsequent acquisition costs	45	1
Business combinations	0	0
Other	250	203
Disposals		
Loss of control	0	–1
Other	–5	–51
Reclassifications	–22	–208
Reversal of impairment losses	1	6
Depreciation	–80	–77
Impairment losses	–61	0
Carrying amount at 31 December	**3,772**	**3,702**
Accumulated depreciation and impairment losses at 31 December	–925	–797
Gross carrying amount at 31 December	4,696	4,499

Two additions consisted of housing complexes in Texas and North Carolina.

Impairment losses totalling €46m relate to two commercial properties in the US and Germany. The adjustment to the carrying amounts when measuring these properties was motivated primarily by lower market demand and increased discount rates.

Of particular note under “Reclassifications” was a change in presentation of owner-occupied properties.

The development of investment property measured using the fair value model was as follows:

Development of investment property (measured using the fair value model)

€m	2023	Prev. year
Carrying amount at 1 January	5,917	5,658
Currency translation differences	5	0
Additions		
Subsequent acquisition costs	7	18
Business combinations	0	0
Other	218	428
Disposals		
Loss of control	0	0
Other	–95	–320
Reclassifications	–131	79
Fair value change	–309	53
Other changes	0	0
Carrying amount at 31 December	**5,613**	**5,917**

The main additions were an office building in Brussels and a share of the land and soil of a forest in Arkansas.

The negative changes in fair value primarily reflect reduced market demand, particularly for commercial properties, and changes in the interest-rate environment, which translated into higher discount rates.

The reclassifications involved properties that we classified as held for sale.

The decarbonisation of our investment portfolio is part of our climate strategy. ESG aspects and risks related to climate change are taken into account when determining the fair values used to measure properties. The impact on the carrying amounts was low in the reporting year.

Investment property pledged as security and other restrictions on title totalled €3,146m (3,327m). Contractual commitments to acquire property amounted to €29m (45m).

12 Property, plant and equipment

Expenditure on property, plant and equipment primarily comprised investments in renewable energies:

Development of investments in renewable energies

€m	2023	Prev. year
Gross carrying amount at 1 January	767	792
Accumulated depreciation and impairment losses at 1 January	–287	–255
Carrying amount at 1 January	480	537
Currency translation differences	4	–10
Additions		
Business combinations	0	0
Other	1	7
Disposals		
Loss of control	0	0
Other	–2	–13
Reclassifications	0	0
Reversal of impairment losses	1	0
Depreciation	–37	–37
Impairment losses	–3	–3
Carrying amount at 31 December	**444**	**480**
Accumulated depreciation and impairment losses at 31 December	–329	–287
Gross carrying amount at 31 December	773	767

The cumulative investment expenditure recognised in the carrying amount for assets under construction consisting of property, plant and equipment for renewable energies totalled €30m (28m).

The investments in renewable energies include items pledged as security, and other restrictions on title, amounting to €40m (48m).

13 Intangible assets

Development of intangible assets related to investments in infrastructure and renewable energies

€m	2023
Gross carrying amount at 1 January	0
Accumulated amortisation and impairment losses at 1 January	0
Carrying amount at 1 January	0
Currency translation differences	0
Additions	
Business combinations	0
Other	0
Disposals	
Loss of control	0
Other	0
Reclassifications	141
Reversal of impairment losses	0
Amortisation	–13
Impairment losses	0
Carrying amount at 31 December	**128**
Accumulated amortisation and impairment losses at 31 December	–139
Gross carrying amount at 31 December	267

Intangible assets pledged as security and other restrictions on title amounted to €55m (62m). Commitments to acquire intangible assets totalled €0m (0m).

As at 1 January 2023, intangible assets related to the acquisition of investments in infrastructure and renewable energies were reclassified from “Other intangible assets” to “Non-financial investments” owing to the new balance sheet structure. The previous year’s figures were not reclassified because of immateriality. Intangible assets related to investments in infrastructure and renewable energies pledged as security and other restrictions on title are, however, presented here in full.

14 Biological assets

Development of forestry investments

€m	2023	Prev. year
Carrying amount at 1 January	735	494
Currency translation differences	–23	33
Additions		
Business combinations	0	0
Acquisitions	110	39
Disposals		
Loss of control	0	0
Sales	–36	–37
Change in fair value less costs to sell	45	70
Other changes	–3	136
Carrying amount at 31 December	**828**	**735**

The purchases primarily comprised the acquisition of 38,000 hectares of forest in Arkansas.

15 Investments in affiliated companies, associates and joint ventures

Reversed impairment losses with respect to associates and joint ventures amounted to €2m (1m). They are distributed between the following segments: €0m (1m) is apportionable to property-casualty reinsurance and €2m (0m) to property-casualty primary insurance.

Impairment losses with respect to these companies amounted to €54m (25m), and are almost entirely attributable to property-casualty reinsurance.

In the financial year, shares of losses of associates and joint ventures amounting to €0m (4m) were not recognised in the balance sheet. Overall, losses not recognised in the balance sheet totalled €20m (25m).

Aggregated financial information on investments in associates and joint ventures accounted for using the equity method and individually considered immaterial

€m	31.12.2023	Prev. year
Overall result for the year after tax from continued operations	133	45
Result after tax from discontinued operations	1	0
Income and expenses recognised in other comprehensive income	–20	8
Total comprehensive income	**114**	**53**

Further information about affiliated companies, associates and joint ventures can be found under Other information > 62 Contingent liabilities, other financial commitments; 63 Significant restrictions; and in the List of shareholdings as at 31 December 2023 pursuant to Section 313(2) of the German Commercial Code (HGB).

16 Financial investments

Our financial assets are generally managed on the basis of their asset class as defined by our Asset Liability Management unit. For explanatory purposes, financial investments are divided into three classes – those subject to equity risk, those subject to interest-rate and credit risk, and alternative investments. For a breakdown of financial investments by asset class, please refer to the Notes to the financial instruments and fair value disclosures on assets and liabilities > 41 Carrying amounts and categories of financial instruments.

The following table provides an overview of the product groups that come under financial investments:

Breakdown of financial investments

€m	31.12.2023	Prev. year
Fixed-interest securities and loans	174,106	167,300
Deposits with banks	2,975	2,887
Equities	11,461	9,808
Investment funds	3,959	3,425
Derivatives	1,459	1,974
Other financial investments	6,756	5,726
Total	**200,715**	**191,120**

Approximately 60% of the fixed-interest securities and loans are covered bonds, government bonds or government-guaranteed securities. The remaining portfolio is composed of bonds issued by banks and state central savings banks, as well as by companies outside the banking sector, and asset-backed securities/mortgage-backed securities. Any single investment accounts for less than 1% of the total investment portfolio. The asset-backed securities and mortgage-backed securities are largely rated A or better. The proportion of the instruments shown above that have a lifetime of less than one year amounted to €27,348m (24,950m).

Of the securities shown, €3,633m (2,326m) are what are known as green bonds. We also hold more than €190m in bonds with ESG characteristics; the interest rates of these securities and loans will rise if pre-defined ESG targets are not met. This means that the ESG characteristics do not give rise to any additional risks. On the contrary, additional interest income would offset the elevated risks triggered by a failure to meet ESG targets. We manage bonds with ESG characteristics within the business model “hold to collect and sell”. Many of these bonds pass the SPPI test and are therefore measured at fair value through other comprehensive income. We have implicitly taken climate risks and other ESG risks into account in our determination of fair values using the respective forward-looking valuation inputs, provided that they have an influence on price in the capital markets in which the products of relevance here are traded.

Fixed-interest securities and loans pledged as security and other restrictions on title amounted to €8,506m (9,071m). €3,201m (2,927m) of the securities reported were transferred to third parties, but with us retaining substantially all risks and rewards. As a result, these securities have not been derecognised.

Assets pledged as security and other restrictions on title amounted to €68m (61m) for deposits with banks. Deposits with banks include receivables of €65m (19m) from repurchase sellers under repurchase agreements that have been booked by us as the repurchase buyer. For these receivables, the repurchase seller provided collateral of €73m (39m) in Munich Re’s favour. Of the amounts held on deposit with banks, €2,884m (2,822m) was due within one year.

Derivatives are used by Munich Re to manage and hedge against interest-rate, currency, and other market risks. Given the daily collateral-adjustment process, the risk of default can essentially be disregarded in the case of products traded on the stock exchange and for centrally cleared and secured over-the-counter (OTC) derivatives. In order to minimise the risk of default for non-listed unsecured OTC derivatives as well, Munich Re conducts such business only with counterparties of high creditworthiness and exchanges collateral daily on the basis of current fair values.

As at 31 December 2023, Munich Re held collateral for derivatives in the form of cash collateral and securities with a rating of at least AA. The collateral received is subject to a title transfer collateral arrangement, but is not re-sold or pledged.

€167,254m (157,685m) of the fixed-interest securities and loans were measured at fair value through other comprehensive income because they pass the SPPI test. The other fixed-interest securities and loans were measured at fair value through profit or loss. Equities, investment fund units, derivatives and other financial investments were all measured at fair value through profit or loss. Deposits with banks were measured at amortised cost due to the “hold to collect” business model.

The unrealised gains and losses attributable to financial investments measured at fair value through other comprehensive income amounted to –€12,876m (–17,078m). These included expected credit losses from financial investments measured at fair value through other comprehensive income in the amount of €545m (0m). –€9,344m (–12,952m) was recognised in equity (other reserves) after deduction of deferred taxes, non-controlling interests, and consolidation and currency-translation effects.

The increase in value of the fixed-interest securities was chiefly attributable to lower interest rates in the reporting year. The greater value of the equities resulted mainly from bullish developments on the equity markets.

Further explanatory information on our financial investments can be found in the section "Notes to the financial instruments and fair value disclosures on assets and liabilities".

17 Investments for unit-linked life insurance

Breakdown of investments for unit-linked life insurance

€m	31.12.2023	Prev. year
Non-consolidated investments for unit-linked life insurance	8,056	7,275
Consolidated investments for unit-linked life insurance	224	194
Total	**8,280**	**7,470**

18 Insurance-related financial instruments

Breakdown of insurance-related financial instruments

€m	31.12.2023	Prev. year
Variable annuities		
Derivative components of variable annuities	120	82
Derivatives for hedging variable annuities	1,119	1,288
	1,238	**1,371**
Insurance-linked derivatives	285	1,584
Insurance-related instruments subject to equity risk	211	221
Insurance-related loans	351	451
Insurance-related bonds and cat bonds	659	0
Insurance contracts that do not transfer significant insurance risk	7,127	14,672
Total	**9,872**	**18,298**

Insurance-related financial instruments are instruments that are directly linked to insurance business in our respective business units. They relate to derivative and parametric contracts, which are included in the derivative components of variable annuities as well as in the insurance-linked derivatives. Insurance-linked derivatives also include separately recognised embedded derivatives in insurance contracts and insurance contracts designated as measured at fair value through profit or loss.

The insurance-related instruments subject to equity risk include contracts that do not fall within the scope of IFRS 17 and are like equity instruments in nature, as well as investments in intermediaries related to insurance contracts. Insurance-related loans involve financing issued in connection with insurance contracts. The insurance-related bonds and cat bonds include securitised catastrophe risks, as well as registered bonds from insurance companies that we have acquired in insurance transactions. Insurance contracts that do not transfer significant insurance risk are outside the scope of IFRS 17, and as such are also presented under insurance-related financial instruments.

We recognise insurance-related financial instruments at fair value through profit or loss as per IFRS 9. All expected incoming payments and outgoing payments regarding a given financial instrument are accounted for when determining the fair value of the financial instrument; in addition, the payments are generally presented as asset items. In the previous year, the contractual cash flows were presented separately as assets (cash inflows) and liabilities (cash outflows).

Insurance-related financial instruments with a lifetime of less than one year amounted to €3,293m (3,423m).

19 Financial receivables

Financial receivables totalled €3,841m (4,044m), essentially consisting of receivables from cash collateral – mainly for derivative transactions.

Financial receivables with a lifetime of less than one year amounted to €2,221m (2,223m).

Expected credit losses from financial receivables recognised in the consolidated income statement stood at €4m.

Other financial receivables pledged as security and other restrictions on title came to €19m (18m).

20 Other receivables

Other receivables amounting to €1,382m (1,451m) include non-financial receivables from advance payments of salary components, prepaid pension expenses, and receivables connected with our pension plan. Other receivables with a lifetime of less than one year amounted to €811m (871m).

21 Cash and cash equivalents

We present cash at its nominal value and cash equivalents at their nominal value, provided they are recognised at amortised cost. If cash equivalents do not pass the SPPI test, they are measured at fair value through profit or loss.

22 Deferred tax

The deferred tax assets and liabilities recognised in the consolidated balance sheet concern the following balance sheet items:

Deferred tax

	31.12.2023		Prev. year[1]	
€m	Assets	Liabilities	Assets	Liabilities
Assets				
A. Intangible assets	16	42	–	–
D. Investments	11,500	8,874	–	–
E. Investments for unit-linked life insurance	2	0	–	–
F. Insurance-related financial instruments	346	743	–	–
G. Receivables	195	208	–	–
J. Other assets	39	600	–	–
	12,098	**10,467**	**–**	**–**
Equity and liabilities				
C. Reinsurance contracts held (net)	3,336	1,693	–	–
D. Insurance contracts issued (net)	8,822	13,244	–	–
E. Other provisions	1,162	356	–	–
F. Liabilities	399	61	–	–
	13,719	**15,354**	**–**	**–**
Loss carry-forwards and tax credits	**506**	**0**	**–**	**–**
Deferred tax from initial application of IFRS 17				
Deferred tax in the consolidated income statement	0	0	19,663	18,664
Deferred tax in equity	0	0	6,889	6,777
	0	**0**	**26,552**	**25,441**
Total before netting	**26,323**	**25,821**	**26,552**	**25,441**
Netting amount	–23,580	–23,580	–23,690	–23,690
Total	**2,743**	**2,241**	**2,862**	**1,751**

1 Some of the previous year's figures are not available in a comparable balance sheet structure and are only shown in aggregated form.

No deferred taxes were posted for temporary differences of €250m (113m) in connection with investments in subsidiaries and associates. No deferred tax assets were recognised on deductible temporary differences of €229m (827m) due to lack of recoverability.

The available tax loss carry-forwards and tax credits are broken down as follows:

Tax loss carry-forwards and tax credits

	31.12.2023			Prev. year		
€m	For which deferred tax assets are recognised	For which deferred tax assets are not recognised	Total	For which deferred tax assets are recognised	For which deferred tax assets are not recognised	Total
Corporation tax loss carry-forwards						
Expiring in up to three years	34	5	39	26	23	49
Expiring in over three years and up to ten years	431	60	491	244	65	309
Expiring in over ten years	110	6	116	410	65	475
Not expiring	1,004	2,589	3,593	1,621	1,397	3,018
	1,579	**2,660**	**4,239**	**2,301**	**1,550**	**3,851**
Trade tax loss carry-forwards						
Not expiring	462	372	834	237	292	529
	462	**372**	**834**	**237**	**292**	**529**
Tax loss carry-forwards from capital losses						
Expiring in up to three years	0	0	0	0	0	0
Expiring in over three years and up to ten years	22	19	41	0	0	0
Expiring in over ten years	0	0	0	0	0	0
Not expiring	0	1	1	0	0	0
	22	**20**	**42**	**0**	**0**	**0**
Tax credits						
Expiring in up to three years	55	0	55	41	19	60
Expiring in over three years and up to ten years	42	1	43	60	2	62
Expiring in over ten years	0	0	0	0	0	0
Not expiring	1	0	1	0	0	0
	98	**1**	**99**	**101**	**21**	**122**

23 Other assets

Other assets include €1,383m (1,361m) in owner-occupied property measured using the cost model, and €914m (992m) in owner-occupied property measured at fair value through profit or loss. The latter are held as underlying items for insurance contracts with direct participation features under the variable fee approach in accordance with IFRS 17. A total of €230m (217m) was attributable to operating and office equipment. Payments already made which, in accordance with IFRS 17, have not yet been included in the cash flows allocated to a portfolio of insurance contracts amounted to €2,677m (2,304m). Other deferred assets recognised in other assets came to €272m (248m).

Development of property, plant and equipment

€m	Owner-occupied property (measured using the cost model) 2023	Prev. year	Operating and office equipment 2023	Prev. year	Total 2023	Prev. year
Gross carrying amount at 1 January	2,167	2,166	1,034	971	3,201	3,137
Accumulated depreciation and impairment losses at 1 January	–806	–773	–817	–770	–1,623	–1,544
Carrying amount at 1 January	1,361	1,392	217	201	1,578	1,593
Currency translation differences	–2	8	1	1	–1	10
Additions						
Business combinations	25	25	0	3	25	28
Other	37	21	111	118	148	139
Disposals						
Loss of control	0	0	0	0	0	0
Other	–27	–10	–16	–21	–44	–31
Reclassifications	33	–36	0	0	33	–36
Reversal of impairment losses	0	0	5	0	5	1
Depreciation	–37	–41	–85	–86	–122	–127
Impairment losses	–7	0	–2	0	–9	0
Carrying amount at 31 December	**1,383**	**1,361**	**230**	**217**	**1,613**	**1,578**
Accumulated depreciation and impairment losses at 31 December	–858	–806	–814	–817	–1,672	–1,623
Gross carrying amount at 31 December	2,242	2,167	1,044	1,034	3,286	3,201

Development of owner-occupied property (measured at fair value)

€m	2023	Prev. year
Carrying amount at 1 January	992	1,035
Currency translation differences	0	0
Additions		
Business combinations	0	0
Other	1	1
Disposals		
Loss of control	0	0
Other	–8	–14
Reclassifications	–13	–50
Fair value change	–57	20
Other changes	0	0
Carrying amount at 31 December	**914**	**992**

The expenditures recognised in the carrying amount for assets under construction totalled €22m (8m) for property, of which €22m (8m) was attributable to property measured using the cost model and €0m (0m) was attributable to property measured at fair value through profit or loss. Owner-occupied property pledged as security and other restrictions on title totalled €36m (0m). €13m (16m) of the expenditures recognised in the carrying amount for assets in the course of construction related to operating and office equipment. Commitments to acquire property totalled €11m (21m) and commitments to acquire operating and office equipment €5m (5m).

We present right-of-use assets totalling €416m (348m) under other assets. These mainly comprise right-of-use assets for property of €390m (329m). Additions to right-of-use assets in the financial year amounted to €192m (45m). The depreciation expense totalled €84m (94m).

Notes to the consolidated balance sheet – Equity and liabilities

24 Equity

The total share capital of €587,725,396.48 at 31 December 2023 was divided into 136,468,150 no-par-value registered shares, each fully paid up and carrying one vote. The number of shares in circulation was as follows:

Development of shares in circulation

Number	2023	Prev. year
Balance at 1 January	**137,643,183**	**140,098,931**
Reductions		
Acquired for retirement (share buy-back programme)	–3,043,376	–2,455,748
Balance at 31 December	**134,599,807**	**137,643,183**

On 31 December 2023, a total of 1,868,343 Munich Reinsurance Company shares with a calculated nominal value of around €8.1m were held by Group companies. This represents around 1.4% of the share capital.

In the financial year, Munich Re bought back 3,043,376 shares as part of the 2022/2023 share buy-back programme completed on 21 April 2023 and the 2023/2024 share buy-back programme, which was approved by the Board of Management on 22 February 2023. It provides for the acquisition of shares up to a value of €1bn before the 2024 Annual General Meeting.

The acquisition costs of all Munich Re shares in the possession of Group companies at the end of the financial year totalled €665,006,064.13.

A total of €1,583m was distributed to Munich Reinsurance Company's equity holders for the 2022 financial year in the form of a dividend of €11.60 per dividend-bearing share.

Authorised and contingent capital

€m	31.12.2023
Authorised capital 2021 (until 27 April 2026)	118
Contingent capital 2020 (until 28 April 2025)	117

The transition to IFRS 9 and IFRS 17 had the following impact on equity as at 1 January 2023:

With the initial application of IFRS 9 as at 1 January 2023, retained earnings increased by €1,155m due to the changed requirements regarding the classification and measurement of financial assets and liabilities. In addition, for some financial instruments, the reclassification had an impact on unrealised gains and losses recognised in other comprehensive income, leading to a decrease of €1,595m in "Other reserves". For details, please refer to Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 9 > Classification and measurement of financial instruments.

Other effects on retained earnings from the initial application of IFRS 9 included a reclassification of €113m from "Other reserves" due to changes in the measurement of investments in affiliated companies, associates and joint ventures that were not consolidated because they were immaterial, and various other transition effects of €42m. Further comments can be found under Accounting policies > Changes in accounting policies and other adjustments > Effects from the initial application of IFRS 9 > Impact on equity.

Of the total amount reclassified from "Other reserves" to "Retained earnings", €1,077m was attributable to financial instruments held as underlying items of insurance contracts accounted for under the VFA. As the method of measurement of these financial instruments had changed to "at fair value through profit or loss", the amounts recognised in other comprehensive income in the 2022 financial year from the measurement of the insurance contracts related to these underlying items would in future have been neither derecognised nor reclassified to the consolidated income statement. A corresponding reclassification from "Other reserves" to "Retained earnings" was therefore required for the insurance contracts concerned.

The table below shows the taxes relating to components of the income and expenses recognised in other comprehensive income:

Tax effects in the income and expenses recognised in other comprehensive income

	2023			Prev. year		
€m	Before tax	Taxes	After tax	Before tax	Taxes	After tax
Foreign currency translation	–433	0	–433	738	0	738
Unrealised gains and losses on financial investments	6,865	–1,951	4,914	–37,183	10,900	–26,283
Changes resulting from cash flow hedges	2	0	2	–23	0	–23
Change resulting from equity method measurement	28	–1	27	24	0	24
Change resulting from reinsurance contracts held	–826	52	–774	–268	–197	–465
Changes resulting from insurance contracts issued	–4,032	1,401	–2,631	30,057	–8,962	21,095
Remeasurements of defined benefit plans	–151	40	–111	1,141	–350	791
Income and expenses recognised in other comprehensive income	**1,453**	**–459**	**994**	**–5,514**	**1,391**	**–4,123**

The taxes of –€459m (1,391m) recognised in other comprehensive income comprise deferred taxes amounting to –€438m (1,229m), and current taxes on unrealised gains and losses from financial investments and insurance contracts of –€21m (162m).

25 Subordinated liabilities

The table below provides an overview of the subordinated bonds we have issued:

Breakdown of subordinated liabilities

€m	Fitch	S&P	31.12.2023	Prev. year
Munich Reinsurance Company, Munich, 5.875% until 2032, thereafter floating, US$ 1,250m, Bonds 2022/2042	–	A	1,132	1,171
Munich Reinsurance Company, Munich, 1.00% until 2032, thereafter floating, €1,000m, Bonds 2021/2042	A	A	999	998
Munich Reinsurance Company, Munich, 1.25% until 2031, thereafter floating, €1,250m, Bonds 2020/2041	A	A	1,247	1,245
Munich Reinsurance Company, Munich, 3.25% until 2029, thereafter floating, €1,250m, Bonds 2018/2049	A	–	1,266	1,265
ERGO Versicherung Aktiengesellschaft, Vienna, secondary market yield on federal government bonds (Austria) +70 BP, €6m, Registered bonds 2001/perpetual	–	–	6	6
ERGO Versicherung Aktiengesellschaft, Vienna, secondary market yield on federal government bonds (Austria) +70 BP, €7m, Registered bonds 1998/perpetual	–	–	7	7
HSB Group Inc., Delaware, SOFR 117.161 BP, US$ 67m, Bonds 1997/2027	–	–	56	56
Total			**4,713**	**4,748**

A majority of the above-mentioned subordinated liabilities mature in more than one year.

26 Insurance contracts issued

Due to the extended coverage periods, we use the general measurement model for our (re)insurance contracts issued in the life and health reinsurance segment. We measure our property-casualty insurance contracts issued in accordance with the premium allocation approach if they meet the applicable requirements. This applies to the majority of our property-casualty business. For large parts of the German and some parts of the international participating life and health primary insurance business, the variable fee approach is used. Since both property as well as life and health primary insurance contracts are issued in the ERGO International segment, all three measurement models of IFRS 17 are used in this segment.

The tables below show the changes in carrying amounts of the insurance contracts issued by the life and health reinsurance, property-casualty reinsurance, ERGO Life and Health Germany, ERGO Property-casualty Germany and ERGO International segments in the past financial year, broken down by liability component: The reconciliation tables therefore show the changes between the opening and closing balances for the liability for remaining coverage and the liability for incurred claims. The liability for remaining coverage is split into the liability for remaining coverage excluding the loss component and the loss component. Changes in the liability components arise from the insurance service result, investment components, insurance finance income or expenses, other value changes, changes recognised in other comprehensive income, and changes in cash inflows or outflows. An explanation of the above-mentioned items and the effects on the consolidated income statement can be found under “Notes to the consolidated income statement”.

Changes in insurance contracts issued by liability component – Life and health reinsurance segment

				2023
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	10,422	–11	–4,938	5,473
Carrying amount at 1 January – Insurance portfolios that are liabilities	–11,880	–179	–5,685	–17,744
	–1,458	**–190**	**–10,623**	**–12,271**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	9,239			9,239
Expected reversal of risk adjustment for non-financial risk for the reporting period	254			254
Contractual service margin for services provided in the reporting period	914			914
Portion of premium that relates to the recovery of acquisition costs	0			0
Experience adjustments for premium receipts and related cash flows	317			317
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	1			1
	10,725			**10,725**
Insurance service expenses				
Claims and other insurance service expenses			–9,604	–9,604
Changes that relate to past service			35	35
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–7		–7
Changes in estimates that do not adjust the contractual service margin		–86		–86
Reversal of losses		55		55
		–38		**–38**
Changes from underlying items that relate to future service	0			0
Recovery of acquisition costs	0			0
	0	**–38**	**–9,570**	**–9,608**
Subtotal	**10,724**	**–38**	**–9,570**	**1,117**

Investment components	**2,628**		**–2,628**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–78	–2	–57	–138
Effects of changes in interest rates	5	0	0	5
Changes in the fair value of the underlying items	0	0	0	0
	–73	**–2**	**–57**	**–133**
Other effects				
Effects from derecognition and changes in consolidated group	65	0	2	67
Effects of currency exchange differences	110	8	272	390
	175	**8**	**273**	**456**
Changes presented in other comprehensive income				
Effects from changes in market variables	235	0	–55	180
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0	0	0
	235	**0**	**–55**	**180**
Cash flows				
Premiums received	–12,269			–12,269
Acquisition costs	–29			–29
Claims and other insurance service expenses			12,041	12,041
Other cash flows	0		0	0
	–12,299		**12,041**	**–257**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	10,397	–27	–3,897	6,473
Carrying amount at 31 December – Insurance portfolios that are liabilities	–10,464	–195	–6,724	–17,383
	–67	**–222**	**–10,621**	**–10,910**

				Prev. year
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	7,844	0	–1,391	6,453
Carrying amount at 1 January – Insurance portfolios that are liabilities	–8,622	0	–10,580	–19,202
	–778	**–1**	**–11,971**	**–12,750**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	9,512			9,512
Expected reversal of risk adjustment for non-financial risk for the reporting period	263			263
Contractual service margin for services provided in the reporting period	973			973
Portion of premium that relates to the recovery of acquisition costs	0			0
Experience adjustments for premium receipts and related cash flows	415			415
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	0			0
	11,164			**11,164**
Insurance service expenses				
Claims and other insurance service expenses			–8,661	–8,661
Changes that relate to past service			–1,467	–1,467
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–2		–2
Changes in estimates that do not adjust the contractual service margin		–210		–210
Reversal of losses		2		2
		–210		**–210**
Changes from underlying items that relate to future service	0			0
Recovery of acquisition costs	0			0
	0	**–210**	**–10,128**	**–10,337**
Subtotal	**11,164**	**–210**	**–10,128**	**827**

Investment components	**1,671**		**–1,671**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	3	0	–32	–29
Effects of changes in interest rates	0	0	5	5
Changes in the fair value of the underlying items	0	0	0	0
	3	**0**	**–27**	**–25**
Other effects				
Effects from derecognition and changes in consolidated group	22	0	11	33
Effects of currency exchange differences	–294	22	133	–140
	–272	**22**	**143**	**–107**
Changes presented in other comprehensive income				
Effects from changes in market variables	–28	0	147	119
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0	0	0
	–28	**0**	**147**	**119**
Cash flows				
Premiums received	–13,244			–13,244
Acquisition costs	27			27
Claims and other insurance service expenses			12,884	12,884
Other cash flows	0		0	0
	–13,217		**12,884**	**–334**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	10,422	–11	–4,938	5,473
Carrying amount at 31 December – Insurance portfolios that are liabilities	–11,880	–179	–5,685	–17,744
	–1,458	**–190**	**–10,623**	**–12,271**

Changes in insurance contracts issued by liability component – Property-casualty reinsurance segment

				2023
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	200	0	–168	32
Carrying amount at 1 January – Insurance portfolios that are liabilities	4,286	–542	–60,682	–56,937
	4,486	**–542**	**–60,850**	**–56,906**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	18			18
Expected reversal of risk adjustment for non-financial risk for the reporting period	0			0
Contractual service margin for services provided in the reporting period	18			18
Portion of premium that relates to the recovery of acquisition costs	1			1
Experience adjustments for premium receipts and related cash flows	–13			–13
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	27,038			27,038
	27,061			**27,061**
Insurance service expenses				
Claims and other insurance service expenses			–21,618	–21,618
Changes that relate to past service			1,554	1,554
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–255		–255
Changes in estimates that do not adjust the contractual service margin		216		216
Reversal of losses		0		0
		–39		**–39**
Changes from underlying items that relate to future service	0			0
Recovery of acquisition costs	–2,494			–2,494
	–2,494	**–39**	**–20,064**	**–22,598**
Subtotal	**24,567**	**–39**	**–20,064**	**4,464**

Investment components	**2,501**		**–2,500**	**2**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–323	0	–1,358	–1,682
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying item	0	0	0	0
	–323	**0**	**–1,358**	**–1,682**
Other effects				
Effects from derecognition and changes in consolidated group	1	0	–2	–1
Effects of currency exchange differences	–289	7	1,526	1,243
	–289	**7**	**1,524**	**1,242**
Changes presented in other comprehensive income				
Effects from changes in market variables	0	0	–1,396	–1,396
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0	0	0
	0	**0**	**–1,396**	**–1,396**
Cash flows				
Premiums received	–29,396			–29,396
Acquisition costs	2,486			2,486
Claims and other insurance service expenses			19,596	19,596
Other cash flows	0		0	0
	–26,909		**19,596**	**–7,314**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	1,661	–1	–1,544	116
Carrying amount at 31 December – Insurance portfolios that are liabilities	2,372	–573	–63,504	–61,705
	4,033	**–574**	**–65,049**	**–61,589**

				Prev. year
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	0	0	10	10
Carrying amount at 1 January – Insurance portfolios that are liabilities	3,161	–1,011	–58,464	–56,313
	3,161	**–1,011**	**–58,453**	**–56,303**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	0			0
Expected reversal of risk adjustment for non-financial risk for the reporting period	0			0
Contractual service margin for services provided in the reporting period	0			0
Portion of premium that relates to the recovery of acquisition costs	0			0
Experience adjustments for premium receipts and related cash flows	0			0
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	25,325			25,325
	25,325			**25,325**
Insurance service expenses				
Claims and other insurance service expenses			–21,301	–21,301
Changes that relate to past service			2,117	2,117
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–462		–462
Changes in estimates that do not adjust the contractual service margin		941		941
Reversal of losses		0		0
		479		**479**
Changes from underlying items that relate to future service	0			0
Recovery of acquisition costs	–2,427			–2,427
	–2,427	**479**	**–19,183**	**–21,132**
Subtotal	**22,898**	**479**	**–19,183**	**4,193**

Investment components	**2,712**		**–2,699**	**14**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–123	0	–326	–449
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying item	0	0	0	0
	–123	**0**	**–326**	**–449**
Other effects				
Effects from derecognition and changes in consolidated group	–12	0	–36	–48
Effects of currency exchange differences	124	–10	–1,291	–1,177
	112	**–10**	**–1,327**	**–1,225**
Changes presented in other comprehensive income				
Effects from changes in market variables	0	0	3,390	3,390
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0	0	0
	0	**0**	**3,390**	**3,390**
Cash flows				
Premiums received	–26,627			–26,627
Acquisition costs	2,353			2,353
Claims and other insurance service expenses			17,748	17,748
Other cash flows	0		0	0
	–24,274		**17,748**	**–6,526**
IFRS 5 reclassification	**0**	**0**	**1**	**1**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	200	0	–168	32
Carrying amount at 31 December – Insurance portfolios that are liabilities	4,286	–542	–60,682	–56,937
	4,486	**–542**	**–60,850**	**–56,906**

Changes in insurance contracts issued by liability component – ERGO Life and Health Germany segment

				2023
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	246	0	–8	239
Carrying amount at 1 January – Insurance portfolios that are liabilities	–107,900	–26	–1,868	–109,794
	–107,654	**–26**	**–1,876**	**–109,556**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	6,912			6,912
Expected reversal of risk adjustment for non-financial risk for the reporting period	35			35
Contractual service margin for services provided in the reporting period	819			819
Portion of premium that relates to the recovery of acquisition costs	202			202
Experience adjustments for premium receipts and related cash flows	–3			–3
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	1,976			1,976
	9,942			**9,942**
Insurance service expenses				
Claims and other insurance service expenses			–8,401	–8,401
Changes that relate to past service			220	220
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–29		–29
Changes in estimates that do not adjust the contractual service margin		–3		–3
Reversal of losses		38		38
		5		**5**
Changes from underlying items that relate to future service	52			52
Recovery of acquisition costs	–637			–637
	–585	**5**	**–8,181**	**–8,761**
Subtotal	**9,356**	**5**	**–8,181**	**1,180**

Investment components	**2,934**		**–2,934**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–25	–1	–8	–33
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying item	–2,950	0	0	–2,950
	–2,975	**–1**	**–8**	**–2,983**
Other effects				
Effects from derecognition and changes in consolidated group	–24	2	–12	–35
Effects of currency exchange differences	3	1	–2	2
	–21	**2**	**–15**	**–33**
Changes presented in other comprehensive income				
Effects from changes in market variables	–3	0	–3	–6
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–3,095	0	0	–3,095
	–3,097	**0**	**–3**	**–3,100**
Cash flows				
Premiums received	–10,406			–10,406
Acquisition costs	978			978
Claims and other insurance service expenses			11,113	11,113
Other cash flows	0		0	0
	–9,428		**11,113**	**1,685**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	291	–1	–4	287
Carrying amount at 31 December – Insurance portfolios that are liabilities	–111,176	–19	–1,900	–113,095
	–110,885	**–19**	**–1,903**	**–112,808**

				Prev. year
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	292	0	–1	291
Carrying amount at 1 January – Insurance portfolios that are liabilities	–132,807	–20	–1,596	–134,424
	–132,515	**–20**	**–1,597**	**–134,132**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	6,866			6,866
Expected reversal of risk adjustment for non-financial risk for the reporting period	49			49
Contractual service margin for services provided in the reporting period	948			948
Portion of premium that relates to the recovery of acquisition costs	192			192
Experience adjustments for premium receipts and related cash flows	–18			–18
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	1,764			1,764
	9,802			**9,802**
Insurance service expenses				
Claims and other insurance service expenses			–8,112	–8,112
Changes that relate to past service			348	348
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–15		–15
Changes in estimates that do not adjust the contractual service margin		–9		–9
Reversal of losses		17		17
		–7		**–7**
Changes from underlying items that relate to future service	–156			–156
Recovery of acquisition costs	–528			–528
	–684	**–7**	**–7,763**	**–8,454**
Subtotal	**9,118**	**–7**	**–7,763**	**1,347**

Investment components	**2,915**		**–2,915**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	2	0	0	2
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying item	–818	0	0	–818
	–815	**0**	**0**	**–816**
Other effects				
Effects from derecognition and changes in consolidated group	0	0	0	0
Effects of currency exchange differences	–82	0	42	–40
	–82	**0**	**42**	**–40**
Changes presented in other comprehensive income				
Effects from changes in market variables	3	1	7	11
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	23,237	0	0	23,237
	23,241	**1**	**7**	**23,249**
Cash flows				
Premiums received	–10,311			–10,311
Acquisition costs	796			796
Claims and other insurance service expenses			10,351	10,351
Other cash flows	0		0	0
	–9,515		**10,351**	**836**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	246	0	–8	239
Carrying amount at 31 December – Insurance portfolios that are liabilities	–107,900	–26	–1,868	–109,794
	–107,654	**–26**	**–1,876**	**–109,556**

Changes in insurance contracts issued by liability component – ERGO Property-casualty Germany segment

				2023
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	131	–12	55	174
Carrying amount at 1 January – Insurance portfolios that are liabilities	–278	–287	–5,319	–5,884
	–147	**–299**	**–5,265**	**–5,711**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	1,564			1,564
Expected reversal of risk adjustment for non-financial risk for the reporting period	11			11
Contractual service margin for services provided in the reporting period	352			352
Portion of premium that relates to the recovery of acquisition costs	691			691
Experience adjustments for premium receipts and related cash flows	84			84
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	1,837			1,837
	4,539			**4,539**
Insurance service expenses				
Claims and other insurance service expenses			–2,933	–2,933
Changes that relate to past service			–79	–79
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–34		–34
Changes in estimates that do not adjust the contractual service margin		–5		–5
Reversal of losses		146		146
		107		**107**
Changes from underlying items that relate to future service	–2			–2
Recovery of acquisition costs	–771			–771
	–773	**107**	**–3,011**	**–3,677**
Subtotal	**3,766**	**107**	**–3,011**	**862**

Investment components	**66**		**–66**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–31	0	–20	–51
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying item	–15	0	0	–15
	–46	**0**	**–20**	**–66**
Other effects				
Effects from derecognition and changes in consolidated group	0	0	–1	–1
Effects of currency exchange differences	1	0	–1	0
	1	**0**	**–2**	**0**
Changes presented in other comprehensive income				
Effects from changes in market variables	–58	0	–202	–260
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–8	0	0	–8
	–66	**0**	**–202**	**–267**
Cash flows				
Premiums received	–4,440			–4,440
Acquisition costs	622			622
Claims and other insurance service expenses paid			2,673	2,673
Other cash flows	0		0	0
	–3,818		**2,673**	**–1,145**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	177	–2	89	264
Carrying amount at 31 December – Insurance portfolios that are liabilities	–419	–190	–5,983	–6,592
	–243	**–192**	**–5,893**	**–6,328**

				Prev. year
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	54	–1	–12	41
Carrying amount at 1 January – Insurance portfolios that are liabilities	–590	–244	–5,657	–6,492
	–536	**–246**	**–5,669**	**–6,450**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	1,634			1,634
Expected reversal of risk adjustment for non-financial risk for the reporting period	16			16
Contractual service margin for services provided in the reporting period	289			289
Portion of premium that relates to the recovery of acquisition costs	468			468
Experience adjustments for premium receipts and related cash flows	45			45
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	1,775			1,775
	4,227			**4,227**
Insurance service expenses				
Claims and other insurance service expenses			–3,288	–3,288
Changes that relate to past service			325	325
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–132		–132
Changes in estimates that do not adjust the contractual service margin		–81		–81
Reversal of losses		161		161
		–52		**–52**
Changes from underlying items that relate to future service	–10			–10
Recovery of acquisition costs	–536			–536
	–546	**–52**	**–2,966**	**–3,565**
Subtotal	**3,681**	**–52**	**–2,966**	**662**

Investment components	**64**		**–64**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	0	1	34	34
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–15	0	0	–15
	–16	**1**	**34**	**19**
Other effects				
Effects from derecognition and changes in consolidated group	26	0	–36	–10
Effects of currency exchange differences	9	–11	–3	–5
	34	**–11**	**–38**	**–15**
Changes presented in other comprehensive income				
Effects from changes in market variables	64	9	665	738
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	84	0	0	84
	148	**9**	**665**	**822**
Cash flows				
Premiums received	–4,172			–4,172
Acquisition costs	649			649
Claims and other insurance service expenses			2,775	2,775
Other cash flows	0		0	0
	–3,523		**2,775**	**–748**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	131	–12	55	174
Carrying amount at 31 December – Insurance portfolios that are liabilities	–278	–287	–5,319	–5,884
	–147	**–299**	**–5,265**	**–5,711**

Changes in insurance contracts issued by liability component – ERGO International segment

				2023
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (netto)				
Carrying amount at 1 January – Insurance portfolios that are assets	68	–1	–7	60
Carrying amount at 1 January – Insurance portfolios that are liabilities	–11,647	–319	–2,729	–14,694
	–11,579	**–320**	**–2,735**	**–14,634**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	1,985			1,985
Expected reversal of risk adjustment for non-financial risk for the reporting period	18			18
Contractual service margin for services provided in the reporting period	362			362
Portion of premium that relates to the recovery of acquisition costs	478			478
Experience adjustments for premium receipts and related cash flows	5			5
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	2,769			2,769
	5,618			**5,618**
Insurance service expenses				
Claims and other insurance service expenses			–3,963	–3,963
Changes that relate to past service			145	145
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–19		–19
Changes in estimates that do not adjust the contractual service margin		–1		–1
Reversal of losses		79		79
		58		**58**
Changes from underlying items that relate to future service	–2			–2
Recovery of acquisition costs	–483			–483
	–485	**58**	**–3,819**	**–4,245**
Subtotal	**5,133**	**58**	**–3,819**	**1,372**

Investment components	**799**		**–799**	**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–151	–7	–56	–214
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–413	0	0	–413
	–564	**–7**	**–56**	**–627**
Other effects				
Effects from derecognition and changes in consolidated group	0	3	3	6
Effects of currency exchange differences	18	–14	–123	–118
	19	**–11**	**–120**	**–112**
Changes presented in other comprehensive income				
Effects from changes in market variables	–55	0	–108	–163
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–227	0	0	–227
	–281	**0**	**–108**	**–389**
Cash flows				
Premiums received	–6,095			–6,095
Acquisition costs	541			541
Claims and other insurance service expenses			4,516	4,516
Other cash flows	0		0	0
	–5,554		**4,516**	**–1,039**
IFRS 5 reclassification	**70**	**2**	**40**	**111**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	79	0	–26	53
Carrying amount at 31 December – Insurance portfolios that are liabilities	–12,037	–279	–3,056	–15,372
	–11,958	**–279**	**–3,082**	**–15,319**

				Prev. year
	Liability for remaining coverage		Liability for incurred claims	Total
€m	excluding loss component	Loss component		
Carrying amount at 1 January (net)				
Carrying amount at 1 January – Insurance portfolios that are assets	74	–1	9	82
Carrying amount at 1 January – Insurance portfolios that are liabilities	–14,456	–108	–2,635	–17,198
	–14,381	**–108**	**–2,626**	**–17,116**
Insurance service result				
Insurance revenue				
Expected claims incurred and other expenses in the reporting period	1,846			1,846
Expected reversal of risk adjustment for non-financial risk for the reporting period	28			28
Contractual service margin for services provided in the reporting period	289			289
Portion of premium that relates to the recovery of acquisition costs	391			391
Experience adjustments for premium receipts and related cash flows	–2			–2
Tax specifically chargeable to the policyholder	0			0
Insurance revenue from short-term insurance contracts issued	2,314			2,314
	4,867			**4,867**
Insurance service expenses				
Claims and other insurance service expenses			–3,628	–3,628
Changes that relate to past service			237	237
Changes that relate to future service				
Losses on initial recognition of insurance contracts		–89		–89
Changes in estimates that do not adjust the contractual service margin		–42		–42
Reversal of losses		63		63
		–67		**–67**
Changes from underlying items that relate to future service	–42			–42
Recovery of acquisition costs	–394			–394
	–437	**–67**	**–3,390**	**–3,894**
Subtotal	**4,430**	**–67**	**–3,390**	**973**

Investment components	752		–752	–1
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–72	–6	–17	–95
Effects of changes in interest rates	1	0	0	1
Changes in the fair value of the underlying items	281	0	0	281
	210	**–6**	**–17**	**188**
Other effects				
Effects from derecognition and changes in consolidated group	–42	1	–16	–57
Effects of currency exchange differences	218	–144	38	112
	176	**–143**	**21**	**54**
Changes presented in other comprehensive income				
Effects from changes in market variables	666	3	198	866
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	1,614	0	0	1,614
	2,279	**3**	**198**	**2,480**
Cash flows				
Premiums received	–5,473			–5,473
Acquisition costs	431			431
Claims and other insurance service expenses			3,990	3,990
Other cash flows	0		0	0
	–5,041		**3,990**	**–1,051**
IFRS 5 reclassification	**–3**	**2**	**–159**	**–161**
Carrying amount at 31 December (net)				
Carrying amount at 31 December – Insurance portfolios that are assets	68	–1	–7	60
Carrying amount at 31 December – Insurance portfolios that are liabilities	–11,647	–319	–2,729	–14,694
	–11,579	**–320**	**–2,735**	**–14,634**

The tables below show how the measurement components that make up the liability for remaining coverage and the liability for incurred claims changed during the financial year: The reconciliations are prepared separately for our life and health reinsurance, property-casualty reinsurance, ERGO Life and Health Germany, ERGO Property-casualty Germany and ERGO International segments and show the changes from the opening to the closing balances for the measurement components of the present value of the expected net cash flows, risk adjustment and the contractual service margin. Changes in the measurement components also arise from the insurance service result, investment components, insurance finance income or expenses, other changes in value and changes in cash inflows and outflows. Consequently, the tables reveal which changes arose in the present values of expected net cash flows and in the risk adjustment for non-financial risk during the year and how these changes affected the contractual service margin.

The measurement components include the entire liability from insurance contracts issued which were measured using the general measurement model and the variable fee approach, and the liability for incurred claims for insurance contracts issued which were measured using the premium allocation approach.

The liability for remaining coverage for insurance contracts issued which were measured using the premium allocation approach is not included. When applying the premium allocation approach, neither the present value of expected net cash flows nor a risk adjustment for non-financial risk or a contractual service margin for the liability for remaining coverage are explicitly determined.

Changes in insurance contracts issued by measurement component – Life and health reinsurance segment[1]

€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
				2023
Carrying amount at 1 January – Insurance portfolios (net)	**2,031**	**–3,009**	**–11,294**	**–12,272**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			914	914
Change in risk adjustment for non-financial risk in the reporting period		258		258
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		254		254
Other changes in risk adjustment		4		4
Experience adjustments	3			3
Claims and other insurance service expenses from short-term contracts	0	0		0
	3	**258**	**914**	**1,175**
Changes that relate to future service				
Effects of contracts initially recognised in the period	2,482	–381	–2,108	–7
Changes in estimates adjusting the contractual service margin	559	–402	–158	0
Changes in estimates not adjusting the contractual service margin	–86	–1		–86
	2,956	**–783**	**–2,266**	**–93**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	37	–2		35
	37	**–2**		**35**
Subtotal	**2,995**	**–527**	**–1,351**	**1,117**
Investment components from short-term contracts	**0**			**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	111	–55	–193	–138
Effects of changes in interest rates	5	0	0	5
Changes in the fair value of the underlying items	0	0		0
	116	**–55**	**–193**	**–132**
Other effects				
Effects from derecognition and changes in consolidated group	2	0	0	2
Effects of currency exchange differences	–11	91	309	389
	–9	**91**	**309**	**391**
Changes presented in other comprehensive income				
Effects from changes in market variables	266	–86	0	180
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0		0
	266	**–86**	**0**	**180**
Cash flows				
Premiums received	–11,844			–11,844
Acquisition costs	–29			–29
Claims and other insurance service expenses	11,678			11,678
Other cash flows	0			0
	–196			**–196**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**5,203**	**–3,587**	**–12,530**	**–10,913**

€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
				Prev. year
Carrying amount at 1 January – Insurance portfolios (net)	**1,383**	**–4,033**	**–10,101**	**–12,751**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			973	973
Change in risk adjustment for non-financial risk in the reporting period		261		261
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		263		263
Other changes in risk adjustment		–2		–2
Experience adjustments	1,270			1,270
Claims and other insurance service expenses from short-term contracts	0	0		0
	1,270	**261**	**973**	**2,505**
Changes that relate to future service				
Effects of contracts initially recognised in the period	1,701	–285	–1,414	2
Changes in estimates adjusting the contractual service margin	612	–10	–602	0
Changes in estimates not adjusting the contractual service margin	–206	–4		–210
	2,106	**–299**	**–2,016**	**–209**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	–1,470	0		–1,470
	–1,470	**0**		**–1,470**
Subtotal	**1,907**	**–38**	**–1,043**	**826**
Investment components from short-term contracts	**0**			**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	85	–29	–85	–29
Effects of changes in interest rates	5	0	0	5
Changes in the fair value of the underlying items	0	0		0
	90	**–29**	**–85**	**–24**
Other effects				
Effects from derecognition and changes in consolidated group	7	0	2	8
Effects of currency exchange differences	–52	–42	–71	–164
	–45	**–42**	**–69**	**–156**
Changes presented in other comprehensive income				
Effects from changes in market variables	–1,014	1,133	0	119
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0		0
	–1,014	**1,133**	**0**	**119**
Cash flows				
Premiums received	–13,122			–13,122
Acquisition costs	27			27
Claims and other insurance service expenses	12,888			12,888
Other cash flows	0			0
	–207			**–207**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**2,031**	**–3,009**	**–11,294**	**–12,272**

1 The liability for remaining coverage for insurance contracts issued measured using the premium allocation approach in the amount of €3m (2m) for the life and health reinsurance segment is not included.

Changes in insurance contracts issued by measurement component – Property-casualty reinsurance segment[1]

				2023
€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–60,445**	**–349**	**0**	**–60,794**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			18	18
Change in risk adjustment for non-financial risk in the reporting period		0	0	0
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		0		0
Other changes in risk adjustment		0		0
Experience adjustments	–4			–4
Claims and other insurance service expenses from short-term contracts	–21,572	–94		–21,666
	–21,576	**–94**	**18**	**–21,652**
Changes that relate to future service				
Effects of contracts initially recognised in the period	60	–1	–60	0
Changes in estimates adjusting the contractual service margin	45	–1	–44	0
Changes in estimates not adjusting the contractual service margin	0	0		0
	106	**–2**	**–104**	**0**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	1,554	49		1,602
	1,554	**49**		**1,602**
Subtotal	**–19,916**	**–47**	**–86**	**–20,050**
Investment components from short-term contracts	**–2,500**			**–2,500**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–1,345	–12	–1	–1,358
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	0	0		0
	–1,345	**–12**	**–1**	**–1,358**
Other effects				
Effects from derecognition and changes in consolidated group	–3	0	0	–3
Effects of currency exchange differences	1,060	8	0	1,069
	1,057	**8**	**0**	**1,065**
Changes presented in other comprehensive income				
Effects from changes in market variables	–1,387	–9	0	–1,396
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0		0
	–1,387	**–9**	**0**	**–1,396**
Cash flows				
Premiums received	137			137
Acquisition costs	0			0
Claims and other insurance service expenses	20,004			20,004
Other cash flows	0			0
	20,141			**20,141**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**–64,395**	**–409**	**–88**	**–64,892**

				Prev. year
€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–58,110**	**–344**	**0**	**–58,453**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			0	0
Change in risk adjustment for non-financial risk in the reporting period		0		0
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		0		0
Other changes in risk adjustment		0		0
Experience adjustments	0			0
Claims and other insurance service expenses from short-term contracts	–21,321	–84		–21,405
	–21,321	**–84**	**0**	**–21,405**
Changes that relate to future service				
Effects of contracts initially recognised in the period	0	0	0	0
Changes in estimates adjusting the contractual service margin	0	0	0	0
Changes in estimates not adjusting the contractual service margin	0	0		0
	0	**0**	**0**	**0**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	2,079	70		2,149
	2,079	70		2,149
Subtotal	**–19,241**	**–15**	**0**	**–19,256**
Investment components from short-term contracts	**–2,699**			**–2,699**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–322	–4	0	–326
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	0	0		0
	–322	**–4**	**0**	**–326**
Other effects				
Effects from derecognition and changes in consolidated group	–5	0	0	–5
Effects of currency exchange differences	–1,281	–9	0	–1,290
	–1,286	**–9**	**0**	**–1,295**
Changes presented in other comprehensive income				
Effects from changes in market variables	3,367	23	0	3,390
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	0	0		0
	3,367	**23**	**0**	**3,390**
Cash flows				
Premiums received	55			55
Acquisition costs	0			0
Claims and other insurance service expenses	17,789			17,789
Other cash flows	0			0
	17,845			**17,845**
IFRS 5 reclassification	**1**	**0**	**0**	**1**
Carrying amount at 31 December – Insurance portfolios (net)	**–60,445**	**–349**	**0**	**–60,794**

1 The liability for remaining coverage for insurance contracts issued measured using the premium allocation approach in the amount of €3,303m (3,889m) for the property-casualty reinsurance segment is not included.

Changes in insurance contracts issued by measurement component – ERGO Life and Health Germany segment[1]

€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total 2023
Carrying amount at 1 January – Insurance portfolios (net)	**–98,464**	**–580**	**–10,449**	**–109,494**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			819	819
Change in risk adjustment for non-financial risk in the reporting period		35		35
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		35		35
Other changes in risk adjustment		0		0
Experience adjustments	–30			–30
Claims and other insurance service expenses from short-term contracts	–1,187	–1		–1,188
	–1,217	**34**	**819**	**–364**
Changes that relate to future service				
Effects of contracts initially recognised in the period	141	–8	–154	–21
Changes in estimates adjusting the contractual service margin	–261	15	214	–32
Changes in estimates not adjusting the contractual service margin	–8	0		–8
	–127	**6**	**60**	**–61**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	62	1		63
	62	**1**		**63**
Subtotal	**–1,282**	**41**	**879**	**–362**
Investment components from short-term contracts	**0**			**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–9	0	0	–9
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–2,950	0		–2,950
	–2,959	**0**	**0**	**–2,959**
Other effects				
Effects from derecognition and changes in consolidated group	12	0	1	13
Effects of currency exchange differences	–2	0	0	–2
	10	**0**	**1**	**11**
Changes presented in other comprehensive income				
Effects from changes in market variables	–6	0	0	–6
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–3,095	0		–3,095
	–3,100	**0**	**0**	**–3,100**
Cash flows				
Premiums received	–8,471			–8,471
Acquisition costs	502			502
Claims and other insurance service expenses	11,065			11,065
Other cash flows	0			0
	3,096			**3,096**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**–102,699**	**–539**	**–9,569**	**–112,807**

				Prev. year
€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–123,705**	**–1,038**	**–9,412**	**–134,156**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			948	948
Change in risk adjustment for non-financial risk in the reporting period		49		49
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		49		49
Other changes in risk adjustment		0		0
Experience adjustments	–30			–30
Claims and other insurance service expenses from short-term contracts	–1,099	–1		–1,100
	–1,129	**48**	**948**	**–133**
Changes that relate to future service				
Effects of contracts initially recognised in the period	222	–14	–221	–13
Changes in estimates adjusting the contractual service margin	1,330	423	–1,764	–11
Changes in estimates not adjusting the contractual service margin	–8	0		–8
	1,544	**409**	**–1,985**	**–32**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	21	1		22
	21	**1**		**22**
Subtotal	**436**	**458**	**–1,037**	**–143**
Investment components from short-term contracts	**0**			**0**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	0	0	0	0
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–818	0		–818
	–818	**0**	**0**	**–819**
Other effects				
Effects from derecognition and changes in consolidated group	0	0	0	0
Effects of currency exchange differences	4	0	0	4
	4	**0**	**0**	**4**
Changes presented in other comprehensive income				
Effects from changes in market variables	11	0	0	11
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	23,237	0		23,237
	23,248	**0**	**0**	**23,249**
Cash flows				
Premiums received	–8,481			–8,481
Acquisition costs	483			483
Claims and other insurance service expenses	10,368			10,368
Other cash flows	0			0
	2,371			**2,371**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**–98,464**	**–580**	**–10,449**	**–109,494**

1 The liability for remaining coverage for insurance contracts issued measured using the premium allocation approach in the amount of –€1m (–62m) for the ERGO Life and Health Germany segment is not included.

Changes in insurance contracts issued by measurement component – ERGO Property-casualty Germany segment[1]

				2023
€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–5,327**	**–68**	**–374**	**–5,769**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			352	352
Change in risk adjustment for non-financial risk in the reporting period		3		3
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		11		11
Other changes in risk adjustment		–8		–8
Experience adjustments	205			205
Claims and other insurance service expenses from short-term contracts	–1,340	1		–1,339
	–1,134	**3**	**352**	**–778**
Changes that relate to future service				
Effects of contracts initially recognised in the period	253	–8	–278	–34
Changes in estimates adjusting the contractual service margin	81	–4	–77	0
Changes in estimates not adjusting the contractual service margin	–17	–1		–19
	316	**–14**	**–355**	**–53**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	–75	–4		–79
	–75	**–4**		**–79**
Subtotal	**–893**	**–14**	**–3**	**–909**
Investment components from short-term contracts	**–8**			**–8**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–16	0	–8	–25
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–15	0		–15
	–31	**0**	**–8**	**–39**
Other effects				
Effects from derecognition and changes in consolidated group	–1	0	0	–1
Effects of currency exchange differences	–1	0	0	–1
	–2	**0**	**0**	**–2**
Changes presented in other comprehensive income				
Effects from changes in market variables	–258	–1	0	–260
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–8	0		–8
	–266	**–1**	**0**	**–267**
Cash flows				
Premiums received	–2,626			–2,626
Acquisition costs	537			537
Claims and other insurance service expenses	2,652			2,652
Other cash flows	0			0
	563			**563**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**–5,964**	**–83**	**–385**	**–6,432**

Prev. year

€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–5,838**	**–81**	**–435**	**–6,354**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			289	289
Change in risk adjustment for non-financial risk in the reporting period		15		15
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		16		16
Other changes in risk adjustment		–1		–1
Experience adjustments	5			5
Claims and other insurance service expenses from short-term contracts	–1,451	–3		–1,454
	–1,447	**12**	**289**	**–1,145**
Changes that relate to future service				
Effects of contracts initially recognised in the period	328	–13	–371	–55
Changes in estimates adjusting the contractual service margin	–144	3	141	0
Changes in estimates not adjusting the contractual service margin	–5	0		–6
	179	**–10**	**–230**	**–61**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	319	0		318
	319	0		318
Subtotal	**–949**	**2**	**59**	**–888**
Investment components from short-term contracts	**–8**			**–8**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	28	1	2	31
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–15	0		–15
	12	**1**	**2**	**15**
Other effects				
Effects from derecognition and changes in consolidated group	–69	0	0	–69
Effects from currency exchange differences	–2	0	1	–1
	–71	**0**	**1**	**–70**
Changes presented in other comprehensive income				
Effects from changes in market variables	727	11	0	738
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	84	0		84
	811	**11**	**0**	**822**
Cash flows				
Premiums received	–2,473			–2,473
Acquisition costs	418			418
Claims and other insurance service expenses	2,771			2,771
Other cash flows	0			0
	715			**715**
IFRS 5 reclassification	**0**	**0**	**0**	**0**
Carrying amount at 31 December – Insurance portfolios (net)	**–5,327**	**–68**	**–374**	**–5,769**

1 The liability for remaining coverage for insurance contracts issued measured using the premium allocation approach in the amount of €105m (58m) for the ERGO Property-casualty Germany segment is not included.

Changes in insurance contracts issued by measurement component – ERGO International segment[1]

€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	2023 Total
Carrying amount at 1 January – Insurance portfolios (net)	**–10,569**	**–218**	**–3,282**	**–14,069**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			362	362
Change in risk adjustment for non-financial risk in the reporting period		21		21
Thereof:				
Expected reversal of risk adjustment in connection with services provided in the reporting period		18		18
Other changes in risk adjustment		3		3
Experience adjustments	–42			–42
Claims and other insurance service expenses from short-term contracts	–1,864	5		–1,860
	–1,906	**26**	**362**	**–1,519**
Changes that relate to future service				
Effects of contracts initially recognised in the period	368	–13	–362	–7
Changes in estimates adjusting the contractual service margin	–469	28	448	7
Changes in estimates not adjusting the contractual service margin	–14	0		–15
	–115	**14**	**86**	**–15**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	141	–2		139
	141	**–2**		**139**
Subtotal	**–1,880**	**38**	**448**	**–1,394**
Investment components from short-term contracts	**–19**			**–19**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–105	–3	–37	–146
Effects of changes in interest rates	0	0	0	0
Changes in the fair value of the underlying items	–413	0		–413
	–518	**–3**	**–37**	**–559**
Other effects				
Effects from derecognition and changes in consolidated group	3	0	1	5
Effects of currency exchange differences	–117	0	–14	–131
	–114	**1**	**–13**	**–126**
Changes presented in other comprehensive income				
Effects from changes in market variables	–148	–14	0	–163
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	–227	0		–227
	–375	**–14**	**0**	**–389**
Cash flows				
Premiums received	–3,200			–3,200
Acquisition costs	528			528
Claims and other insurance service expenses	4,480			4,480
Other cash flows	0			0
	1,808			**1,808**
IFRS 5 reclassification	**29**	**1**	**17**	**47**
Carrying amount at 31 December – Insurance portfolios (net)	**–11,638**	**–196**	**–2,868**	**–14,702**

				Prev. year
€m	Present value of expected net cash flows	Risk adjustment	Contractual service margin	Total
Carrying amount at 1 January – Insurance portfolios (net)	**–13,692**	**–234**	**–2,739**	**–16,666**
Insurance service result				
Changes that relate to service provided in the reporting period				
Contractual service margin for services provided in the reporting period			289	289
Change in risk adjustment for non-financial risk in the reporting period		30		30
Thereof: Expected reversal of risk adjustment in connection with services provided in the reporting period		28		28
Other changes in risk adjustment		2		2
Experience adjustments	–131			–131
Claims and other insurance service expenses from short-term contracts	–1,627	–3		–1,630
	–1,758	**27**	**289**	**–1,442**
Changes that relate to future service				
Effects of contracts initially recognised in the period	416	–21	–417	–22
Changes in estimates adjusting the contractual service margin	429	–40	–403	–13
Changes in estimates not adjusting the contractual service margin	–45	5		–40
	801	**–56**	**–820**	**–75**
Changes that relate to past service				
Changes in fulfilment cash flows relating to incurred claims	233	0		233
	233	0		233
Subtotal	**–724**	**–29**	**–531**	**–1,284**
Investment components from short-term contracts	**–19**			**–19**
Insurance finance income or expenses from insurance contracts issued				
Accretion of interest	–69	–2	–16	–86
Effects of changes in interest rates	1	0	0	1
Changes in the fair value of the underlying items	282	0		282
	214	**–2**	**–16**	**196**
Other effects				
Effects from derecognition and changes in consolidated group	–16	0	0	–16
Effects of currency exchange differences	40	1	3	44
	24	**1**	**3**	**28**
Changes presented in other comprehensive income				
Effects from changes in market variables	819	47	0	866
Effects from derecognition due to changes in consolidated group	0	0	0	0
Change in the present values of expected net cash flows due to change in the fair value of the underlying items	1,614	0		1,614
	2,433	**47**	**0**	**2,480**
Cash flows				
Premiums received	–3,041			–3,041
Acquisition costs	435			435
Claims and other insurance service expenses	3,958			3,958
Other cash flows	0			0
	1,352			**1,352**
IFRS 5 reclassification	**–157**	**0**	**1**	**–156**
Carrying amount at 31 December – Insurance portfolios (net)	**–10,569**	**–218**	**–3,282**	**–14,069**

1 The liability for remaining coverage for insurance contracts issued measured using the premium allocation approach in the amount of –€617m (–565m) for the ERGO International segment is not included.

27 Liability for remaining coverage

In the following tables, we present the underwritten or acquired insurance contracts recognised in the financial year for the first time based on the segments in which the general measurement model or the variable fee approach is predominantly used in order to explain the change in the contractual service margin. The property-casualty reinsurance and ERGO Property-casualty Germany segments are not shown, as these insurance contracts issued are measured predominantly using the premium allocation approach, meaning that the contractual service margin is of minor importance in these segments.

The underwritten or acquired insurance contracts issued in the life and health reinsurance segment – and recognised in the financial year for the first time and measured under the general measurement model – had the following amounts:

Insurance contracts issued recognised in the financial year for the first time – Life and health reinsurance segment

					2023
	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	17,245	91	0	0	17,335
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	−14,756	−97	0	0	−14,853
Acquisition costs	0	0	0	0	0
	−14,756	**−97**	**0**	**0**	**−14,853**
Risk adjustment	−381	0	0	0	−381
Contractual service margin	−2,108		0		−2,108
Total	**0**	**−7**	**0**	**0**	**−7**

					Prev. year
	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	15,707	1	0	0	15,708
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	−14,009	−3	0	0	−14,011
Acquisition costs	0	0	0	0	0
	−14,009	**−3**	**0**	**0**	**−14,011**
Risk adjustment	−284	0	0	0	−285
Contractual service margin	−1,414		0		−1,414
Total	**0**	**−2**	**0**	**0**	**−2**

The table below shows the components of the insurance contracts in the ERGO Life and Health Germany segment that were recognised in the reporting period for the first time, measured under the general measurement model and the variable fee approach:

Insurance contracts issued recognised in the financial year for the first time – ERGO Life and Health segment

	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		2023
					Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	2,842	17	0	0	2,859
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	–2,438	–12	0	0	–2,450
Acquisition costs	–243	–25	0	0	–268
	–2,681	**–37**	**0**	**0**	**–2,718**
Risk adjustment	–8	0	0	0	–8
Contractual service margin	–154		0		–154
Total	**0**	**–21**	**0**	**0**	**–21**

	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		Prev. year
					Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	3,275	34	0	0	3,309
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	–2,800	–23	0	0	–2,822
Acquisition costs	–240	–24	0	0	–264
	–3,040	**–47**	**0**	**0**	**–3,087**
Risk adjustment	–14	0	0	0	–14
Contractual service margin	–221		0		–221
Total	**0**	**–13**	**0**	**0**	**–13**

The table below shows the components of the insurance contracts in the ERGO International segment that were recognised in the reporting period for the first time, measured under the general measurement model and the variable fee approach:

Insurance contracts issued recognised in the financial year for the first time – ERGO International segment

	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		2023
					Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	2,662	85	0	0	2,746
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	–1,812	–74	0	0	–1,886
Acquisition costs	–475	–18	0	0	–493
	–2,287	**–92**	**0**	**0**	**–2,379**
Risk adjustment	–13	–1	0	0	–13
Contractual service margin	–362		0		–362
Total	**0**	**–7**	**0**	**0**	**–7**

					Prev. year
	Insurance contracts issued (concluded)		Insurance contracts issued (acquired)		Total
€m	Non-onerous	Onerous	Non-onerous	Onerous	
Estimated present value of future cash inflows	3,415	39	0	0	3,454
Estimated present value of future cash outflows					
Expected future claims, expenses and investment components	–2,554	–44	0	0	–2,598
Acquisition costs	–419	–20	0	0	–439
	–2,974	**–64**	**0**	**0**	**–3,037**
Risk adjustment	–25	4	0	0	–21
Contractual service margin	–417		0		–417
Total	**0**	**–22**	**0**	**0**	**–22**

The table below shows our forecast of the recognition in profit or loss of the contractual service margin for insurance contracts issued that are measured under the general measurement model or the variable fee approach, including the corresponding revenue recognised. The recognition of the contractual service margin in profit or loss will influence the amount of insurance revenue, and thus the insurance service result and the amount of the liability for remaining coverage, in subsequent reporting periods – particularly in the life and health reinsurance, ERGO Life and Health Germany and ERGO International segments.

Forecast of the recognition of the contractual service margin in profit or loss[1]

				2023				Prev. year
€m	Life and health reinsurance	ERGO Life and Health Germany	ERGO International	Total	Life and health reinsurance	ERGO Life and Health Germany	ERGO International	Total
Carrying amount at 31 December – Contractual service margin	**–12,530**	**–9,569**	**–2,868**	**–24,967**	**–11,294**	**–10,449**	**–3,282**	**–25,026**
Expected amounts recognised in profit or loss								
Year 1 change	–880	–518	–240	–1,638	–832	–492	–267	–1,591
Year 2 change	–755	–492	–152	–1,399	–727	–563	–166	–1,456
Year 3 change	–699	–473	–131	–1,304	–652	–534	–147	–1,333
Year 4 change	–654	–455	–116	–1,226	–609	–508	–131	–1,248
Year 5 change	–611	–437	–105	–1,152	–571	–484	–119	–1,174
Year 6 change	–563	–419	–95	–1,077	–523	–460	–109	–1,093
Year 7 change	–529	–400	–89	- 1,017	–488	–437	–102	–1,028
Year 8 change	–498	–382	–83	–963	–457	–416	–95	–968
Year 9 change	–469	–364	–78	–911	–429	–396	–90	–914
Year 10 change	–440	–347	–73	–860	–402	–374	–84	–861
Year 11 and subsequent change	–6,433	–5,284	–1,705	–13,421	–5,603	–5,785	–1,970	–13,359

1 In the property-casualty reinsurance and ERGO Property-casualty Germany segments, measurement of the insurance contracts using the general measurement model results in a contractual service margin of €472m (374m), which is largely recognised in profit or loss within a period of five years.

The following tables present the effects on the contractual service margin resulting from the initial measurement of insurance contracts issued that were measured at the transition date applying the full retrospective, modified retrospective and fair value approaches. This disclosure is only relevant for insurance contracts measured under the general measurement model or the variable fee approach. The associated insurance revenue also includes insurance contracts issued measured as at the transition date by applying the premium allocation approach.

Breakdown of insurance revenue and reconciliation of the contractual service margin by type of transition approach applied

	2023				Prev. year			
€m	Contracts measured using the fully retro-spective approach[1]	Contracts measured using the modified retro-spective approach	Contracts measured using the fair value approach	Total	Contracts measured using the fully retro-spective approach[1]	Contracts measured using the modified retro-spective approach	Contracts measured using the fair value approach	Total
Insurance revenue from insurance contracts issued	**4,493**	**8,687**	**8,900**	**22,080**	**19,962**	**8,946**	**10,449**	**39,357**
Carrying amount at 1 January – Contractual service margin from insurance contracts issued	**–243**	**–13,341**	**–9,842**	**–23,427**	**–596**	**–12,128**	**–9,965**	**–22,688**
Contractual service margin for services provided in the reporting period	77	1,217	701	1,995	135	1,117	860	2,112
Changes in estimates adjusting the contractual service margin	–34	867	25	859	213	–2,322	–597	–2,706
Effects of contracts initially recognised in the period	0	2	0	2	0	0	0	0
Insurance finance income or expenses	–2	–19	–119	–140	0	–11	–67	–79
Other effects	3	–3	227	227	4	3	–73	–66
Carrying amount at 31 December – Contractual service margin from insurance contracts issued	**–199**	**–11,277**	**–9,008**	**–20,485**	**–243**	**–13,341**	**–9,842**	**–23,427**

1 This only shows groups of insurance contracts in force at the transition date.

28 Liability for incurred claims

The tables below illustrate how claims and claims payments in the property-casualty business have changed over the past ten years.

Claims payments for the individual accident years (per calendar year, net)

€m	Accident year										
Calendar year	**≤2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
2013	12,771											
2014	8,226	5,240										
2015	4,064	2,808	4,884									
2016	3,417	1,466	2,675	5,227								
2017	1,333	668	1,332	2,560	4,897							
2018	1,467	385	797	1,672	4,252	5,493						
2019	1,234	237	411	803	1,965	4,490	4,770					
2020	1,064	305	491	505	1,412	2,471	5,242	5,178				
2021	707	202	429	369	624	1,144	2,398	5,196	5,614			
2022	690	171	268	386	646	818	1,452	2,593	6,206	6,425		
2023	684	207	159	254	446	631	1,173	1,457	3,416	7,084	6,449	21,960

Nominal liability for incurred claims for the individual accident years as at the respective reporting date (net)

€m	Accident year											
Calendar year	**≤2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
31.12.2013	44,487											
31.12.2014	35,008	8,879										
31.12.2015	29,466	6,144	8,534									
31.12.2016	24,685	4,665	5,929	9,144								
31.12.2017	22,865	3,787	4,401	6,420	12,727							
31.12.2018	19,627	3,136	3,400	4,794	8,497	12,221						
31.12.2019	16,618	2,714	2,838	3,812	6,435	8,496	13,861					
31.12.2020	14,115	2,190	2,236	2,962	4,947	6,402	9,144	16,828				
31.12.2021	12,581	1,699	1,651	2,482	4,029	5,165	6,886	11,938	18,333			
31.12.2022	11,790	1,419	1,281	2,078	3,041	4,001	5,253	8,831	12,378	21,022		
31.12.2023	10,667	1,060	1,014	1,758	2,525	3,203	3,605	6,747	8,622	14,739	22,178	76,119

Ultimate loss status as at the respective reporting date (net)

€m	Accident year											
Calendar year	**≤2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
31.12.2013	57,258											
31.12.2014	56,005	14,119										
31.12.2015	54,526	14,192	13,418									
31.12.2016	53,162	14,179	13,488	14,371								
31.12.2017	52,675	13,969	13,293	14,207	17,624							
31.12.2018	50,904	13,704	13,089	14,253	17,645	17,714						
31.12.2019	49,128	13,518	12,937	14,074	17,549	18,480	18,630					
31.12.2020	47,689	13,299	12,826	13,729	17,472	18,856	19,156	22,006				
31.12.2021	46,862	13,010	12,671	13,618	17,179	18,763	19,295	22,313	23,947			
31.12.2022	46,762	12,902	12,569	13,600	16,837	18,417	19,115	21,798	24,199	27,447		
31.12.2023	46,323	12,749	12,461	13,535	16,766	18,250	18,640	21,171	23,858	28,248	28,628	240,628
Claim settlement result (net)	10,935	1,370	957	836	858	–536	–10	835	90	–801	0	14,534
Changes 2022 to 2023	439	153	108	65	71	167	475	627	341	–801	0	1,644

The ultimate loss for an accident year comprises all payments made for that accident year up to the reporting date, plus the nominal liability for incurred claims remaining as at that date. Given complete information regarding all losses incurred up to the end of the reporting period, the ultimate-loss status for each accident-year period would remain the same. In practice, however, the ultimate-loss status (based on estimates) is exposed to fluctuations that reflect the growth in knowledge about the claims. Changes in the consolidated group, especially new acquisitions, or the composition of reportable segments, can also have an influence on the ultimate-loss status.

The run-off triangles are prepared on a currency-adjusted basis. To determine the effects of currency remeasurement, which are presented separately, all balances were translated from the respective local currency into the Group currency (euro) on the basis of the exchange rate applicable as at the reporting date.

The following table shows the reconciliation of the nominal property-casualty liability (net) to the liability for incurred claims recognised in the balance sheet. The liability for incurred claims recognised in the balance sheet (net) of €82,942m comprises the liability for incurred claims from insurance contracts issued in the amount of €86,548m, less reinsurance contracts held in the amount of €3,606m.

Reconciliation of the nominal property-casualty liability (net) to the liability for incurred claims recognised in the balance sheet (total, net)

€m	2023
Nominal liability for incurred claims (property-casualty)	76,119
Effect of discounting	–7,655
Discounted provision for deposits retained as well as accounts receivable and payable	1,248
Risk adjustment for non-financial risk for incurred claims (property-casualty)	484
Discounted liability for incurred claims incl. risk adjustment for non-financial risk (life and health)	12,480
Other effects	266
Liability for incurred claims recognised in the balance sheet (net)	**82,942**

29 Other provisions

Breakdown of other provisions

€m	31.12.2023	Prev. year
Provisions for post-employment benefits and similar obligations	1,517	1,482
Miscellaneous provisions	1,249	1,178
Total	**2,766**	**2,661**

Provisions for post-employment benefits and similar obligations

Munich Re companies generally give pension commitments to their employees in the form of defined contribution plans or defined benefit plans. Special regional economic, legal and tax features are taken into account. The type of pension obligations is determined by the conditions of the respective pension plan. The pension commitments comprise obligations towards active members or retired members with vested benefits, and current pension payments. Defined benefit plans are funded internally through provisions for post-employment benefits and externally through funds and insurance contracts concluded to cover the benefit obligations.

Expenses for defined contribution plans totalled €107m (98m) in the financial year, and expenses for contributions to state plans amounted to €126m (120m).

The present value of obligations under defined benefit pension plans amounted to €5,013m (4,609m), and the plan assets to be deducted totalled €4,069m (3,759m). Defined benefit plans comprise the following main plans:

Munich Reinsurance Company's pension obligations account for €1,298m (1,155m) of the present value of obligations under defined benefit pension plans and €1,514m (1,396m) of plan assets. The obligations include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The defined benefits granted up to 31 December 2007 are financed through a fund. New members on or after 1 January 2008 receive pension commitments in the form of defined contribution plans funded by means of intra-Group insurance contracts securing the obligations under pension schemes. The fund and insurance contracts have been grouped in a contractual trust arrangement (CTA).

ERGO Group's pension obligations account for €2,476m (2,229m) of the present value of obligations under defined benefit pension plans and €1,421m (1,271m) of plan assets, with both figures being impacted by IFRS 5 reclassification. The obligations include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The obligations are generally funded through pension provisions, although for ERGO significant portions have been funded through a pension fund since 1 April 2022. New members receive pension commitments in the form of defined contribution plans funded by means of intra-Group insurance contracts securing the obligations under pension schemes. There are also medical-care benefit obligations.

The pension obligations of Munich Reinsurance America, Inc. account for €587m (601m) of the present value of obligations under defined benefit plans, and €469m (453m) of plan assets. The obligations include pensions for employees and surviving dependants. The amount of the pensions generally depends on includable compensation and length of service. The plan is funded through a fund and pension provisions. The plan was closed to new members effective 1 January 2006 and to all remaining members effective 31 December 2011. With effect from 1 January 2012, all members now receive pension commitments in the form of defined contribution plans. There are also retiree medical-care benefit obligations.

Change in the present value of the defined benefit obligations

€m	2023	Prev. year
Balance at 1 January	**4,609**	**6,873**
Currency translation differences	–16	43
Changes in consolidated group	2	3
Current service cost	106	151
Past service cost	11	7
Gains and losses from plan settlements	0	0
Employee contributions	2	3
Interest expense	176	78
Payments	–175	–180
Payments from plan settlements	–1	0
Transfer of obligations	–7	2
Actuarial gains/losses: change in demographic assumptions	–4	6
Actuarial gains/losses: change in financial assumptions	217	–2,489
Actuarial gains/losses: experience adjustments	23	19
Others	1	–6
IFRS 5 reclassification	72	100
Balance at 31 December	**5,013**	**4,609**

The present value of medical-care benefit obligations amounted to €212m (208m) at the end of the reporting period.

The present value of the obligations under defined benefit plans breaks down as follows:

Breakdown of the present value of defined benefit obligations

%	31.12.2023	Prev. year
Active members	43	43
Deferred members	13	13
Pensioners	44	44
Total	**100**	**100**

Pension obligations are measured using assumptions about future developments. The consolidated companies used the following actuarial assumptions (weighted-average values):

Actuarial assumptions

%	2023	Prev. year
Discount rate	3.5	3.8
Future increases in entitlement/salary	1.7	1.8
Future pension increases	1.4	1.4
Medical cost trend rate	3.5	3.5

In the eurozone, the discount rate was 3.20% (3.50%) as at 31 December 2023. The actuarial losses from changes in financial assumptions amounting to €195m (previous year: gains of €2,074m) primarily arise from the reduction in the actuarial interest rate.

Munich Re uses generally recognised biometric actuarial assumptions, adjusted as a rule to take account of company-specific circumstances. The average remaining life expectancy of a 65-year-old plan participant is 24.1 years for women and 23.2 years for men.

Change in the fair value of plan assets for defined benefit plans

€m	2023	Prev. year
Balance at 1 January	**3,759**	**3,735**
Currency translation differences	–8	26
Changes in consolidated group	0	0
Interest income	147	57
Return excluding interest income	69	–1,217
Contributions by the employer	134	1,151
Contributions by plan participants	2	1
Payments	–98	–91
Payments from plan settlements	0	–1
Transfer of assets	0	0
Others	–1	–1
IFRS 5 reclassification	66	99
Balance at 31 December	**4,069**	**3,759**

Breakdown of the fair value of plan assets for defined benefit plans

%	31.12.2023	Prev. year
Quoted market price in an active market		
Fixed-interest securities	28	29
Non-fixed-interest securities		
Equities	2	2
Investment funds	14	15
Other	0	0
	16	**17**
Others	0	0
No quoted market price in an active market		
Cash and cash equivalents	0	0
Real estate	1	1
Fixed-interest securities	0	0
Non-fixed-interest securities		
Equities	0	0
Investment funds	2	3
Other	0	0
	2	**3**
Insurance contracts	52	49
Others	1	1

As in the previous year, the plan assets do not include any own shares.

For the 2024 financial year, capital transfers of €70m (68m) to plan assets are expected.

Change in the reimbursement rights for defined benefit plans

€m	2023	Prev. year
Balance at 1 January	**291**	**382**
Changes in consolidated group	0	0
Interest income	10	3
Return excluding interest income	–2	–105
Contributions by the employer	21	20
Contributions by plan participants	0	0
Payments	–11	–9
Transfer of assets	0	0
Others	0	0
Balance at 31 December	**310**	**291**

The reimbursement rights derive from insurance concluded to cover the benefit obligations.

There was an effect of €17m (29m) resulting from the asset ceiling on overfunded defined benefit plans.

Funded status of defined benefit plans

€m	31.12.2023	Prev. year
Obligations funded through provisions		
Present value of defined benefit obligations	1,425	1,236
Others	0	0
IFRS 5 reclassification	0	0
Net balance sheet liability	**1,425**	**1,236**
Obligations funded through plan assets		
Present value of defined benefit obligations	3,516	3,273
Plan assets	–4,004	–3,660
Assets from defined benefit plan	554	604
Effect of asset ceiling	17	29
Others	2	0
IFRS 5 reclassification	6	1
Net balance sheet liability	**92**	**246**
Obligations independent of funded obligations		
Present value of defined benefit obligations	4,941	4,509
Plan assets	–4,004	–3,660
Assets from defined benefit plan	554	604
Effect of asset ceiling	17	29
Others	2	0
IFRS 5 reclassification	6	1
Net balance sheet liability	**1,517**	**1,482**

The plan assets have the exclusive purpose of fulfilling the defined benefit obligations to which they are allocated and making provision for future outflows. This is required by law in several countries, whilst in other countries plan assets are provided on a voluntary basis.

The relationship between the fair value of the plan assets and the present value of the defined benefit obligations is referred to as the funded status. If the present value of defined benefit obligations exceeds the fair value of the plan assets, this excess of liabilities over assets is financed by means of provisions for post-employment benefits.

If the fair value of the plan assets exceeds the present value of the defined benefit obligations, an asset arises out of the defined benefit plan. As each plan is analysed individually, this may give rise to both a provision for post-employment benefits and an asset from the defined benefit plan.

Market fluctuations may give rise to changes in the fair value of the plan assets over time. Adjustments to the actuarial assumptions (e.g. life expectancy, discount rate) or deviations in actual risk experience from the risk experience assumed may result in changes in the present value of the defined benefit obligations. Both factors may therefore lead to fluctuations in the funded status. To avoid these fluctuations wherever possible, care is taken, when choosing investments, that fluctuations in the fair value of the plan assets and in the present value of defined benefit obligations offset each other as far as possible whenever changes in certain influencing variables occur (asset-liability matching).

Changes in the provision for defined benefit plans

€m	2023	Prev. year
Balance at 1 January	**1,482**	**3,617**
Currency translation differences	–7	12
Change in consolidated group	2	2
Expenses	132	175
Payments	–77	–89
Payments from plan settlements	–1	1
Capital transfer to plan assets	–135	–1,152
Transfer of assets	–1	2
Transfer to other receivables	–51	144
Actuarial gains/losses recognised in other comprehensive income	153	–1,128
Others	13	–103
IFRS 5 reclassification	8	1
Balance at 31 December	**1,517**	**1,482**

Breakdown of expenses recognised in the financial year

€m	2023	Prev. year
Net interest cost	19	19
Service cost	119	161
Others	–5	–5
Total	**132**	**175**

The expenses are distributed between the functional areas and shown mainly under “Other operating income and expenses” in the consolidated income statement.

The actual return on plan assets amounted to €217m (previous year: losses of €1,160m) and the actual return on reimbursements to €8m (previous year: losses of €102m).

Contractual period to maturity of pension obligations

€m	31.12.2023	Prev. year
≤ 1 year	206	195
> 1 year and ≤ 5 years	927	884
> 5 years and ≤ 10 years	1,306	1,250
> 10 years and ≤ 20 years	2,682	2,655
> 20 years	4,660	4,860
Total	**9,782**	**9,845**

The weighted average contractual period to maturity of our pension obligations is 14 (15) years.

An increase or decrease in the following essential actuarial assumptions has an impact on the present value of defined benefit obligations:

Sensitivity analysis

€m	31.12.2023	Prev. year
Increase in discount rate by 50 BP	–341	–321
Decrease in discount rate by 50 BP	384	363
Increase in salary/entitlement trends by 10 BP	7	12
Decrease in salary/entitlement trends by 10 BP	–7	–9
Increase in pension trends by 10 BP	31	33
Decrease in pension trends by 10 BP	–30	–30
Increase in medical cost trend rate by 100 BP	28	27
Decrease in medical cost trend rate by 100 BP	–24	–23
Increase in mortality rate by 10%	–117	–105
Decrease in mortality rate by 10%	125	115

The calculations for the actuarial assumptions classified as essential were carried out individually in order to display their effects separately.

Miscellaneous provisions

Miscellaneous provisions

€m	Prev. year	Additions	Withdrawals	Reversals	Other changes	31.12.2023
Restructuring	167	21	–43	–29	0	116
Commissions	254	2,507	–2,476	–3	6	288
Multi-year variable remuneration	83	54	–18	–1	12	130
Early retirement benefits/semi-retirement	123	30	–32	0	2	123
Salary obligations and other remuneration for desk and field staff	76	116	–73	–3	0	116
Anniversary benefits	85	3	–6	0	3	86
Other	389	254	–214	–38	–2	389
Total	**1,178**	**2,986**	**–2,862**	**–74**	**21**	**1,249**

The provisions for restructuring mainly included €20m (32m) for the comprehensive restructuring of the ERGO sales organisations and €91m (129m) for the “ERGO Strategy Programme”. The provision for multi-year variable remuneration includes components for multi-year performance and for the incentive plans. The “Other” provisions comprise a large number of different items. The provisions for restructuring, early-retirement benefits/semi-retirement, anniversary benefits, multi-year performance and incentive plans are mainly long-term, whereas the provisions for commissions, salary obligations, other remuneration for desk and field staff, and the “Other” provisions are essentially short-term.

30 Liabilities

The table below provides an overview of our liabilities:

Breakdown of liabilities

€m	31.12.2023	Prev. year
Derivatives	1,379	1,466
Non-derivative financial liabilities	4,161	4,647
Current tax liabilities	2,657	1,569
Other liabilities	11,242	19,840
Total	**19,438**	**27,522**

Derivatives with a remaining term of less than one year totalled €733m (659m), non-derivative financial liabilities €2,722m (3,114m) and other liabilities €2,149m (5,468m).

Derivative financial instruments are used by Munich Re to manage and hedge against interest-rate, currency and other market risks. Derivatives with a negative market value are presented under liabilities. Economically, they are offset by the changes in fair value of the items for which the derivatives were entered into as hedges.

The non-derivative financial liabilities include a bond issued in an amount of €266m (300m), liabilities to credit institutions in an amount of €912m (1,047m), interest and rent liabilities in an amount of €2m (4m), and dividend and profit-participation liabilities in an amount of €17m (20m). Of the amounts due to banks, €9m (11m) is attributable to bank borrowing by Group companies acquired by Munich Re under its infrastructure investment strategy.

Lease liabilities in an amount of €437m (356m) are also allocated to non-derivative financial liabilities. For more information on the interest paid for lease liabilities in the financial year, please refer to the Notes to the consolidated income statement > 38 Other operating income and expenses. For further details on cash outflows for leases in the financial year, see this section under 31 Liabilities from financing activities.

Non-derivative financial liabilities are normally measured at amortised cost, unless they are designated as measured at fair value under the fair value option; please refer to the Notes to the financial instruments and fair value disclosures on assets and liabilities > 44 Disclosures on exercising the fair value option. The carrying amount of non-derivative liabilities measured at amortised cost was €3,631m.

The table below summarises key information on the bond issued.

Ratings and carrying amount of bond issued

€m	A.M. Best	Fitch	S&P	31.12.2023	Prev. year
Munich Re America Corporation, Wilmington, 7.45%, US$ 294m[1], Senior Notes 1996/2026	a	AA–	A–	266	300
Total				**266**	**300**

1 The issuer executed partial redemptions in 2023, with a nominal volume totalling US$ 27m.

Other liabilities include, among other items, social security liabilities of €33m (22m), deferred income of €865m (789m) and non-financial liabilities of €2,016m (2,756m). In addition, the "Other liabilities" item is used to present insurance-related liabilities of €4,820m (13,109m), of which €622m (9,973m) is measured at amortised cost and €4,197m (3,136m) at fair value.

Insurance-related liabilities are contracts that are directly linked to insurance business in our respective business units. These include insurance contracts that do not transfer significant insurance risk totalling €1,646m (6,579m). Of this amount, liabilities of €230m (224m) are designated as measured at fair value through profit or loss; please refer to the Notes to the financial instruments and fair value disclosures on assets and liabilities > 44 Disclosures on exercising the fair value option.

For information on the measurement of insurance-related liabilities in line with the measurement of insurance-related financial instruments at fair value, please refer to the information in the Notes to the consolidated balance sheet – Assets > 18 Insurance-related financial instruments.

Insurance-related liabilities also comprise derivative components of variable annuities in an amount of €2,450m (2,725m) and insurance-linked derivatives in an amount of €232m (383m). In addition to free-standing derivatives, insurance-linked derivatives also include separately recognised derivatives embedded in insurance contracts and insurance contracts designated as measured at fair value because of embedded derivatives; please refer to the Notes to the financial instruments and fair value disclosures on assets and liabilities > 44 Disclosures on exercising the fair value option.

All remaining insurance-related liabilities totalling €492m (0m) are measured at fair value through profit or loss.

There is a bond with a nominal volume of US$ 543m (0m), recognised under insurance-related liabilities, that was pledged as collateral by Munich Re in connection with a life-reinsurance business transaction with non-significant risk transfer. In return we received from the counterparty a subordinated bond with an identical nominal volume, which is presented under insurance-related financial instruments.

31 Liabilities from financing activities

The table below shows the cash and non-cash changes in liabilities arising from financing activities between the beginning of the financial year and the reporting date. The cash changes are included in the consolidated cash flow statement as item III. "Cash flows from financing activities".

Change in liabilities from financing activities

	Current financial liabilities		Non-current financial liabilities		Lease liabilities		Liabilities from financing activities	
€m	2023	Prev. year	2023	Prev. year	2023	Prev. year	2023	Prev. year
Balance at 1 January	**1,047**	**1,016**	**5,048**	**5,348**	**355**	**433**	**6,452**	**6,797**
Cash changes	–121	–3	–134	–457	–85	–88	–340	–548
Non-cash changes								
Currency translation differences	–14	35	–52	16	–3	5	–69	56
Changes in fair value	0	0	0	0	0	0	0	0
Changes in consolidated group/other	0	0	117	140	170	7	286	146
Balance at 31 December	**912**	**1,047**	**4,979**	**5,048**	**437**	**356**	**6,328**	**6,452**

Non-current financial liabilities include subordinated liabilities as well as bonds and notes issued.

Notes to the consolidated income statement

32 Insurance revenue

Insurance revenue from insurance contracts issued corresponds to the reversal of the liability for remaining coverage to reflect the services we provided during the reporting period.

Insurance revenue in the life and health reinsurance segment is shown in the table below:

Insurance revenue – Life and health reinsurance segment

€m	31.12.2023	Prev. year
Insurance revenue from insurance contracts issued		
Expected claims incurred and other expenses in the reporting period	9,239	9,512
Expected reversal of risk adjustment for non-financial risk for the reporting period	254	263
Contractual service margin for services provided in the reporting period	914	973
Portion of premium that relates to the recovery of acquisition costs	0	0
Experience adjustments for premium receipts and related cash flows	317	415
Tax specifically chargeable to the policyholder	0	0
Insurance revenue from short-term contracts	1	0
	10,725	**11,164**
Insurance revenue ceded from reinsurance contracts held	**–246**	**–325**

Insurance contracts issued in the life and health reinsurance segment are measured using the general measurement model.

The table below shows insurance revenue in the property-casualty reinsurance segment:

Insurance revenue – Property-casualty reinsurance segment

€m	31.12.2023	Prev. year
Insurance revenue from insurance contracts issued		
Expected claims incurred and other expenses in the reporting period	18	0
Expected reversal of risk adjustment for non-financial risk for the reporting period	0	0
Contractual service margin for services provided in the reporting period	18	0
Portion of premium that relates to the recovery of acquisition costs	1	0
Experience adjustments for premium receipts and related cash flows	–13	0
Tax specifically chargeable to the policyholder	0	0
Insurance revenue from short-term contracts	27,038	25,325
	27,061	**25,325**
Insurance revenue ceded from reinsurance contracts held	**–1,025**	**–981**

In the property-casualty reinsurance segment, we primarily use the premium allocation approach for measurement purposes, with the result being that the insurance revenue from insurance contracts issued, as calculated under this model, amounted to €27,038m in the financial year (25,325m). Insurance revenue from insurance contracts issued which are measured using the general measurement model amounted to €23m in the financial year (0m).

All reinsurance contracts held in the property-casualty reinsurance segment are measured using the premium allocation approach.

The table below shows insurance revenue in the ERGO Life and Health Germany segment:

Insurance revenue – ERGO Life and Health Germany segment

€m	31.12.2023	Prev. year
Insurance revenue from insurance contracts issued		
Expected claims incurred and other expenses in the reporting period	6,912	6,866
Expected reversal of risk adjustment for non-financial risk for the reporting period	35	49
Contractual service margin for services provided in the reporting period	819	948
Portion of premium that relates to the recovery of acquisition costs	202	192
Experience adjustments for premium receipts and related cash flows	–3	–18
Tax specifically chargeable to the policyholder	0	0
Insurance revenue from short-term contracts	1,976	1,764
	9,942	**9,802**
Insurance revenue ceded from reinsurance contracts held	**–9**	**–8**

In the ERGO Life and Health Germany segment, we generated insurance revenue in the amount of €7,966m (8,038m) in the financial year from insurance contracts issued measured using the variable fee approach or the general measurement model. Insurance revenue of €1,976m (1,764m) was attributable to insurance contracts measured using the premium allocation approach.

The reinsurance contracts held in the ERGO Life and Health Germany segment are measured using the general measurement model.

The table below presents the insurance revenue of the ERGO Property-casualty Germany segment:

Insurance revenue – ERGO Property-casualty Germany segment

€m	31.12.2023	Prev. year
Insurance revenue from insurance contracts issued		
Expected claims incurred and other expenses in the reporting period	1,564	1,634
Expected reversal of risk adjustment for non-financial risk for the reporting period	11	16
Contractual service margin for services provided in the reporting period	352	289
Portion of premium that relates to the recovery of acquisition costs	691	468
Experience adjustments for premium receipts and related cash flows	84	45
Tax specifically chargeable to the policyholder	0	0
Insurance revenue from short-term contracts	1,837	1,775
	4,539	**4,227**
Insurance revenue ceded from reinsurance contracts held	**–68**	**–99**

Insurance revenue from insurance contracts issued which are measured using the general measurement model amounted to €2,693m (2,445m). A smaller share of the insurance revenue generated during the financial year was attributable to insurance contracts issued which were measured using the premium allocation approach. This share amounted to €1,837m (1,775m).

The insurance revenue of the ERGO International segment for the reporting period is shown in the table below:

Insurance revenue – ERGO International segment

€m	31.12.2023	Prev. year
Insurance revenue from insurance contracts issued		
Expected claims incurred and other expenses in the reporting period	1,985	1,846
Expected reversal of risk adjustment for non-financial risk for the reporting period	18	28
Contractual service margin for services provided in the reporting period	362	289
Portion of premium that relates to the recovery of acquisition costs	478	391
Experience adjustments for premium receipts and related cash flows	5	–2
Tax specifically chargeable to the policyholder	0	0
Insurance revenue from short-term contracts	2,769	2,314
	5,618	**4,867**
Insurance revenue ceded from reinsurance contracts held	**–229**	**–198**

For the most part, insurance contracts in the ERGO International segment are measured using the premium allocation approach and the general measurement model. Some of the life insurance contracts are measured using the variable fee approach.

33 Insurance service expenses and income from reinsurance contracts held

The table below shows the insurance service expenses and income from reinsurance contracts held in the life and health reinsurance segment:

Insurance service expenses and income from reinsurance contracts held – Life and health reinsurance segment

€m	31.12.2023	Prev. year
Insurance service expenses from insurance contracts issued		
Claims expenses	–9,174	–9,957
Administration and acquisition costs	–434	–380
Other insurance service expenses	0	0
	–9,608	**–10,337**
Income from reinsurance contracts held	**202**	**253**

The table below presents the insurance service expenses and income from reinsurance contracts held in the property-casualty reinsurance segment:

Insurance service expenses and income from reinsurance contracts held – Property-casualty reinsurance segment

€m	31.12.2023	Prev. year
Insurance service expenses from insurance contracts issued		
Claims expenses	–18,595	–17,407
Administration and acquisition costs	–4,002	–3,725
Other insurance service expenses	0	0
	–22,598	**–21,132**
Income from reinsurance contracts held	**410**	**881**

The table below shows the insurance service expenses and income from reinsurance contracts held in the ERGO Life and Health Germany segment:

Insurance service expenses and income from reinsurance contracts held – ERGO Life and Health Germany segment

€m	31.12.2023	Prev. year
Insurance service expenses from insurance contracts issued		
Claims expenses	–7,681	–7,293
Changes from underlying items	52	–156
Administration and acquisition costs	–1,307	–1,160
Other insurance service expenses	0	0
	–8,936	**–8,609**
Income from reinsurance contracts held	**4**	**3**

The table below presents the insurance service expenses and income from reinsurance contracts held in the ERGO Property-casualty Germany segment:

Insurance service expenses and income from reinsurance contracts held – ERGO Property-casualty Germany segment

€m	31.12.2023	Prev. year
Insurance service expenses from insurance contracts issued		
Claims expenses	–2,677	–2,687
Changes from underlying items	–2	–10
Administration and acquisition costs	–1,335	–1,203
Other insurance service expenses	0	0
	–4,015	**–3,899**
Income from reinsurance contracts held	**39**	**171**

Insurance service expenses and income from reinsurance contracts held in the ERGO International segment are shown in the table below:

Insurance service expenses and income from reinsurance contracts held – ERGO International segment

€m	31.12.2023	Prev. year
Insurance service expenses from insurance contracts issued		
Claims expenses	–3,354	–3,049
Changes from underlying items	–2	–42
Administration and acquisition costs	–1,539	–1,340
Other insurance service expenses	0	0
	–4,894	**–4,431**
Income from reinsurance contracts held	**133**	**104**

34 Result from insurance-related financial instruments

Result from insurance-related financial instruments

€m	2023	Prev. year
Result		
Derivative components of variable annuities	144	–104
Insurance-linked derivatives	116	158
Insurance-related instruments subject to equity risk	21	5
Insurance-related loans	31	37
Insurance-related bonds and cat bonds	30	0
Insurance-related liabilities	22	20
Contracts that do not transfer significant insurance risk	317	234
	681	**351**
Expenses for management of insurance-related financial instruments	**–181**	**–61**
Total	**501**	**291**

35 Investment result

Investment result by type of investment

€m	2023	Prev. year
Result from non-financial investments		
Investment property	151	699
Property, plant and equipment	104	143
Intangible assets	–13	0
Biological assets	75	88
Inventories	0	0
Investments in affiliated companies, associates and joint ventures	313	95
Thereof: Associates and joint ventures accounted for using the equity method	356	52
	629	**1,024**
Result from financial investments	**5,302**	**2,480**
Expenses for the management of investments and other expenses	**–558**	**–522**
Total	**5,374**	**2,983**

The result from investment property includes €626m (601m) in rental income. The expenses for the management of investments include running costs and expenses for repair and maintenance of property totalling €89m (78m).

Impairment losses on non-financial investments

€m	2023	Prev. year
Investment property	–61	0
Investments in associates and joint ventures	–54	–25
Other	–2	–3
Total	**–117**	**–28**

Impairment losses on financial investments in accordance with IFRS 9 amounted to €47m.

The improved result can be traced back, in particular, to increased regular income in a year-on-year comparison. This is due primarily to the improvement in the reinvestment return.

In the previous year, by contrast, the result had been negatively impacted by impairment losses in accordance with IAS 39. These were recognised largely on equity instruments totalling €1,849m and on Russian and Ukrainian bonds and loans in the amount of €849m in total.

Gains and losses on the derecognition of financial assets measured at amortised cost amounted to €0m (3,456m).

For detailed information about the result from financial instruments by category, please refer to the Notes to the financial instruments and fair value disclosures on assets and liabilities > 42 Net result from financial instruments by measurement category.

36 Investment result for unit-linked life insurance

The investments for unit-linked life insurance generated regular income of €70m (44m). The change in fair value amounted to €749m (–1,180m). The expenses incurred for managing these investments amounted to €3m (3m).

37 Insurance finance income or expenses

Insurance finance income or expenses comprise insurance finance income or expenses from insurance contracts issued and insurance finance income or expenses from reinsurance contracts held.

Insurance finance income or expenses

€m	31.12.2023	Prev. year
Insurance finance income or expenses from insurance contracts issued		
Accrued interest from insurance contracts issued	–2,118	–537
Effects of changes in interest rates from insurance contracts issued	5	6
Change in the fair value of underlying items	–3,378	–552
	–5,490	**–1,083**
Insurance finance income or expenses from reinsurance contracts held		
Accrued interest from reinsurance contracts held	100	21
Effects of changes in interest rates from reinsurance contracts held	0	2
	99	**23**
Total	**–5,391**	**–1,060**

The effects from changes in interest rates are recognised in equity for the majority of our insurance portfolios (see Accounting policies > Changes in accounting policies and other adjustments).

38 Other operating income and expenses

Other operating income and expenses

€m	2023	Prev. year
Other operating income	1,316	1,089
Thereof: Interest and similar income	217	104
Reversal of impairment losses on other operating assets	8	22
Other operating expenses	–3,667	–3,197
Thereof: Interest and similar expenses	–128	–108
Impairment losses on other operating assets	–8	–23

Other operating income mainly comprised income of €785m (678m) from services provided, interest income of €217m (104m), and income from the release/reversal of provisions grouped under "Miscellaneous" of €45m (52m). Also included was income of €23m (55m) from owner-occupied property, some of which is also leased out.

Services provided also give rise to revenue within the meaning of IFRS 15, Revenue from Contracts with Customers, which essentially derives from technical engineering and inspection services, investment management services, and services in connection with the generation of electricity from renewable energy sources and with the provision of insurance-related software. The income from these services is largely recognised for the period in question. The magnitude of this revenue to be recognised under IFRS 15 is not material for Munich Re.

Other operating expenses mainly included expenses of €915m (795m) for services received, interest expenses of €128m (108m), thereof €8m (7m) from leases, and other tax of €110m (91m).

Also included were expenses amounting to €1,623m (1,542m) for Group functions and central tasks and projects. Expenses not directly attributable to a portfolio of insurance contracts or not forming part of cash flows within insurance contract boundaries amounted to €577m (500m).

39 Net finance costs

Net finance costs include all interest income, interest expenses and other expenses directly attributable to strategic debt. Debt components have a strategic character for us if they do not have an original, direct link with our underwriting business.

Net finance costs by financing instrument

€m	2023	Prev. year
Subordinated liabilities of Munich Reinsurance Company, Munich	–139	–150
Senior notes of Munich Re America Corporation, Wilmington	–23	–25
Subordinated liabilities of HSB Group Inc., Delaware	–5	–3
Other	–1	0
Total	**–168**	**–179**

40 Taxes on income

This item shows the corporation tax and municipal trade earnings tax paid by the German consolidated companies (including solidarity surcharge) and the comparable taxes on earnings paid by the foreign consolidated companies in the Group. The determination of taxes on income includes the calculation of deferred taxes.

Main components of tax expenses/income

€m	2023	Prev. year
Current tax for the reporting year	–1,510	–1,145
Current tax for other periods	736	319
Deferred tax resulting from the occurrence or reversal of temporary differences	–12	–425
Deferred tax resulting from the occurrence or utilisation of loss carry-forwards	–96	–31
Valuation allowances for deferred taxes/loss carry-forwards	–55	–17
Effects of changes in tax rates on deferred tax	1	–25
Taxes on income	**–936**	**–1,324**

The table below shows the reconciliation between the expected taxes on income and the tax on income actually shown. The expected tax expenses are calculated by multiplying the consolidated result before taxes on income (after "other tax") by the Group tax rate. The applicable Group tax rate amounts to 33%. This takes into account corporation tax including solidarity surcharge, and trade tax (GewSt). The municipal trade-tax multipliers range from 240% to 490%.

Reconciliation to effective tax income/expenses

€m	2023	Prev. year
Result before taxes on income (after "other tax")	5,534	6,634
Group tax rate in %	33	33
Derived taxes on income	–1,826	–2,189
Tax effect of:		
Tax rate differences	795	354
Tax-free income	238	475
Non-deductible expenses	–123	–254
Valuation allowances for deferred taxes/loss carry-forwards	–55	–17
Change in tax rates and tax legislation	1	–25
Tax for prior years	159	409
Trade tax adjustments	–3	24
Other effects	–122	–101
Taxes on income shown	**–936**	**–1,324**

The effective tax burden is the ratio between the "Taxes on income" shown and the "Result before taxes on income (after "other tax")". During the financial year, the tax burden was 16.9% (previous year: 20.0%).

Since the local tax legislation relating to Pillar Two only came into effect on 1 January 2024, and Munich Re made use of the obligatory exception under IAS 12 to the obligation to account for deferred tax assets and liabilities, there were no tax effects from the global minimum tax rate in 2023.

In multiple countries where Munich Re does business, statutory regulations relating to Pillar Two have already been implemented. Munich Re is subject to the scope of application of this enacted tax legislation and has analysed the possible impacts. Based on that analysis, the effective tax rates in the majority of countries in which the Group does business are over 15%. However, in a number of countries we expect additional tax expenditure that, from the Group's perspective, will probably be immaterial. For Munich Re, any material impact on the effective tax rate is unlikely.

Notes to the financial instruments and fair value disclosures on assets and liabilities

41 Carrying amounts and categories of financial instruments

We manage our financial assets depending on the nature and extent of the underlying risk parameters. For the purposes of these notes to the financial instruments, we have grouped our financial assets and liabilities into classes accordingly.

Financial investments comprise Munich Re's main economic asset classes. We distinguish between financial investments subject to equity risk, financial investments subject to interest-rate and credit risk, and alternative investments. Financial investments are largely managed within the business model "hold to collect and sell" and measured either at fair value through other comprehensive income or at fair value through profit or loss, depending on whether or not they pass the SPPI test. By contrast, deposits with credit institutions are managed within the business model "hold to collect" and – since they pass the SPPI test – are thus measured at amortised cost.

Investments for unit-linked life insurance and insurance-related financial instruments are managed within the business model "other" based on their fair value. They each constitute a class. Insurance-related financial instruments also include hybrid contracts with host insurance contracts that are designated as measured at fair value through profit or loss due to embedded derivatives that must be separated.

Financial receivables and cash and cash equivalents are managed within the business model "hold to collect" and – if they pass the SPPI test – are measured at amortised cost. If they do not, measurement is at fair value through profit or loss. We also assign lease receivables to the class of financial receivables; however, they do not fall into one of the IFRS 9 measurement categories.

Carrying amounts and measurement categories of economic asset classes of financial assets

							31.12.2023
	Carrying amount	IFRS 9 measurement category				Hedge accounting	Lease receivables
			Fair value through profit or loss				
€m		Amortised cost	Mandatory	Designated	Fair value through other comprehensive income		
Financial investments							
Instruments subject to equity risk	10,820	0	10,820	0	0	0	0
Instruments subject to interest-rate and credit risk	174,496	2,975	10,786	0	160,735	0	0
Alternative investments	15,400	0	8,882	0	6,518	0	0
	200,715	**2,975**	**30,487**	**0**	**167,254**	**0**	**0**
Investments for unit-linked life insurance	8,280	0	8,280	0	0	0	0
Insurance-related financial instruments	9,872	0	9,835	36	0	0	0
Financial receivables	3,841	3,807	0	0	0	0	35
Cash and cash equivalents	5,595	5,595	0	0	0	0	0
Total	**228,303**	**12,376**	**48,602**	**36**	**167,254**	**0**	**35**

							Previous year
	Carrying amount	Measurement basis under IAS 39				Hedge accounting	Lease receivables
			Fair value through profit or loss		Fair value through other comprehen-sive income		
€m		Amortised cost	Mandatory	Designated			
Financial investments							
Instruments subject to equity risk	10,022	0	310	1	9,711	0	0
Instruments subject to interest-rate and credit risk	168,582	42,730	1,783	1,623	122,446	0	0
Alternative investments	12,516	4,001	27	229	8,259	0	0
	191,120	**46,732**	**2,119**	**1,853**	**140,416**	**0**	**0**
Investments for unit-linked life insurance	7,470	0	0	7,470	0	0	0
Insurance-related financial instruments	18,298	14,856	1,898	1,036	508	0	0
Financial receivables	4,044	4,017	0	0	0	0	27
Cash and cash equivalents	6,439	6,439	0	0	0	0	0
Total	**227,371**	**72,044**	**4,017**	**10,359**	**140,924**	**0**	**27**

Our financial liabilities are included in the balance sheet items “Subordinated liabilities” and “Liabilities”. Subordinated liabilities constitute a class of their own, whereas liabilities are broken down into several classes. Derivatives and insurance-related liabilities each constitute a class of their own. Non-derivative liabilities are broken down into bonds and notes issued, liabilities to credit institutions, and other financial liabilities.

Carrying amounts and measurement categories of economic classes of financial liabilities

						31.12.2023
	Carrying amount	IFRS 9 measurement category			Hedge accounting	Lease receivables
			Fair value through profit or loss			
€m		Amortised cost	Mandatory	Designated		
Subordinated liabilities	4,713	4,713	0	0	0	0
Liabilities						
Derivatives	1,379	0	1,371	0	8	0
Non-derivative financial liabilities						
Bonds and notes issued	266	266	0	0	0	0
Liabilities to credit institutions	912	912	0	0	0	0
Other financial liabilities	2,982	2,452	0	93	0	437
	4,161	**3,631**	**0**	**93**	**0**	**437**
Other liabilities						
Insurance-related liabilities	4,820	622	2,990	1,207	0	0
Subtotal	**10,359**	**4,253**	**4,361**	**1,300**	**8**	**437**
Total	**15,072**	**8,966**	**4,361**	**1,300**	**8**	**437**

						Previous year
	Carrying amount	Measurement basis under IAS 39			Hedge accounting	Lease receivables
		Amortised cost	Fair value through profit or loss			
€m			Mandatory	Designated		
Subordinated liabilities	4,748	4,748	0	0	0	0
Liabilities						
Derivatives	1,466	0	1,455	0	11	0
Non-derivative financial liabilities						
Bonds and notes issued	300	300	0	0	0	0
Liabilities to credit institutions	1,047	1,047	0	0	0	0
Other financial liabilities	3,300	2,943	0	0	0	356
	4,647	**4,291**	**0**	**0**	**0**	**356**
Other liabilities						
Insurance-related liabilities	13,109	9,973	2,531	605	0	0
Subtotal	**19,222**	**14,265**	**3,985**	**605**	**11**	**356**
Total	**23,970**	**19,012**	**3,985**	**605**	**11**	**356**

For further details on the measurement categories of financial liabilities under IFRS 9, please refer to Accounting policies > Overarching accounting policies > Financial instruments.

42 Net result from financial instruments by measurement category

In the net result from financial instruments, we combine effects from regular income, from risk provisioning, from disposals recognised in profit or loss and from changes in the market value of financial instruments measured at fair value.

The following table provides an overview of the net result from financial assets and liabilities by measurement category.

Net result according to IFRS 9 measurement categories in accordance with IFRS 7.20

						2023
	Regular income	Effects from subsequent measurement recognised in profit or loss		Effects from subsequent measure-ment not recognised in profit or loss	Effects from disposals recognised in profit or loss	Total
€m		Fair value	Impairment loss	Fair value		
Fair value through profit or loss						
Designated	63	69	0	0	0	132
Mandatory	1,539	1,151	0	0	0	2,691
	1,602	**1,221**	**0**	**0**	**0**	**2,823**
Fair value through other comprehensive income						
Designated	0	0	0	0	0	0
Mandatory	4,896	0	–47	6,929	–980	10,798
	4,896	**0**	**–47**	**6,929**	**–980**	**10,798**
At amortised cost						
Financial assets	240	0	–4	0	0	236
Financial liabilities	–271	0	0	0	0	–271
	–31	**0**	**–4**	**0**	**0**	**–35**

Previous year

€m	Regular income	Effects from subsequent measurement recognised in profit or loss: Fair value	Effects from subsequent measurement recognised in profit or loss: Impairment loss	Effects from subsequent measurement not recognised in profit or loss: Fair value	Effects from disposals recognised in profit or loss	Total
Fair value through profit or loss						
Designated	391	–1,528	0	0	0	–1,137
Mandatory	410	–1,854	0	0	0	–1,444
	801	**–3,382**	**0**	**0**	**0**	**–2,581**
Fair value through other comprehensive income						
Designated	0	0	0	0	0	0
Mandatory	3,846	0	–2,582	–15,400	2,797	–11,338
	3,846	**0**	**–2,582**	**–15,400**	**2,797**	**–11,338**
At amortised cost						
Financial assets	1,896	0	–2,702	0	3,456	2,650
Financial liabilities	–286	0	0	0	0	–286
	1,610	**0**	**–2,702**	**0**	**3,456**	**2,364**

Regular income includes interest and dividend payments from our financial instruments.

In addition to the results from the change in the fair value of financial instruments measured at fair value through profit or loss, the effects recognised in profit or loss include the change in risk provisions recognised in profit or loss.

Depending on the underlying financial instrument, net results recognised in profit or loss are presented in the consolidated income statement either in the result from insurance-related financial instruments, in the investment result or in the investment result for unit-linked life insurance.

Results not recognised in profit or loss arise at Munich Re in particular from the subsequent measurement of debt instruments mandatorily measured at fair value through other comprehensive income. They are recognised in other comprehensive income as part of unrealised gains and losses.

The effects of disposals on profit or loss arise only for debt instruments mandatorily measured at fair value through other comprehensive income and financial instruments measured at amortised cost. In the case of instruments measured at fair value through profit or loss, the instrument is measured at fair value prior to disposal to ensure no gains/losses arise from the disposal of the instrument. Financial assets measured at amortised cost gave rise to gains and losses on disposal of €0m (5,447m) and €0m (1,991m) respectively.

The gross interest result is attributable to financial instruments that are not measured at fair value through profit or loss. It is presented in the table below.

Gross interest result

€m	31.12.2023	Previous year
Gross interest income		
from financial assets measured at amortised cost[1]	230	1,615
from financial assets measured at fair value through other comprehensive income[2]	4,893	2,751
	5,123	**4,366**
Gross interest expense		
from financial liabilities measured at amortised cost	–271	–279

1 The previous year's figures relate to the IAS 39 measurement category "loans and receivables".
2 The previous year's figures relate to the IAS 39 measurement category "available for sale".

43 Fair value hierarchy for assets and liabilities

All assets and liabilities measured at fair value, or not measured at fair value in the consolidated balance sheet but for which a fair value has to be disclosed in the Notes to the consolidated financial statements, are allocated to one of the fair value hierarchy levels set out in IFRS 13.

Information on the criteria for allocation to the individual levels of the fair value hierarchy can be found under Accounting policies > Overarching accounting policies > Fair value.

The following table provides an overview of the valuation techniques and inputs used to measure the fair values of our assets and liabilities if quoted prices for these instruments are not available.

Valuation techniques for assets and liabilities

Bonds and notes	Pricing method	Inputs	Pricing model
Interest-rate risks			
Promissory note loans/ registered bonds	Theoretical price	Sector-, rating- or issuer-specific yield curve	Present-value method
RUB-denominated Russian government bonds	Theoretical price	Issuer-specific yield curve	Present-value method
Mortgage loans	Theoretical price	Sector-specific yield curve considering the profit margin included in the nominal interest rate	Present-value method
Derivatives	**Pricing method**	**Inputs**	**Pricing model**
Equity and index risks			
OTC stock options	Theoretical price	Listing of underlying shares Effective volatilities Money-market interest-rate curve Dividend yield	Black-Scholes (European) Cox, Ross and Rubinstein (American)
Equity forwards	Theoretical price	Listing of underlying shares Money-market interest-rate curve Dividend yield	Present-value method
Interest-rate risks			
Interest-rate swaps	Theoretical price	Swap and CSA curve[1]	Present-value method
Swaptions/interest-rate guarantee	Theoretical price	At-the-money volatility matrix and skew OIS/swap curve	Bachelier/ Normal Black
Interest-rate currency swaps	Theoretical price	Swap and CSA curve[1] Currency spot rates	Present-value method
Inflation swaps	Theoretical price	Zero-coupon inflation swap rates OIS curve	Present-value method
Bond forwards (forward transactions)	Theoretical price	Listing of underlying OIS curve	Present-value method
Currency risks			
Currency options	Theoretical price	Volatility skew Currency spot rates Money-market interest-rate curve	Garman-Kohlhagen (European)
Currency forwards	Theoretical price	Currency spot rates Currency forward rates/ticks Money-market interest-rate curve	Present-value method
Other transactions			
Insurance derivatives (natural and weather risks)	Theoretical price	Fair values of cat bonds Historical event data Interest-rate curve	Present-value method
Insurance derivatives (variable annuities)	Theoretical price	Biometric rates and lapse rates Volatilities Interest-rate curve Currency spot rates	Present-value method
Credit default swaps	Theoretical price	Credit spreads Recovery rates CSA curve[1]	ISDA CDS Standard Model
Total return swaps on commodities	Theoretical price	Listing of underlying index	Index ratio calculation
Commodity options	Theoretical price	Listing of underlying Effective volatilities Money-market interest-rate curve Cost of carry	Black-Scholes (European) Cox, Ross and Rubinstein (American)

Bonds and notes with embedded derivatives	Pricing method	Inputs	Pricing model
Callable bonds	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix	Hull-White model
CMS floaters	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix and skews	Replication model (Hagan) Stochastic volatility model Hull-White model
CMS floaters with variable cap	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix and skews	Replication model (Hagan) Stochastic volatility model Hull-White model
Inverse CMS floaters	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix and skews	Replication model (Hagan) Stochastic volatility model Hull-White model
CMS steepeners	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix and skews Correlation matrix	Replication model (Hagan) Stochastic volatility model Hull-White model
Convergence bonds	Theoretical price	Swap curve Issuer-specific spreads Volatility matrix Correlation matrix	Replication model (Hagan) Stochastic volatility model
Multi-tranches	Theoretical price	At-the-money volatility matrix and skew Swap curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method, Hull-White model
FIS promissory note loans	Theoretical price	At-the-money volatility matrix and skew Swap curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
Swaption notes	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
Cat bonds	Theoretical price	Fair values of cat bonds Historical event data Interest-rate curve	Present-value method
Funds	**Pricing method**	**Inputs**	**Pricing model**
Real estate funds	–	–	Net asset value
Alternative investment funds (e.g. private equity, infrastructure, forestry)	–	–	Net asset value
Other	**Pricing method**	**Inputs**	**Pricing model**
Real estate	Theoretical market price	Interest-rate curve Market rents	Present-value method or valuation
Alternative direct investments (e.g. infrastructure, forestry)	Theoretical market price	Interest-rate curve (among others) Electricity price forecast and inflation forecast Timber price	Present-value method or valuation
Insurance contracts that do not transfer significant insurance risk	Theoretical market price	Biometric rates and lapse rates Historical event data Interest-rate curve Currency spot rates	Present-value method

1 The OIS curve is used if the quotation currency is the CSA currency.

The fair value of the loans and the bonds is based on established valuation techniques in line with the present-value principle and taking observable and, in some cases, unobservable inputs into account. The derivative components of catastrophe bonds are measured based on the values supplied by brokers for the underlying bonds, which is why the extent to which unobservable inputs were used cannot readily be assessed.

The fair value of derivative financial instruments is based on the present-value method or established option pricing models using mostly observable market inputs such as interest-rate curve volatilities or exchange rates.

Insurance derivatives and insurance contracts that do not transfer significant insurance risk are mostly allocated to Level 3 of the fair value hierarchy. This is assessed on a case-by-case basis, taking into account the characteristics of the financial instrument concerned. In this case, exclusively observable market inputs are often unavailable, so that biometric rates (including lapse rates) and historical event data are used for valuation on the basis of the present-value method.

The inputs required in measuring variable annuities are derived either directly from market data (in particular volatilities, interest-rate curves and currency spot rates) or from actuarial data (especially biometric and lapse rates). The lapse rates used are modelled dynamically depending on the specific insurance product and current capital market situation. Mortality assumptions are based on client-specific data or published mortality tables, which are adjusted with regard to the target markets and the actuaries' expectations. The dependencies between different capital market inputs are modelled by correlation matrices. Where the valuation of these products is not based on observable inputs, which is usually the case, we allocate them to Level 3 of the fair value hierarchy.

The other investments allocated to Level 3 are mainly external fund units (in particular, private equity, real estate and funds that invest in a variety of assets that are subject to theoretical valuation). Since market quotes are not available on a regular basis, net asset values (NAVs) are provided by asset managers. The NAVs are determined by adding up all the fund assets and subtracting all the fund liabilities. The NAV per fund unit is calculated by dividing the NAV by the number of outstanding fund units. We thus do not perform our own valuations using unobservable inputs. We regularly perform plausibility tests over the valuations supplied on the basis of comparable investments.

We have taken climate risks and other ESG risks into account implicitly in our determination of fair values using the respective forward-looking valuation inputs, provided that they have an influence on price in the capital markets in which the products of relevance here are traded.

Among the associates and joint ventures accounted for using the equity method, there is only one investment for which a quoted market price is available. This price amounts to €43m (51m) and is allocated to Level 1 of the fair value hierarchy.

The fair value of investment property managed by Munich Re is measured by valuation experts within the Group, while the fair value of investment property managed by third parties is measured by external valuation experts. Property is allocated to Level 3 of the fair value hierarchy. The valuation is based on determining future expected income and expenses, taking into account the market conditions at the property location. The fair value is determined individually per item by discounting the future net cash inflows to the measurement date. Depending on the type of property and its individual risk/reward profile, discount rates of 1.4% to 4.5% are used for residential buildings, and 1.4% to 7.6% for office buildings and commercial property.

The measurement of subordinated liabilities for which quoted market prices are not available is performed using the present-value method and taking observable market inputs into account. For the bonds we have issued, we use the quoted market prices of corresponding assets provided by price quoters to measure the fair value. The fair values of our liabilities to credit institutions are determined using the present-value method, in part exclusively using observable market inputs, and partly also taking into account unobservable inputs.

In the following table, we present the fair values of our assets at the reporting date for each level of the fair value hierarchy.

Allocation of assets to levels of the fair value hierarchy

				31.12.2023
€m	Level 1	Level 2	Level 3	Total
Financial assets				
Financial investments				
Instruments subject to equity risk	10,281	33	506	10,820
Instruments subject to interest-rate and credit risk	1,381	171,773	1,342	174,496
Alternative investments	1	620	14,779	15,400
	11,662	**172,427**	**16,626**	**200,715**
Investments for unit-linked life insurance	**7,151**	**1,129**	**0**	**8,280**
Insurance-related financial instruments	**0**	**1,264**	**8,610**	**9,873**
Financial receivables	**329**	**3,456**	**70**	**3,855**
Subtotal	**19,142**	**178,276**	**25,306**	**222,724**
Non-financial assets				
Non-financial investments and owner-occupied property				
Investment property	0	0	7,151	7,151
Investments in affiliated companies, associates and joint ventures	43	757	8,821	9,621
Other non-financial investments	101	10	1,350	1,462
Owner-occupied property	0	0	2,613	2,613
	144	**767**	**19,935**	**20,846**
Non-financial assets held as underlying items				
Investment property	0	0	5,613	5,613
Owner-occupied property	0	0	914	914
	0	**0**	**6,526**	**6,526**
Other receivables	**0**	**1,170**	**40**	**1,211**
Subtotal	**144**	**1,938**	**26,502**	**28,583**
Total	**19,286**	**180,213**	**51,808**	**251,307**

				Prev. year
€m	Level 1	Level 2	Level 3	Total
Financial assets				
Financial investments				
Instruments subject to equity risk	8,890	170	962	10,022
Instruments subject to interest-rate and credit risk	707	165,923	1,537	168,166
Alternative investments	0	512	11,802	12,313
	9,596	**166,604**	**14,301**	**190,501**
Investments for unit-linked life insurance	**5,355**	**2,115**	**0**	**7,470**
Insurance-related financial instruments	**0**	**1,497**	**8,107**	**9,604**
Financial receivables	**1,746**	**1,132**	**939**	**3,817**
Subtotal	**16,697**	**171,349**	**23,347**	**211,392**
Non-financial assets				
Non-financial investments and owner-occupied property				
Investment property	0	0	7,175	7,175
Investments in affiliated companies, associates and joint ventures	51	770	7,955	8,775
Other non-financial investments	92	40	1,259	1,391
Owner-occupied property	0	0	2,682	2,682
	144	**809**	**19,071**	**20,024**
Non-financial assets held as underlying items				
Investment property	0	0	5,917	5,917
Owner-occupied property	0	0	992	992
	0	**0**	**6,908**	**6,908**
Other receivables	**0**	**1,337**	**0**	**1,337**
Subtotal	**144**	**2,146**	**25,979**	**28,270**
Total	**16,841**	**173,495**	**49,326**	**239,662**

The fair values of our liabilities at the reporting date for each level of the fair value hierarchy are presented in the following table.

Allocation of liabilities to levels of the fair value hierarchy

				31.12.2023
€m	Level 1	Level 2	Level 3	Total
Subordinated liabilities	**0**	**4,298**	**0**	**4,298**
Liabilities				
Derivatives	**264**	**1,038**	**77**	**1,379**
Non-derivative financial liabilities				
Bonds and notes issued	0	266	0	266
Liabilities to credit institutions	0	223	690	912
Other financial liabilities	0	3,278	240	3,519
	0	**3,767**	**930**	**4,697**
Other liabilities				
Insurance-related liabilities	31	1,733	3,056	4,820
Subtotal	**294**	**6,538**	**4,063**	**10,895**
Total	**294**	**10,836**	**4,063**	**15,193**

				Prev. year
€m	Level 1	Level 2	Level 3	Total
Subordinated liabilities[1]	**0**	**4,029**	**0**	**4,029**
Liabilities				
Derivatives	**423**	**825**	**218**	**1,466**
Non-derivative financial liabilities				
Bonds and notes issued[1]	0	338	0	338
Liabilities to credit institutions	0	971	76	1,047
Other financial liabilities[1]	0	1,748	539	2,287
	0	**3,057**	**615**	**3,672**
Other liabilities				
Insurance-related liabilities	29	2,081	2,492	4,602
Subtotal	**452**	**5,964**	**3,324**	**9,740**
Total	**452**	**9,993**	**3,324**	**13,769**

1 The previous year's figures have been adjusted.

Regularly, at each reporting date, we assess whether the allocation of our assets and liabilities to the levels of the fair value hierarchy is still appropriate. If changes in the basis of valuation have occurred – for instance, if a market is no longer active or the valuation was performed using inputs requiring a different allocation – we make the necessary adjustments.

In the following tables, we present the assets transferred to a different level of the fair value hierarchy in the reporting period or the previous period. No transfers between the levels of the fair value hierarchy were carried out for liabilities in the current reporting period or the previous financial year.

Transfers between levels of the fair value hierarchy for assets

						31.12.2023
			Transfer from			Transfer to
€m	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial assets						
Financial investments						
Instruments subject to equity risk	0	0	0	0	0	0
Instruments subject to interest-rate and credit risk	0	–3	–54	0	54	3
Alternative investments	0	–8	0	0	0	8
	0	**–11**	**–54**	**0**	**54**	**12**
Investments for unit-linked life insurance	**0**	**0**	**0**	**0**	**0**	**0**
Insurance-related financial instruments	**0**	**0**	**0**	**0**	**0**	**0**
Subtotal	**0**	**–11**	**–54**	**0**	**54**	**12**
Non-financial assets						
Non-financial investments and owner-occupied property						
Investment property	0	0	0	0	0	0
Investments in affiliated companies, associates and joint ventures	0	0	0	0	0	0
Other non-financial investments	0	0	0	0	0	0
Owner-occupied property	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
Non-financial assets held as underlying items						
Investment property	0	0	0	0	0	0
Owner-occupied property	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
Subtotal	**0**	**0**	**0**	**0**	**0**	**0**
Total	**0**	**–11**	**–54**	**0**	**54**	**12**

						Prev. year
			Transfer from			Transfer to
€m	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial assets						
Financial investments						
Instruments subject to equity risk	0	0	–1	0	1	0
Instruments subject to interest-rate and credit risk	0	–87	0	0	0	87
Alternative investments	0	–18	–67	0	67	18
	0	**–105**	**–68**	**0**	**68**	**105**
Investments for unit-linked life insurance	**0**	**0**	**0**	**0**	**0**	**0**
Insurance-related financial instruments	**0**	**0**	**0**	**0**	**0**	**0**
Subtotal	**0**	**–105**	**–68**	**0**	**68**	**105**
Non-financial assets						
Non-financial investments and owner-occupied property						
Investment property	0	0	0	0	0	0
Investments in affiliated companies, associates and joint ventures	0	0	0	0	0	0
Other non-financial investments	0	0	0	0	0	0
Owner-occupied property	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
Non-financial assets held as underlying items						
Investment property	0	0	0	0	0	0
Owner-occupied property	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
Subtotal	**0**	**0**	**0**	**0**	**0**	**0**
Total	**0**	**–105**	**–68**	**0**	**68**	**105**

The following tables show a reconciliation of the fair values of assets and liabilities allocated to Level 3 of the fair value hierarchy broken down by class.

Reconciliation of the fair values of the assets allocated to Level 3

	Financial investments					
	Instruments subject to equity risk		Instruments subject to interest-rate and credit risk		Alternative investments	
€m	2023	Prev. year	2023	Prev. year	2023	Prev. year
Fair value before transition to IFRS 9	**962**		**96**		**8,014**	
Transition effect to IFRS 9	0		1,441		3,788	
Fair value at 1 January	**962**	**774**	**1,537**	**134**	**11,802**	**8,104**
Gains and losses						
on derivative transactions	0	0	0	0	–1	0
on non-derivative transactions	14	–13	–47	–15	–99	427
recognised in equity	0	–56	43	0	593	–422
	14	**–69**	**–3**	**–15**	**494**	**5**
Additions	298	257	115	–51	4,776	3,124
Disposals	–78	–29	–214	–5	–2,952	–3,160
Transfer to Level 3	0	0	3	87	8	18
Transfer from Level 3	0	–1	–54	0	0	–67
Other	–691	30	–42	–53	651	–11
Fair value at 31 December	**506**	**962**	**1,342**	**96**	**14,779**	**8,014**

→

	Investments for unit-linked life insurance		Insurance-related financial instruments	
€m	2023	Prev. year	2023	Prev. year
Fair value before transition to IFRS 9	**0**		**1,019**	
Transition effect to IFRS 9	0		7,088	
Fair value at 1 January	**0**	**122**	**8,107**	**869**
Gains and losses				
on derivative transactions	0	0	–49	–1
on non-derivative transactions	0	–78	–272	293
recognised in equity	0	0	0	0
	0	**–78**	**–321**	**292**
Additions	0	0	2,201	134
Disposals	0	–44	–1,344	–288
Transfer to Level 3	0	0	0	0
Transfer from Level 3	0	0	0	0
Other	0	0	–33	12
Fair value at 31 December	**0**	**0**	**8,610**	**1,019**

€m	Other non-financial investments[1] 2023	Other non-financial investments[1] Prev. year	Non-financial assets held as underlying items: Investment property 2023	Investment property Prev. year	Owner-occupied property 2023	Owner-occupied property Prev. year
Fair value before transition to IFRS 9	**1,137**		**5,917**		**992**	
Transition effect to IFRS 9	0		0		0	
Fair value at 1 January	**1,137**	**882**	**5,917**	**5,658**	**992**	**1,035**
Gains and losses						
on derivative transactions	27	0	0	0	0	0
on non-derivative transactions	–73	61	–279	–31	–57	–43
recognised in equity	2	–65	0	0	0	0
	–45	**–4**	**–279**	**–31**	**–57**	**–43**
Additions	245	311	664	446	1	0
Disposals	–109	–60	–615	–150	–8	0
Transfer to Level 3	0	0	0	0	0	0
Transfer from Level 3	0	0	0	0	0	0
Other	72	9	–73	–7	–13	0
Fair value at 31 December	**1,301**	**1,137**	**5,613**	**5,917**	**914**	**992**

1 Including investments in affiliated companies, associates and joint ventures measured at fair value.

Reconciliation of the fair values of the liabilities allocated to Level 3

€m	Derivatives 2023	Derivatives Prev. year	Other financial liabilities 2023	Other financial liabilities Prev. year	Insurance-related liabilities 2023	Insurance-related liabilities Prev. year
Fair value before transition to IFRS 9	**218**		**0**		**1,706**	
Transition effect to IFRS 9	0		0		785	
Fair value at 1 January	**218**	**138**	**0**	**0**	**2,492**	**1,682**
Gains and losses						
on derivative transactions	–1	0	0	0	–49	–1
on non-derivative transactions	–60	31	1	0	–316	–370
recognised in equity	0	0	0	0	0	0
	–61	**31**	**1**	**0**	**–364**	**–371**
Additions	1	73	91	0	2,126	593
Disposals	–81	–45	0	0	–1,294	–275
Transfer to Level 3	0	0	0	0	0	0
Transfer from Level 3	0	0	0	0	0	0
Other	0	22	0	0	–11	78
Fair value at 31 December	**77**	**218**	**93**	**0**	**2,949**	**1,706**

Other changes in instruments subject to equity risk and other changes in alternative investments – totalling €690m altogether – comprised transfers of individual financial instruments between these two asset classes in accordance with our internal management.

Changes in fair value recognised in the consolidated income statement for assets allocated to Level 3 of the fair value hierarchy are presented in the result from insurance-related financial instruments, the investment result, or the investment result for unit-linked life insurance. Gains and losses on these assets recognised in equity are shown as part of unrealised gains and losses in other comprehensive income.

Changes in fair value recognised in the consolidated income statement for liabilities allocated to Level 3 of the fair value hierarchy are presented in the result from insurance-related financial instruments or the investment result. Where the impact of own credit risk of financial liabilities designated as at fair value through profit or loss is recognised in equity, we present it as part of unrealised gains and losses in other comprehensive income. When the financial liabilities designated as at fair value through profit or loss are derecognised, the amount of change in the fair value attributable to changes in the credit risk and recognised in other comprehensive income is transferred to retained earnings.

Sensitivity of unobservable inputs used to measure fair value

If the value of financial instruments is based on unobservable inputs, the value of these inputs at the reporting date is derived using a range of reasonably possible alternatives that are determined based on management judgement. The values we select for such unobservable inputs used to measure fair value are reasonable and commensurate with the prevailing market conditions and the respective measurement approach.

The following information sets out the significant unobservable inputs for financial assets and liabilities allocated to Level 3 of the fair value hierarchy, and subsequently illustrates the effect that a change in the inputs has on the fair value. The sensitivities presented have been calculated based on the assumption that only the inputs in question have changed. In reality, however, it is unlikely that changes in market conditions affect only one input. For that reason, the effects shown here on the fair values calculated may differ from the actual changes in fair value. It should also be noted that the disclosures are neither a prediction nor an indication of future changes in fair value.

Significant estimation uncertainties and judgements are involved in measuring instruments that are subject to credit risk if no issuer rating is available and it is not possible to access prices for traded financial instruments from the issuer. This usually applies to mortgage loans and infrastructure loans. In such cases, we use our internal rating model to estimate the issuer's credit risk and determine, on the basis of their operating sector, geographic location and creditworthiness, the interest-rate curve to apply to measure the fair value. If the interest-rate curve were to increase or decrease, it would lead to a decrease or increase in the fair value of interest-sensitive financial investments.

A significant share of the insurance-related financial instruments is comprised of annuity policies and life insurance contracts that do not transfer significant insurance risk. Here, actuarial data such as biometric data (mortality rates) and lapse rates are the underlying significant unobservable inputs. A decrease (or increase) in lapse rates, mortality rates or annuity claims would lead to a higher (or lower) fair value. In the case of contracts that provide high death benefits, the effect for lapse rate changes may be reversed. A decrease (or increase) in the exercising of withdrawal plans would lead to a lower (or higher) fair value. Even if the mortality assumption were to constantly increase by 5%, or the lapse assumption were to increase (or decrease) by 50%, the resulting changes in the fair value of the insurance-related financial instruments would be immaterial, as these contracts do not transfer significant insurance risk.

Other instruments for which we used significant unobservable inputs to measure the fair value are unlisted fund investments, investments in private-equity companies and direct investments in non-listed companies. For these assets, the fair value is determined based on the net asset value of the investment. Any changes in the net asset value would lead to a corresponding adjustment of the fair value, i.e. a 10% increase (or decrease) in the net asset value would mean that the fair value would also increase (or decrease) by 10%.

44 Disclosures on exercising the fair value option

Financial assets

The following tables provide an overview of our financial assets that have been designated as measured at fair value through profit or loss, the influence of credit risk on their fair values and changes in the fair values of related credit derivatives.

Disclosures on financial assets designated as measured at fair value through profit or loss

						31.12.2023
	Maximum credit risk[1]		Changes in the fair value			
	As at the end of the reporting period	Reduction as a result of related derivatives and similar instruments	Of the financial instrument from changes in credit risk		Of related credit derivatives and similar instruments	
€m			During the reporting period	Accu-mulated	During the reporting period	Accu-mulated
Financial investments	0	0	0	0	0	0
Insurance-related financial instruments	36	0	0	0	0	0
Total	**36**	**0**	**0**	**0**	**0**	**0**

						Prev. year
	Maximum credit risk[1]		Changes in the fair value			
	As at the end of the reporting period	Reduction as a result of related derivatives and similar instruments	Of the financial instrument from changes in credit risk		Of related credit derivatives and similar instruments	
€m			During the reporting period	Accu-mulated	During the reporting period	Accu-mulated
Financial investments	1,853	0	–	–	–	–
Insurance-related financial instruments	1,036	0	–	–	–	–
Total	**2,889**	**0**	**–**	**–**	**–**	**–**

1 Corresponds to the current carrying amount.

The portion of fair value attributable to credit risk is determined by calculating the difference that results from deducting the fair value determined using only credit risk-free market parameters from the fair value of the instrument as a whole calculated using customary measurement methods and market parameters. For information on fair value measurement, please refer to this chapter under "43 Fair value hierarchy for assets and liabilities".

To reduce the credit risk associated with these financial assets, we enter into contracts for the provision of collateral. These types of agreements also include a requirement to provide cash collateral or to issue guarantees.

Financial liabilities

When exercising the option to designate financial liabilities as measured at fair value through profit or loss, changes in value in relation to our own credit risk are recognised in other comprehensive income, unless such treatment would lead to an accounting mismatch or exacerbate an existing mismatch. We exercise the option for our insurance-related liabilities, since they are managed at fair value in the same way as insurance-related financial instruments. If the effect of changes in value due to a change in our credit risk was recognised separately in other comprehensive income, the offsetting effect of designating these instruments would be lower. Overall, given our excellent creditworthiness and the collateral agreed in the contracts, our credit risk and the resulting changes are of minor significance.

We determine the portion of fair value attributable to credit risk by calculating the difference that results from deducting the fair value determined using only credit risk-free market parameters from the fair value of the instrument as a whole calculated using customary measurement methods and market parameters.

The cumulative changes in value in relation to our own credit risk are reclassified from other comprehensive income to retained earnings when the corresponding liability is derecognised.

The following table shows our financial liabilities that we have designated as measured at fair value through profit or loss and for which changes in the value of our own credit risk are recognised in other comprehensive income.

Financial liabilities designated as measured at fair value through profit or loss, with changes in the value of credit risk recognised in other comprehensive income

			31.12.2023
€m	Cumulative change in fair value resulting from credit risk	Difference between carrying amount and the amount contractually due on maturity	Reclassifications of gains/losses within equity during the reporting period
Non-derivative financial liabilities	0	5	0
Insurance-related liabilities	0	0	0
Total	**0**	**5**	**0**

€m	Cumulative change in fair value resulting from credit risk	Difference between carrying amount and the amount contractually due on maturity	Reclassifications of gains/losses within equity during the reporting period
			Prev. year
Non-derivative financial liabilities	0	0	0
Insurance-related liabilities	0	0	0
Total	**0**	**0**	**0**

The following table shows our financial liabilities that we have designated as measured at fair value through profit or loss and for which changes in the value of our own credit risk are recognised in profit or loss.

Financial liabilities designated as measured at fair value through profit or loss, with changes in the value of credit risk recognised in the consolidated income statement

			31.12.2023
	Changes in fair value resulting from changes in credit risk		Difference between carrying amount and the amount contractually due on maturity
€m	During the reporting period	Accumulated	
Non-derivative financial liabilities	0	0	0
Insurance-related liabilities	0	0	–534
Total	**0**	**0**	**–534**

			Prev. year
	Changes in fair value resulting from changes in credit risk		Difference between carrying amount and the amount contractually due on maturity
€m	During the reporting period	Accumulated	
Non-derivative financial liabilities	0	0	0
Insurance-related liabilities	0	0	–206
Total	**0**	**0**	**–206**

45 Offsetting of financial assets and liabilities

Below, we present an overview of the financial assets and liabilities subject to legally enforceable master netting agreements or similar contractual arrangements. The overview contains instruments that satisfy the offsetting criteria and are therefore offset in the balance sheet, as well as those instruments that are subject to an enforceable netting agreement, but are not permitted to be offset in the balance sheet. The overview does not include off-balance-sheet securities lending transactions without cash collaterals.

Offsetting of financial assets

€m	Gross amount	Amounts set off	Net amount presented	Amounts not set off	Financial collaterals	Cash collaterals	Net amount
							31.12.2023
Derivatives	1,467	9	1,459	481	386	484	109
Repurchase agreements	65	n/a	65	0	65	0	0
Insurance-related financial instruments	10,170	299	9,872	885	0	155	8,831
Total	**11,703**	**307**	**11,396**	**1,366**	**451**	**639**	**8,940**

€m	Gross amount	Amounts set off	Net amount presented	Amounts not set off	Financial collaterals	Cash collaterals	Net amount
							Prev. year
Derivatives	1,982	8	1,974	483	370	859	262
Repurchase agreements	19	n/a	19	0	19	0	0
Insurance-related financial instruments	19,096	798	18,298	991	0	402	16,905
Total	**21,098**	**806**	**20,292**	**1,474**	**390**	**1,261**	**17,167**

Offsetting of financial liabilities

€m	Gross amount	Amounts set off	Net amount presented	Amounts not set off	Financial collaterals	Cash collaterals	Net amount
							31.12.2023
Derivatives	1,387	9	1,379	481	332	342	223
Repurchase agreements	0	n/a	0	0	0	0	0
Insurance-related liabilities	5,118	299	4,820	885	0	1,260	2,674
Total	**6,506**	**307**	**6,198**	**1,366**	**332**	**1,602**	**2,898**

€m	Gross amount	Amounts set off	Net amount presented	Amounts not set off	Financial collaterals	Cash collaterals	Net amount
							Prev. year
Derivatives	1,474	8	1,466	483	256	706	21
Repurchase agreements	106	n/a	106	0	106	0	0
Insurance-related liabilities	13,907	798	13,109	991	77	1,575	10,466
Total	**15,487**	**806**	**14,681**	**1,474**	**439**	**2,282**	**10,487**

For more information on collaterals received and pledged, please refer to Disclosures on risks from financial instruments and insurance contracts > 51 Disclosures on risks from financial instruments > Credit risk.

46 Transfers of financial assets

In the context of securities repurchase and securities lending, we transfer bonds and other securities. However, due to the structure of these agreements, we retain the risks and rewards of ownership of these financial assets arising from the credit, interest-rate and currency risk. This means that the requirements for derecognition are not met and the financial assets continue to be recognised in the consolidated balance sheet. The amount received from the repurchase buyer is, however, presented as a non-derivative financial liability. For securities repurchase transactions, the amount of this liability at the transaction date corresponds to the fair value of the securities transferred less a safety margin. When the instruments are transferred back upon the securities repurchase transaction reaching maturity, this amount, plus the agreed interest, is repaid to the repurchase buyer. Under the repurchase agreements in place as at the reporting date, we act exclusively as the repurchase buyer. In securities lending, the corresponding liability corresponds to the obligation to repay the cash collaterals received, which are repaid to the counterparty less the fees retained at the end of the lending period. As the securities lending transactions entered into are secured not with cash collateral but with securities that we do not recognise because the recognition criteria are not met, there are no corresponding liabilities within this context.

The following table shows, as at the reporting date, the carrying amounts and fair values of the assets transferred and the corresponding liabilities that continue to be recognised in our balance sheet.

Financial assets that continue to be recognised in full

€m	31.12.2023	Prev. year
Carrying amounts of assets transferred	3,201	2,927
Carrying amounts of liabilities associated with the transfer	0	0
Fair values		
of assets transferred	3,201	2,927
of liabilities associated with the transfer	0	0
Fair values (net)	**3,201**	**2,927**

47 Hedge accounting

We use derivative financial instruments to hedge interest-rate, currency and other market price risks. The decision to apply hedge accounting is made individually for each hedging transaction and is based on the decisions of our risk management. For further information on how risks are managed and monitored, please refer to "Disclosures on risks from financial instruments and insurance contracts".

Although we enter into derivative contracts only to manage and hedge against risks in general, we only designate a small volume of derivatives as hedges pursuant to IFRS 9 (or IAS 39 in the 2022 financial year). At present, the only hedging relationships we have are cash flow hedges. Future cash flows and the related income and expenses are hedged against the risk of changes in value. This primarily involves using interest-rate swaps to hedge against interest-rate risk. Hedge effectiveness is demonstrated using the cumulative dollar offset method.

As at 31 December 2023, the balance of our hedging reserve was –€7m (–11m). Hedging gains and losses recognised in OCI of €4m (–22m) were allocated to the hedging reserve during the period. There were no reclassifications from the hedging reserve to the consolidated income statement. The fair value change on the hedging instrument attributable to the ineffective portion of the hedge was negligible at the reporting date. The net fair value of the derivatives designated as hedges for hedging against interest-rate risks amounted to −€7m (−11m) as at 31 December 2023.

Notes on insurance contracts

48 Yield curves for major currencies

To discount cash flows from insurance contracts issued and reinsurance contracts held, we use the following yield curves for our most important currencies:

Yield curves for major currencies

	2023					Prev. year				
	1 year	5 years	10 years	15 years	20 years	1 year	5 years	10 years	15 years	20 years
Yield curves for major currencies excluding illiquidity premium										
Australian dollar	4.28	3.86	4.15	4.31	4.29	3.98	4.17	4.51	4.60	4.46
Euro	3.36	2.32	2.39	2.47	2.41	3.18	3.13	3.09	3.02	2.77
Canadian dollar	4.29	3.21	3.18	3.16	3.10	4.61	3.52	3.53	3.54	3.49
Pound sterling	4.74	3.36	3.28	3.40	3.43	4.46	4.06	3.71	3.62	3.54
Polish zloty	4.95	4.85	5.10	5.11	4.95	6.40	6.74	6.65	6.39	6.01
Swiss franc	1.17	1.05	1.16	1.34	1.50	1.06	1.34	1.49	1.52	1.58
US dollar	4.76	3.50	3.45	3.49	3.46	5.07	3.95	3.75	3.71	3.63
Japanese yen	0.07	0.45	0.85	1.15	1.39	–0.10	0.16	0.49	0.97	1.26
Yuan renminbi	1.90	2.26	2.53	2.81	3.07	2.10	2.70	3.03	3.27	3.46
Yield curves for major currencies including illiquidity premium										
Euro	3.55	2.51	2.58	2.66	2.60	3.37	3.32	3.28	3.21	2.96

All of the companies in the reinsurance group and all of the subsidiaries in the property-casualty primary insurance segment use yield curves without an illiquidity premium.

Most of the companies in the ERGO Life and Health segment use yield curves with an illiquidity premium in the order of magnitude of the Solvency II volatility adjustment. These companies measure the bulk of their life and health primary insurance business using the variable fee approach.

49 Net financial result

The recognition of insurance finance income and expenses from reinsurance contracts held and insurance contracts issued in relation to investment income in the consolidated income statement and in other comprehensive income can be presented as follows:

Analysis of net financial result relating to recognition in the consolidated income statement and in other comprehensive income

						2023
	Reinsurance		ERGO			Total
€m	Life and health	Property-casualty	Life and Health Germany	Property-casualty Germany	International	
Investment income						
Interest revenue calculated using the effective interest method	650	1,499	2,397	173	311	5,029
Other finance income	–45	337	–36	33	102	392
Impairment of financial assets	3	–12	–37	0	–2	–47
Amounts recognised in other comprehensive income	839	1,626	3,481	249	733	6,929
	1,447	**3,450**	**5,804**	**456**	**1,143**	**12,303**
Finance income or expenses from insurance contracts issued						
Accretion of interest	–138	–1,682	–33	–51	–214	–2,118
Effects of changes in interest rates	–206	–907	–6	–260	–159	–1,538
Changes in the fair value of the underlying items	0	0	–6,038	–22	–571	–6,631
Currency exchange differences	391	–489	0	0	–3	–101
	47	**–3,078**	**–6,077**	**–333**	**–947**	**–10,388**
Thereof: Recognised in the consolidated income statement	–133	–1,682	–2,983	–66	–627	–5,490
Recognised in other comprehensive income	180	–1,396	–3,094	–267	–320	–4,898
Finance income or expenses from reinsurance contracts held						
Accretion of interest	2	88	–1	2	9	100
Other	15	49	0	5	16	86
	17	**137**	**0**	**7**	**25**	**185**
Thereof: Recognised in the consolidated income statement	2	88	–1	2	9	99
Recognised in other comprehensive income	16	49	0	5	16	86
Total	**1,511**	**509**	**–274**	**130**	**221**	**2,100**
Thereof: Recognised in the consolidated income statement	477	230	–661	143	–208	–17
Recognised in other comprehensive income	1,034	279	387	–13	429	2,117

50 Underlying items for insurance contracts with direct participation features

The composition of underlying items for insurance contracts with direct participation features is as follows:

Composition of underlying items for insurance contracts with direct participation features (consolidated)

€m	31.12.2023	Prev. year
Non-financial investments		
Investment property	2,005	2,569
Investments in affiliated companies, associates and joint ventures	558	583
Other non-financial investments	943	863
	3,506	**4,015**
Financial investments	**78,394**	**74,919**
Total	**81,899**	**78,934**

Disclosures on risks from financial instruments and insurance contracts

Munich Re's reporting is based on various legal provisions governing risks it is exposed to as a result of its business operations.

In the Notes to the consolidated financial statements, risks from financial instruments must be reported in accordance with IFRS 7 and risks from insurance contracts in accordance with IFRS 17. Further disclosures on risks are required in the risk report in the combined management report on the basis of Section 315(2) no. 1 of the German Commercial Code (HGB) and German Accounting Standard no. 20 (GAS 20) for management reports.

Since risk reporting concerns not only accounting but also the activities of integrated risk management (IRM) at Munich Re, information on risks is provided in the Risk report and in the disclosures on risks from financial instruments and insurance contracts in the Notes to the consolidated financial statements. Where necessary, we refer to the relevant information in the risk report and information on the respective items.

The disclosures in the risk report largely adopt a purely economic view. The report provides an account of the organisation of risk management and Munich Re's risk strategy, briefly outlines the main risks we are exposed to, and describes the economic risk capital calculated by means of our internal risk model. The report also contains information on specific risk complexes.

51 Disclosures on risks from financial instruments

A summary of the quantitative risks in accordance with IFRS 7 is available in the Combined management report > Risk report.

Credit risk

When determining credit risk, we firstly use a portfolio model and secondly analyse the credit risk exposure of investments on a per-debtor basis.

If the credit risk also depends on other factors beyond the debtor's creditworthiness (such as subordination, guarantees or collateralisation), these are also taken into consideration. We use historical capital market data to determine the associated migration and default probabilities. Correlation effects between debtors are derived from the sectors and countries in which they operate. The assessment of the credit risk from other receivables is based on internal expert assessments.

Risk concentrations exist primarily in government bonds and corporate bonds, as well as in pfandbriefs and similar covered bonds.

A Group-wide counterparty limit system ensures the management and monitoring of Group-wide credit risks. With regard to country risks, we use both standard ratings and our own analyses, which also take climate change risks into account. The limits and measures derived from this are binding for investment decisions and the insurance of political risks.

In order to fulfil the requirements for monitoring and managing credit risks, the sensitivities are regularly checked against the most important input parameters.

In addition to monitoring credit risk under the internal model, we have implemented continuous monitoring of financial investments on the basis of internal and external credit ratings. We also mitigate credit risk by providing collateral. For exchange-traded derivatives and derivatives subject to a clearing process, this is done through automated daily margining. For the majority of our OTC derivatives, we have agreed a similar process of adjusting the collateral on a daily basis. Unsecured OTC derivatives are entered into only with counterparties with good creditworthiness.

In the balance sheet, credit risk is accounted for by recognising expected credit losses as impairment losses on financial assets measured at fair value through other comprehensive income or at amortised cost. In addition, lease receivables are subject to the impairment requirements of IFRS 9. We calculate the expected credit losses by using a parameter-based approach. This involves measuring the expected credit losses on a per-transaction basis, using statistical risk parameters in accordance with our credit risk guidelines. The key parameters are probability of default, loss given default and exposure at default.

Probability of default is calculated on the basis of our internal rating model, which takes account of not only historical information, but also current market conditions and the relevant forward-looking information (such as forecast macroeconomic developments). Our internal rating categories are based on those of the leading international rating agencies. For financial assets allocated to Stage 1 of the impairment model, the probabilities of default are always calculated on the basis of the risk of default for the next 12 months. If the instrument's remaining maturity is less than one year, the probability is determined for this maturity.

Probabilities of default for maturities of more than one year used to determine lifetime expected credit losses at Stage 2 are determined by extrapolating migration matrices of default probabilities for the next 12 months. Financial assets allocated to Stage 3 of the impairment model are always analysed on a case-by-case basis.

The loss given default is calculated at 100% less the recovery rate. The recovery rates for the respective financial assets are derived from the recovery and default studies published by the rating agencies and adjusted by taking expert opinions into account.

The exposure at default corresponds to the gross carrying amount as at the reporting date.

Current financial receivables and lease receivables are not normally subject to material historical default. This means that it is not usually appropriate to calculate the impairment loss on the basis of this information. We therefore determine the credit losses on these types of receivables using a simplified formula. We base this process on a conservative analysis of the probability of default, which corresponds to the lowest rating within the investment grade. In accordance with the ISDA convention, a loss given default of 60% is assumed for senior unsecured corporate debt. The amount of loss given default corresponds to the gross carrying amount.

No impairment losses are normally recognised for cash and cash equivalents as these financial instruments are only entered into with counterparties of first-class financial strength. Moreover, the maximum maturity of these financial assets is three months. The credit risk resulting from these financial instruments is therefore immaterial and is monitored continuously.

In the tables below, we present the reconciliation of loss allowances on financial assets measured at fair value through other comprehensive income or at amortised cost. At Munich Re, this covers the economic classes of "Instruments subject to interest-rate and credit risk" and "Alternative investments". Loss allowances on financial assets measured at amortised cost and on lease receivables are of minor significance at Munich Re.

Reconciliation of loss allowances on financial instruments measured at fair value through OCI

								2023
	Stage 1		Stage 2		Stage 3		Total	
	12-month expected credit losses		Lifetime expected credit losses (not impaired)		Lifetime expected credit losses (impaired)			
€m	Gross carrying amount	Loss allowance	Gross carrying amount	Loss allowance	Gross carrying amount	Loss allowance	Gross carrying amount	Loss allowance
Balance at 1.1.	**177,025**	**93**	**2,667**	**113**	**630**	**404**	**180,322**	**611**
Additions (new assets issued/acquired)	75,611	39	0	0	0	0	75,611	39
Remeasured due to change in measurement parameters	n/a	–5	n/a	27	n/a	1	n/a	23
Transfers to Stage 1	214	5	–207	–5	–6	0	0	0
Transfers to Stage 2	–651	–2	651	2	0	0	0	0
Transfers to Stage 3	–293	–1	–501	–55	794	56	0	0
Disposals (sale, redemption, material modification, write-offs)	–73,229	–21	–839	27	–134	–114	–74,202	–108
Currency translation differences	–1,463	–1	–11	–2	–18	–24	–1,491	–26
Change in the consolidated group	86	0	0	0	0	0	86	0
Modifications of contractual cash flows that do not lead to derecognition	0	0	0	0	0	0	0	0
Other changes	346	0	–1	0	4	6	348	6
Balance at 31.12.	**177,645**	**108**	**1,759**	**108**	**1,270**	**329**	**180,674**	**545**

Reconciliation of loss allowances on financial instruments measured at amortised cost

												2023
	Stage 1			Stage 2			Stage 3			Total		
	12-month expected credit losses			Lifetime expected credit losses (not impaired)			Lifetime expected credit losses (impaired)					
€m	Gross carrying amount	Loss allowance	Net carrying amount	Gross carrying amount	Loss allowance	Net carrying amount	Gross carrying amount	Loss allowance	Net carrying amount	Gross carrying amount	Loss allowance	Net carrying amount
Balance at 1.1.	**12,329**	**0**	**12,329**	**0**	**0**	**0**	**3**	**2**	**1**	**12,333**	**2**	**12,330**
Balance of additions and disposals	–52	0	–52	0	0	0	0	0	0	–51	0	–51
Remeasured due to change in measurement parameters	0	0	0	0	0	0	0	–1	1	0	–1	1
Transfers to Stage 1	2	0	2	0	0	0	–2	0	–2	0	0	0
Transfers to Stage 2	0	0	0	0	0	0	0	0	0	0	0	0
Transfers to Stage 3	–3	0	–3	0	0	0	3	0	3	0	0	0
Currency translation differences	–132	0	–132	0	0	0	0	0	0	–132	0	–132
Change in the consolidated group	9	0	9	0	0	0	0	0	0	9	0	9
Modifications of contractual cash flows that do not lead to derecognition	0	0	0	0	0	0	0	0	0	0	0	0
Other changes	219	0	219	0	0	0	0	0	0	219	0	219
Balance at 31.12.	**12,373**	**0**	**12,372**	**0**	**0**	**0**	**5**	**1**	**4**	**12,378**	**2**	**12,376**

The carrying amounts of financial assets measured at fair value through other comprehensive income are not reduced by recognising impairment losses. The loss allowance is presented in other comprehensive income.

For financial assets measured at amortised cost, on the other hand, the loss allowance is recognised directly as a reduction of the carrying amount.

Financial assets measured at amortised cost essentially relate only to short-term deposits, sight deposits and financial receivables with remaining maturities of less than 90 days. The short remaining maturities generally mean that the review period is too short for assessing whether credit risk is significantly increased. For this reason, these instruments are predominantly allocated to Stage 1 of the impairment model. However, if there is objective evidence of impairment, we allocate these types of instruments to Stage 3.

The "Remeasured due to change in measurement parameters" line item in the above table refers exclusively to the loss allowance and has no influence on the gross carrying amount.

Portfolio changes resulting from transfers between stages represent additions and reversals that arose in the reporting period due to a change in the stage allocation. Impairment losses relate to amounts of financial assets derecognised that are no longer expected to be recovered. Disposals, on the other hand, show reversals of loss allowances for assets settled or sold in the reporting period. Other changes mainly reflect changes in accrued interest paid.

We consider derecognised financial assets non-recoverable if they are still subject to an enforcement activity.

In the previous year, impairment losses were recognised on Russian and Ukrainian bonds and loans in a total amount of €849m in accordance with the provisions set out in IAS 39. A large portion of these fixed-interest securities and loans had been disposed of by the end of 2022. Further impairment losses of €1,849m were attributable to equity instruments measured at fair value through profit or loss pursuant to IFRS 9, meaning that they are no longer subject to the impairment requirements.

Non-substantial modifications of financial assets that arise because of adjustments to the contract terms do not lead to the derecognition of the assets recognised. However, the modification may lead to a change in expected credit losses. The credit risk of modified financial assets is therefore remeasured at the modification date and compared to the original credit risk. No non-substantial modifications were made to financial assets during the financial year.

The maximum credit risk associated with a financial asset corresponds to the gross carrying amount less loss allowances. The tables below also show the net default exposure arising from the maximum credit risk, less the respective collateral (limited to the respective maximum credit risk) or other credit enhancements. The effect of collateral and other credit enhancement instruments amounted to €289m in the reporting year. The secured financial investments mainly relate to loans secured by charges on property where the market value of the underlying property exceeds the nominal amount and the fair value of the loans.

Effect of collateral on the maximum credit risk of credit-impaired financial assets (allocated to Stage 3 of the impairment model)

			31.12.2023
€m	Maximum credit risk	Collateral received	Net default exposure
Financial investments			
Instruments subject to interest-rate and credit risk			
measured at amortised cost	0	0	0
measured at fair value through OCI	821	1,019	531
	821	**1,019**	**531**
Alternative investments			
measured at fair value through OCI	120	0	122
	120	**0**	**122**
Subtotal	**941**	**1,019**	**653**
Financial receivables			
measured at amortised cost	3	0	3
Financial lease assets	0	0	0
	3	**0**	**3**
Cash and cash equivalents			
measured at amortised cost	0	0	0
	0	**0**	**0**
Total	**945**	**1,019**	**656**

			Prev. year
€m	Maximum credit risk	Collateral received	Net default exposure
Financial investments			
Instruments subject to interest-rate and credit risk			
measured at amortised cost	39	84	39
measured at fair value through OCI	115	0	115
	154	**84**	**154**
Alternative investments			
measured at fair value through OCI	97	0	97
	97	**0**	**97**
Subtotal	**251**	**84**	**251**
Financial receivables			
measured at amortised cost	1	0	1
Financial lease assets	0	0	0
	1	**0**	**1**
Cash and cash equivalents			
measured at amortised cost	0	0	0
	0	**0**	**0**
Total	**252**	**84**	**252**

Effect of collateral on the maximum credit risk of financial assets measured at fair value through profit or loss

€m	Maximum credit risk	Collateral received	Net default exposure
			31.12.2023
Financial investments			
Instruments subject to equity risk	956	0	956
Instruments subject to interest-rate and credit risk	10,786	1,012	9,773
Alternative investments	7,284	0	7,284
	19,026	**1,012**	**18,013**
Insurance-related financial instruments	9,662	117	9,545
Cash and cash equivalents	0	0	0
Total	**28,688**	**1,129**	**27,559**

€m	Maximum credit risk	Collateral received	Net default exposure
			Prev. year
Financial investments			
Instruments subject to equity risk	250	0	250
Instruments subject to interest-rate and credit risk	3,406	933	2,473
Alternative investments	256	0	256
	3,912	**933**	**2,979**
Insurance-related financial instruments	2,934	399	2,535
Cash and cash equivalents	0	0	0
Total	**6,846**	**1,332**	**5,514**

The tables below present the carrying amounts of financial assets to which the impairment model is applied, broken down by internal credit-risk rating class. The maximum credit risk of financial assets to which the impairment model is applied and that are allocated to Stage 1 or 2 corresponds to the total for these stages shown in the table.

Gross carrying amounts of financial instruments measured at fair value through OCI

€m				31.12.2023		Prev. year[1]
Rating class	Stage 1	Stage 2	Stage 3	Total	Impaired	Total
AAA	50,308	0	0	50,308	0	47,078
AA	61,364	19	0	61,383	0	24,466
A	23,743	24	0	23,767	0	16,701
BBB	26,847	80	0	26,927	0	18,133
BB or lower	6,064	1,498	154	7,716	159	6,475
No rating available	9,319	137	1,117	10,573	1,361	18,285
Other rating system	0	0	0	0	0	0
Total	**177,645**	**1,759**	**1,270**	**180,674**	**1,521**	**131,139**

1 The prior-year disclosures in the year of first-time application of IFRS 9 include impairment losses under IAS 39 for the “available for sale” measurement category.

The table below does not include receivables amounting to €2,095m that relate largely to collateral provided. These arise in particular in connection with the provision of cash collateral and margin payments to central clearing organisations. As a result, we have not assigned these receivables to rating classes.

Gross carrying amounts of financial assets measured at amortised cost

€m				31.12.2023		Prev. year[1]
Rating class	Stage 1	Stage 2	Stage 3	Total	Impaired	Total
AAA	1,540	0	0	1,540	0	21,584
AA	2,122	0	0	2,122	0	13,821
A	1,723	0	0	1,723	0	4,388
BBB	572	0	0	572	0	4,397
BB or lower	128	0	0	128	0	1,458
No rating available	4,185	0	5	4,189	247	26,398
Other rating system	8	0	0	8	0	0
Total	**10,278**	**0**	**5**	**10,283**	**247**	**72,046**

1 The prior-year disclosures in the year of first-time application of IFRS 9 include impairment losses under IAS 39 for the "Loans and receivables" measurement category.

The table below shows the carrying amounts of financial assets pledged as collateral.

Collateral pledged

€m	31.12.2023	Prev. year
Financial investments	8,582	9,132
Investments for unit-linked life insurance	0	0
Insurance-related financial instruments	0	0
Financial receivables	19	0
Other receivables	74	0
Cash and cash equivalents	2,591	2,922
Total	**11,266**	**12,054**

The table below shows the carrying amounts of financial assets that we have received as collateral and that we are entitled to sell or pass on as security without payment default on the part of the owners.

Collateral received

	Carrying amount		Fair value	
€m	31.12.2023	Prev. year	31.12.2023	Prev. year
Collateral received and held				
Financial collateral	73	30	89	30
Cash collateral	1,172	1,395	1,172	1,395
	1,245	**1,425**	**1,262**	**1,425**
Thereof: collateral resold or repledged	0	0	0	0
Financial collateral	0	0	0	0
Cash collateral	0	0	0	0
	0	**0**	**0**	**0**

Liquidity risk

Our objective in managing liquidity risk is to ensure that we are in a position to meet our payment obligations at all times. To guarantee this, the liquidity position is continuously monitored and subject to stringent requirements for the availability of liquidity.

The management of liquidity risks is founded on a holistic risk strategy, on the basis of which the Board of Management defines tolerances. Minimum liquidity requirements for our operations are derived from these tolerances. The use of quantitative risk criteria also ensures that sufficient liquidity is available even under adverse scenarios. Both extreme insurance scenarios and negative capital market situations are taken into account when assessing the liquidity position.

The overview below shows the liquidity requirements arising from our financial liabilities, divided into maturity bands. The information relates to undiscounted contractual cash outflows from the financial liabilities. These are allocated to the earliest maturity band in which the cash outflow is possible. Cash outflows from financial liabilities payable on demand are therefore allocated to the earliest possible time band. The same applies to financial liabilities with termination options, for which the cash outflows are allocated to the earliest possible termination date. If the cash outflows from a financial liability are not fixed, the amount presented represents the cash outflows as they would be required on the basis of the market data applicable as at the reporting date. Amounts in foreign currency were translated at the period-end exchange rate.

Maturity analysis of future (undiscounted) cash flows from financial liabilities

									31.12.2023
	Carrying amount	Undiscounted cash flows by remaining maturities							Total
€m		≤ 1 year	> 1 year and ≤ 2 years	> 2 years and ≤ 3 years	> 3 years and ≤ 4 years	> 4 years and ≤ 5 years	> 5 years and ≤ 10 years	> 10 years	
Subordinated liabilities	**–4,713**	**–144**	**–133**	**–133**	**–195**	**–133**	**–4,900**	**0**	**–5,637**
Liabilities									
Derivatives	**–1,379**	**–1,552**	**–258**	**–78**	**–72**	**–40**	**–222**	**–102**	**–2,324**
Non-derivative financial liabilities									
Bonds	–266	–20	–20	–20	–286	0	0	0	–346
Liabilities to credit institutions	–912	–727	–5	–3	–4	–4	–20	–150	–913
Other financial liabilities	–2,982	–2,659	–148	–54	–33	–25	–111	–84	–3,114
	–5,539	**–4,958**	**–431**	**–155**	**–395**	**–69**	**–352**	**–336**	**–6,696**
Other liabilities									
Insurance-related liabilities									
Insurance-linked derivatives	–2,682	–520	–79	–47	–59	–61	–890	–1,366	–3,022
Other insurance-related liabilities	–2,138	–1,853	–244	–173	–141	–99	–376	–562	–3,448
	–4,820	**–2,373**	**–323**	**–221**	**–200**	**–160**	**–1,266**	**–1,929**	**–6,471**
Total	**–15,072**	**–7,474**	**–886**	**–508**	**–790**	**–362**	**–6,518**	**–2,265**	**–18,804**

									Prev. year
	Carrying amount	Undiscounted cash flows by remaining maturities							Total
€m		≤ 1 year	> 1 year and ≤ 2 years	> 2 years and ≤ 3 years	> 3 years and ≤ 4 years	> 4 years and ≤ 5 years	> 5 years and ≤ 10 years	> 10 years	
Subordinated liabilities	**–4,748**	**–135**	**–135**	**–135**	**–135**	**–210**	**–5,115**	**0**	**–5,865**
Liabilities									
Derivatives	**–1,466**	**–1,083**	**–159**	**–149**	**–140**	**–122**	**–1,166**	**–204**	**–3,023**
Non-derivative financial liabilities									
Bonds	–300	–22	–22	–22	–323	0	0	0	–390
Liabilities to credit institutions	–1,047	–666	–4	–5	–76	–93	–50	–155	–1,048
Other financial liabilities	–3,300	–2,310	–121	–568	–78	–190	–62	–80	–3,409
	–6,113	**–4,082**	**–307**	**–744**	**–616**	**–405**	**–1,278**	**–438**	**–7,870**
Other liabilities									
Insurance-related liabilities									
Insurance-linked derivatives	–3,108	–189	–73	–70	–72	–92	–939	–1,975	–3,410
Other insurance-related liabilities	–10,002	–6,309	–41	–50	–37	–44	–97	–101	–6,678
	–13,109	**–6,498**	**–114**	**–119**	**–109**	**–136**	**–1,036**	**–2,076**	**–10,087**
Total	**–23,970**	**–10,715**	**–556**	**–998**	**–861**	**–750**	**–7,428**	**–2,514**	**–23,822**

Market risk

We define market risk as the risk of economic losses resulting from price changes in the capital markets. Our financial instruments are subject to equity, interest-rate and currency risk in this context. We also include the inflation risk and the risk of changes in implicit volatilities in our definition of market risk.

Market risks are modelled by means of Monte Carlo simulation of possible future market scenarios. We revalue our assets and liabilities for each simulated market scenario, thus showing the probability distribution for changes to basic own funds in accordance with Solvency II.

We use appropriate limit and early-warning systems in our asset-liability management to manage market risks. Derivative financial instruments are used, most of which are concluded for hedging purposes.

Other risks

As part of the interest-rate benchmark reform (IBOR reform), existing IBOR benchmark interest rates and overnight interest rates are being reviewed and replaced by risk-free rates around the world.

On account of the discontinuation of the US dollar LIBOR as from 2023, Munich Re has switched the corresponding contracts to alternative interest rates; in other instances, fallback arrangements embedded in the contracts have entered into force. This did not result in any material economic impact.

We have identified the significant risks from the transition to the new interest rates and already taken the necessary countermeasures in recent years. We therefore expect the reform of the remaining benchmark interest rates to have only a minor impact. The contracts that fall under these arrangements already contain clauses that guarantee a market-related transition or will be replaced at the date of discontinuation of the interest rate concerned at market conditions prevailing at that point.

The table below shows the carrying amounts of financial instruments with benchmark interest rates that have not yet changed. In the 2023 reporting year, preparations advanced with regard to changing these interest rates. The table includes the most important reference rates. However, rates that had already been changed as at the end of the reporting period are no longer listed in the table for the 2023 financial year.

Carrying amounts of financial instruments affected by the IBOR reform

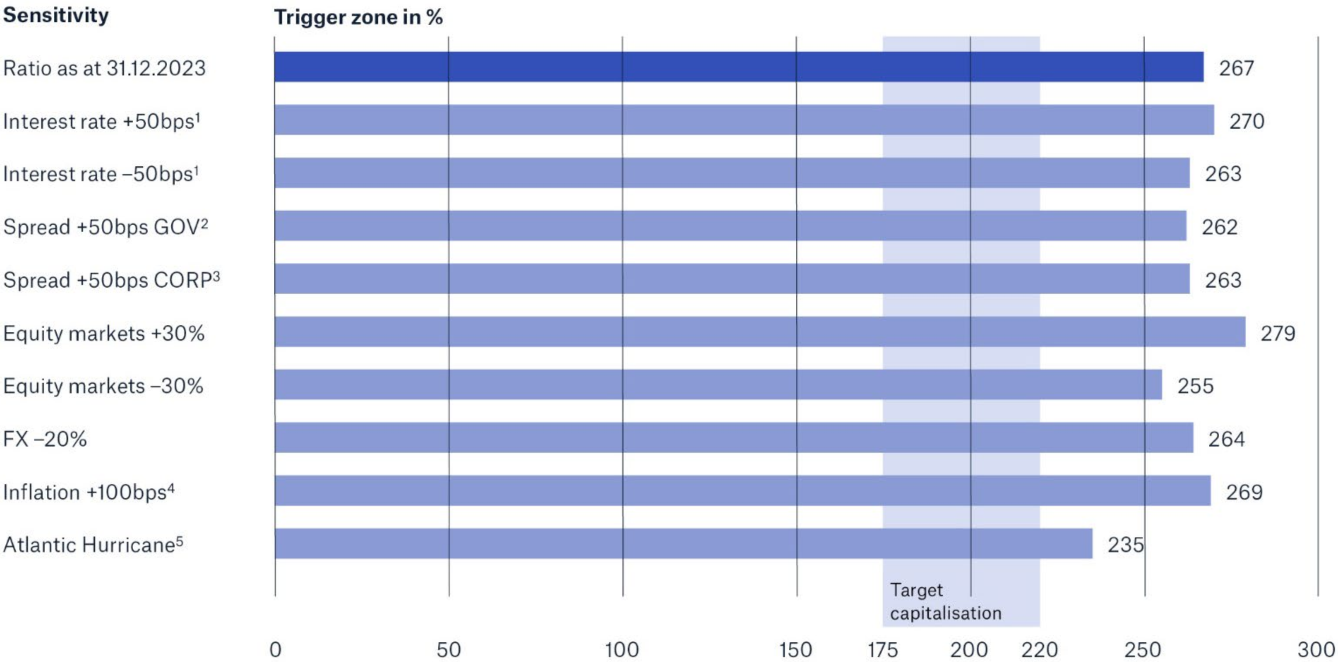
				31.12.2023
€m	Non-derivative financial assets	Non-derivative financial liabilities	Derivative financial assets	Derivative financial liabilities
CAD CDOR: Canadian Dollar Offered Rate	142	1	0	0
JIBAR: Johannesburg Interbank Offered Rate	8	0	2	7
KLIBOR: Kuala Lumpur Interbank Offered Rate	0	0	11	0
Other benchmark interest rates	0	0	0	0
Not affected by the IBOR reform	193,398	8,435	19,597	6,191
Total	**193,548**	**8,436**	**19,610**	**6,198**

52 Solvency II ratio – Sensitivity

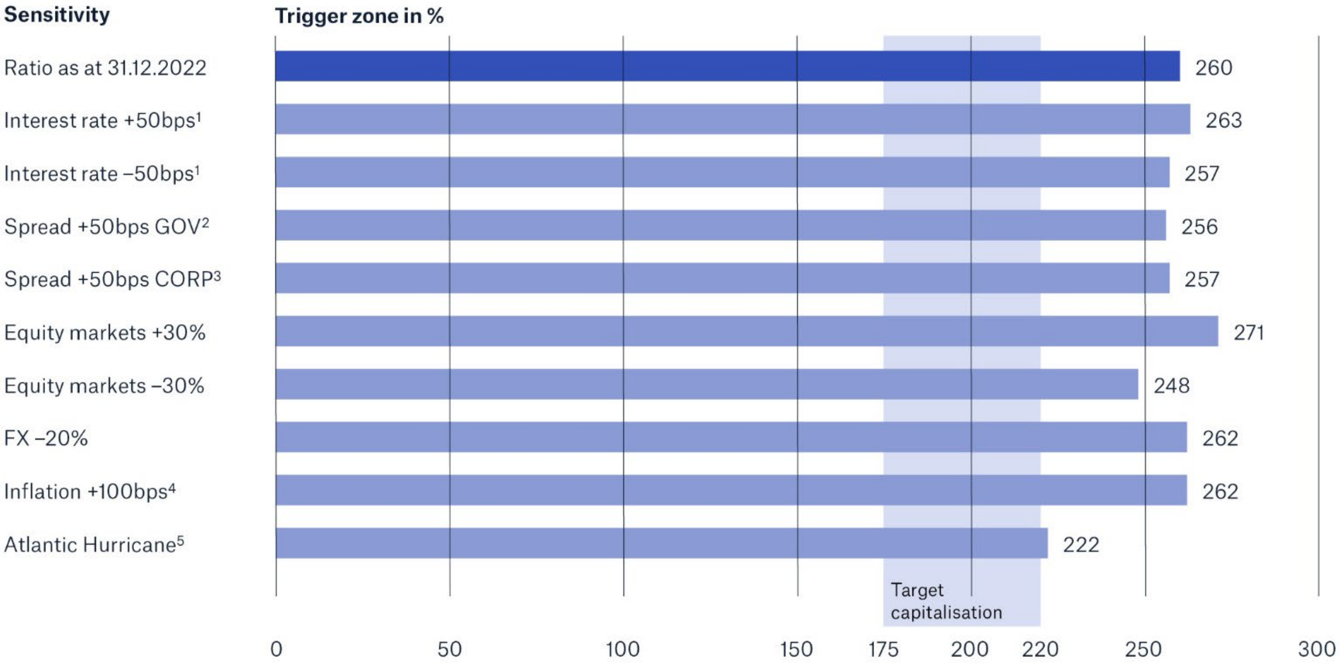
The sensitivities of the solvency ratio under Solvency II are a presentation of the insurance and market-risk sensitivities used by Munich Re for the internal control of these risks. We have therefore not calculated any specific sensitivities to IFRS equity in accordance with IFRS 7 and IFRS 17.

We regularly determine how sensitively the basic own funds, the solvency capital requirement and ultimately also the solvency ratio react to strong changes in specific capital market parameters and in other defined stress scenarios. The impact of selected scenarios on the solvency ratio of Munich Re as at 31 December 2023 and in the previous year is shown in the charts below.

Solvency II ratio – Sensitivity



1 Parallel shift until last liquid point, extrapolation to unchanged ultimate forward rate (UFR).
2 Sensitivity to changes of government bonds +50 basis points.
3 Sensitivity to changes to corporate bonds +50 basis points.
4 Sensitivity to changes of the consumer price index (CPI) only, which can be hedged on the capital markets.
5 Based on 200-year event for original own funds.



1 Parallel shift until last liquid point, extrapolation to unchanged ultimate forward rate (UFR).
2 Sensitivity to changes of government bonds +50 basis points.
3 Sensitivity to changes to corporate bonds +50 basis points.
4 Sensitivity to changes of the consumer price index (CPI) only, which can be hedged on the capital markets.
5 Based on 200-year event for original own funds.

For selected Group companies, we take account of the volatility adjustment to the risk-free interest-rate curve in the basic case and the sensitivities depicted, but not the Solvency II transitional measures. The Atlantic Hurricane scenario is a 1-in-200-year loss of basic own funds. The ultimate forward rate is not adjusted for the risk-free interest-rate curve sensitivities.

For all evaluated sensitivities, Munich Re's solvency ratio at Group level remains very comfortably above the target corridor of 175–220%. Overall, the results show a consistent picture compared to the previous year.

53 Disclosures on further risks from insurance contracts

Significant risks from the insurance contracts comprise underwriting risk, market risk, liquidity risk and default risk. These risks are described in detail in the Combined management report > Risk report.

We measure and manage underwriting risks, split into property-casualty and life and health, market risks and default risks associated with insurance contracts as part of credit risk using our full internal model, which calculates the capital requirements under Solvency II. Using diversification effects, this process also takes account of the interplay with other risks such as operational risks and asset-based risks.

Risk quantification based on solvency capital requirements (SCR)

	Group			
	31.12.2023	Prev. year		Change
	€m	€m	€m	%
Property-casualty	12,411	12,911	–500	–3.9
Life and health	7,447	6,325	1,122	17.7
Market	8,279	8,514	–235	–2.8
Credit	4,309	3,245	1,064	32.8
Operational risk	1,627	1,558	69	4.4
Other[1]	915	826	89	10.8
Subtotal	**34,987**	**33,381**	**1,606**	**4.8**
Diversification effect	–12,863	–11,768	–1,095	9.3
Tax	–4,151	–3,920	–231	5.9
Total	**17,974**	**17,693**	**281**	**1.6**

1 Capital requirements for other financial sectors, e.g. institutions for occupational retirement provision.

Liquidity risks are not included when calculating the Solvency II capital requirements. We quantify our liquidity risks from insurance contracts based on maturity analyses of net cash flows and the monitoring of the amounts payable on demand at short notice, see "Liquidity risk".

The disclosures below describe the individual characteristics of the risks in our life and health insurance business and in our property-casualty insurance business.

Underwriting risks

The particular underwriting risks in the life and health insurance business include biometric risk, lapse risk and accumulation risk. Biometric risks mainly relate to mortality, disability, morbidity and longevity. The biometric assumptions we use for measuring insurance contracts in our portfolios are regularly reviewed on the basis of updated portfolio information. Especially in primary insurance, this includes considering country-specific reviews by supervisory authorities. We also take account of market standards when checking the adequacy of biometric actuarial assumptions and the trend assumptions included in them. In reinsurance, a lapse risk also derives from the indirect transfer of lapse risks from cedants. As a rule, both this risk and the financial risk from extraordinary termination of reinsurance contracts are largely ruled out through appropriate contract design. The lapse risk in primary insurance is allowed for by means of appropriate liquidity planning and adequate calculation of the surrender value. Accumulation risk describes the situation of multiple risks being affected by the same loss event. In the context of our life and health insurance business, the accumulation risk includes the occurrence of a severe pandemic. We counter this risk by examining our overall exposure in detail using scenario analysis, and by deploying appropriate measures to manage the risks.

In property-casualty insurance business, underwriting risks include premium, reserve and accumulation risk. Premium risk is the risk of future claims payments relating to insured losses that have not yet occurred being higher than expected. Reserve risk relates to the liability for incurred claims, which is subject to the risk that actual claims settlement may be less than or exceed the amount reserved. The measurement of our liability for incurred claims and the corresponding run-off results are shown under Accounting policies > Equity and liabilities > D Insurance contracts issued that are liabilities > Liability for incurred claims, and under Notes to the consolidated balance sheet – Equity and liabilities > 28 Liability for incurred claims.

We define natural catastrophes as one of the greatest accumulation risks in property-casualty insurance business. To manage this underwriting risk, we develop well-founded scientific models that allow us to quantify occurrence probabilities and loss potentials.

Market risk

Our main market risk exposure with regard to our insurance liabilities is interest-rate risk. A distinction must be made between risks of changes in interest rates on the one hand and interest-rate guarantee risks on the other, with interest-rate risks primarily affecting our life and health insurance business. Moreover, our segments are exposed to the risks of inflation.

Risks of changes in interest rates result from the discounting of the liability for remaining coverage and of the liability for incurred claims. Economically, an interest-rate risk derives in principle from the need to earn a return on the investments covering the liabilities that is commensurate with the discount rate used in measuring the liabilities. The interest-rate curves used for discounting are presented under Notes on insurance contracts > 48 Yield curves for major currencies.

In life primary insurance, an implicit or explicit interest-rate guarantee is granted for the majority of contracts over their whole duration, based on a fixed interest rate applying at the time the contract is concluded. This exposes the insurance to an interest-guarantee risk. An appropriate minimum return needs to be earned in the long term from the investment result (possibly also with assistance from the insurance service result) for the contractually guaranteed services. Given that the investments, as a rule, have a shorter duration than the insurance commitments, there is a reinvestment risk. As regards premiums yet to be received, the investment of these amounts involves a certain amount of risk. Our life primary insurers take the capital market conditions into account in their asset-liability management. They address the attendant risks by pursuing an investment strategy that is geared to the long term and also comprises derivative financial instruments.

The prolonged phase of low interest rates was recently followed by a significant recovery on the interest-rate market. We factor in the effects on our long-term investment strategy and derivative financial instruments in the context of our asset-liability management.

In long-term health primary insurance, a discount rate is also used for calculating the liability for remaining coverage. However, this rate can generally be altered by way of premium adjustment. For short-term business, there is no direct interest-rate risk. Other market risks are of particular importance to unit-linked life insurance policies and to the lump-sum option in the case of deferred annuity policies.

For the unit-linked life insurance contracts in our portfolio, the investments are held for the benefit of life insurance policyholders who bear the investment risk, meaning that there is no direct market risk. Appropriate product design ensures that the necessary premium portions for payment of a guaranteed minimum benefit on occurrence of death are based on the current fund assets.

The lump-sum option in the case of deferred annuity policies gives policyholders the option of having their annuity paid out in a single payment at a fixed date. As a result, there is a potential risk of an unexpectedly large number of policyholders exercising their option at an interest-rate level markedly higher than the discount rate used for the annuity calculation. But there is no direct interest-rate sensitivity or market sensitivity, since the exercise of the option by the policyholder is determined to a crucial extent by individual factors and relates to the insurance components.

Some primary insurance and reinsurance contracts contain derivative components of variable annuities. These are measured separately from the underlying contract and their changes in value are recognised in the result from insurance-related financial instruments. The valuation of these embedded derivatives is sensitive to share prices, exchange rates, commodity prices and interest rates, but these sensitivities are nearly fully compensated for by the fact that such derivatives are for the most part directly matched by financial derivatives for hedging purposes.

We take inflation-rate developments into consideration in our estimates of insurance liabilities by means of standard actuarial methods and our experienced-based reserving approach.

Liquidity risk

For Munich Re, there could be a liquidity risk if the cash outflow for insurance claims payments and the costs related to the business were to exceed the cash inflow from premiums and investments. The tables below for life and health and for property-casualty insurance business respectively provide details of the expected future cash outflows for our insurance contracts issued that are liabilities and reinsurance contracts held that are liabilities.

With these numerical estimates, it should be borne in mind that this forward-looking data may involve considerable uncertainty.

The amounts from portfolios of insurance contracts issued that are liabilities and that are payable on demand primarily include surrender values in German life primary insurance. In the ERGO Life and Health Germany and ERGO International segments, the amounts from insurance contracts issued that are liabilities and that are payable on demand come to €52,793m (35,377m) in the current financial year. We report a carrying amount of €74,369m (69,476m) for the corresponding contract portfolios that are liabilities.

Amounts payable on demand from insurance contracts issued that are liabilities come to €189m (207m) in the property-casualty reinsurance segment in the current financial year. We report a carrying amount of €18,794m (16,961m) for the corresponding contract portfolios portfolios that are liabilities. These amounts payable on demand largely result from reinsurance contracts where the cedant is entitled to have the claims deposit paid out.

Maturity analysis of the remaining undiscounted contractual net cash flows in life and health insurance business

							2023
€m	**≤ 1 year**	**> 1 year and ≤ 2 years**	**> 2 years and ≤ 3 years**	**> 3 years and ≤ 4 years**	**> 4 years and ≤ 5 years**	**> 5 years and ≤ 10 years**	**> 10 years**
Insurance contracts issued that are liabilities	6,056	5,951	4,488	4,343	4,346	23,077	175,103
Reinsurance contracts held that are liabilities	–24	–72	–12	–7	–3	–2	–54
Total	**6,032**	**5,880**	**4,476**	**4,336**	**4,342**	**23,075**	**175,049**

€m	≤ 1 year	> 1 year and ≤ 2 years	> 2 years and ≤ 3 years	> 3 years and ≤ 4 years	> 4 years and ≤ 5 years	> 5 years and ≤ 10 years	> 10 years
							Prev. year
Insurance contracts issued that are liabilities	2,401	6,339	3,701	4,076	4,127	22,616	178,301
Reinsurance contracts held that are liabilities	34	4	–3	–3	–2	–5	–28
Total	**2,435**	**6,344**	**3,698**	**4,073**	**4,125**	**22,611**	**178,273**

Maturity analysis of the remaining undiscounted contractual net cash flows in property-casualty insurance business

€m	≤ 1 year	> 1 year and ≤ 2 years	> 2 years and ≤ 3 years	> 3 years and ≤ 4 years	> 4 years and ≤ 5 years	> 5 years and ≤ 10 years	> 10 years
							2023
Insurance contracts issued that are liabilities	30,714	14,473	9,253	6,500	4,602	9,637	5,938
Reinsurance contracts held that are liabilities	236	–11	2	3	1	2	2
Total	**30,950**	**14,462**	**9,254**	**6,503**	**4,603**	**9,639**	**5,939**

€m	≤ 1 year	> 1 year and ≤ 2 years	> 2 years and ≤ 3 years	> 3 years and ≤ 4 years	> 4 years and ≤ 5 years	> 5 years and ≤ 10 years	> 10 years
							Prev. year
Insurance contracts issued that are liabilities	25,197	14,173	9,064	6,275	4,673	10,089	5,849
Reinsurance contracts held that are liabilities	100	5	–1	0	0	–4	–4
Total	**25,297**	**14,178**	**9,064**	**6,275**	**4,672**	**10,085**	**5,846**

Default risks

We determine the amount of all cash flows arising from insurance contracts that are subject to default risk from the expected present values of the cash inflows for insurance contracts issued and for reinsurance contracts held, respectively.

It should be noted that these are shown without the corresponding outflows: netting agreements and cancellations permitted due to the deterioration in creditworthiness which counteract the credit default. These significantly reduce the actual credit default risk. Any shortfall in future cash flows generally means a reduction in the contractual service margin.

The information on the credit quality of the present value of future payments from reinsurance contracts held that are assets is based on the counterparty’s rating by the leading international rating agencies. If more than one rating is available from different rating agencies, we use the second-highest rating for the overall assessment of the counterparty’s expected inflows.

Present value of future cash inflows from insurance contracts

€m	31.12.2023	Prev. year
Present value of future payments from insurance contracts issued	358,589	340,916
Present value of future payments from reinsurance contracts held	7,190	7,470
Present value of future payments from reinsurance contracts held that are assets	5,782	5,960
According to rating		
AAA	14	57
AA	808	658
A	1,835	1,835
BBB and lower	367	359
No rating available	2,759	3,050

The high present value of future cash inflows from insurance contracts issued is due to the long contract terms in connection with the high premium volumes in reinsurance business.

Other information

54 Parent

The Group parent is Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company Joint-Stock Company in Munich), Königinstrasse 107, 80802 München.

Its registered seat is Munich, Germany (Commercial register number: HRB 42039, Registrar of Companies: Local Court [Amtsgericht] in Munich).

In addition to its function as a reinsurer, the parent also fulfils the function of holding company for the Group.

55 Declaration of Conformity with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG)

In November 2023, the Board of Management and Supervisory Board of Munich Reinsurance Company published the most recent version of its Declaration of Conformity with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG), and made this Declaration permanently available to shareholders at www.munichre.com/cg-en.

56 Related parties

Information on the remuneration of Board members and transactions with these persons can be found at www.munichre.com/board-of-management and in this chapter under 59 Remuneration of the Board of Management and Supervisory Board.

Transactions between Munich Reinsurance Company and subsidiaries that are to be deemed related parties have been eliminated in consolidation and are not disclosed in the Notes to the consolidated financial statements. Business relations with unconsolidated subsidiaries are of subordinate importance as a whole; this also applies to business relations with associates and joint ventures.

Munich Re's company pension obligations are implemented by several external entities; these entities are deemed related parties under IAS 24. Munich Reinsurance Company has established a contractual trust arrangement in the form of a two-way trust for its unfunded company pension obligations. In this regard, Münchener Rückversicherungs-Gesellschaft Pensionstreuhänder e.V. is deemed a related party under IAS 24. Contributions to it are used for defined contribution plans and defined benefit plans. The Munich Re pension scheme is also considered a related party in accordance with IAS 24. Contributions to the pension scheme are recognised as expenses for defined contribution plans. For further information on Munich Re's pension commitments, see the Notes to the consolidated balance sheet – Equity and liabilities > 29 Other provisions.

For transactions of related parties with Munich Reinsurance Company shares, please refer to the Notes to the consolidated balance sheet – Equity and liabilities > 24 Equity.

57 Personnel expenses

Personnel expenses are broken down as follows:

Breakdown of personnel expenses

€m	2023	Prev. year
Wages and salaries	–3,813	–3,383
Social security contributions and employee assistance	–617	–523
Expenses for employees' pensions	–238	–259
Total	**–4,668**	**–4,165**

58 Incentive plans

Long-term incentive plans

Since 1 January 2020, the companies pertaining to the reinsurance field of business have set up long-term incentive plans, which are based on uniform principles worldwide. All long-term incentive plans offered before 1 January 2020 have since been replaced or expired on 31 December 2021. The standardised remuneration scheme behind these long-term incentive plans largely corresponds with that of the multi-year bonus of the members of the Board of Management, which is described in the remuneration report available at www.munichre.com/board-of-management. From 1 January 2023, the policy in place since 1 January 2022 concerning the multi-year bonus for members of the Board of Management was expanded to include senior management.

59 Remuneration of the Board of Management and Supervisory Board

Remuneration of the Board of Management pursuant to IAS 24

€m	31.12.2023	Prev. year
Short-term employee benefits (Basic remuneration, remuneration in kind, annual bonus, previous year: one-off payment instead of pension contribution)	26.4	20.7
Post-employment benefits (Pension contribution and service costs)	3.0	4.6
Other long-term employee benefits (Multi-year bonus)	10.3	11.9
Total	**39.7**	**37.2**

The members of Munich Reinsurance Company's Board of Management received total remuneration (short-term employee benefits and other long-term employee benefits) totalling €36.7m (32.6m); this includes compensation in the amount of €4.7m (2.5m) paid to two members of the Board by affiliated companies for services performed there. In the reporting year, total post-employment benefits amounted to €3.0m (4.6m). The total remuneration of Munich Reinsurance Company's Supervisory Board amounted to €3.2m (3.2m), the entirety of which comprised short-term employee benefits; included in this figure is €0.1m (0.1m) for membership of supervisory boards at other Group companies.

Payments to retired members of the Board of Management or their surviving dependants totalled €14.3m (10.1m).

Former members of the Board of Management did not accrue any further pension entitlements with an impact on personnel expenses. After deducting plan assets for existing pension commitments held by a separate entity (under a contractual trust arrangement), there were no surplus pension provisions or provisions for comparable benefits for retired members of the Board of Management or their surviving dependants. The amount of the liability is €131.0m (124.1m).

For former members of the Supervisory Board or their surviving dependants, no pension obligations arose from Supervisory Board membership.

The members of the Supervisory Board and Board of Management did not receive any cash advances or loans in the year under review. For their service as employees of the Group, Supervisory Board members received remuneration in the amount of €1.3m (1.4m). Some Board members hold insurance policies with companies belonging to Munich Re, and have small MEAG fund holdings. There were no other significant transactions between Board members and Munich Re.

All other disclosures on the structure of the remuneration system and the remuneration report of the Board of Management and Supervisory Board are available at www.munichre.com/board-of-management and www.munichre.com/supervisory-board. Information on the share ownership of the members of the Board of Management can be found in the remuneration report and at www.munichre.com/board-of-management/shares-held.

60 Number of staff

The number of staff at year-end totalled 18,896 (18,625) in Germany and 23,916 (22,764) in other countries.

The figures include the number of staff at our consolidated subsidiaries.

Breakdown of number of staff

	31.12.2023	Prev. year
Reinsurance	16,146	15,211
ERGO	26,666	26,178
Total	**42,812**	**41,389**

61 Auditor's fees

For services rendered to the parent and consolidated subsidiaries by the Group auditor (EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft), the following fees – in line with IDW RS HFA 36 – were recognised as an expense in the financial year:

Breakdown of auditor's fees

€m	2023
Audit services	–14.5
Other assurance and appraisal services	–0.5
Tax consultancy services	0.0
Other services	–1.0
Total	**–16.0**

The auditor's fees mainly relate to the statutory audits of the consolidated financial statements and the annual financial statements of Munich Reinsurance Company; to various audits of our subsidiaries' annual financial statements, including statutory extensions of the audit assignment (in particular, the audit of the solvency balance sheet); and to audit services agreed with the Audit Committee regarding the introduction of IFRS 9 and IFRS 17. In addition, the following were carried out: reviews of interim financial statements, voluntary audits of annual financial statements, project-related IT audits, and contractual reviews of service providers' internal control systems.

Other assurance and appraisal services concern statutory, contractual, or other audit and consulting services, including services rendered to the statutory protection fund for life insurance and authorities outside Germany, and the confirmation of environmental KPIs. Additional services included the audit of the combined non-financial statement, the issuance of a comfort letter, and the audit of the Green Bond Allocation Report concerning the use of the proceeds.

Other services essentially related to quality assurance support in connection with the introduction of regulatory requirements based on solutions and concepts we developed.

Taking the international EY network companies into account, the auditor's fees come to €30.8m (30.2m), with one-off fees for the introduction of new accounting standards and IT special project audits of €6.1m (5.8m). Other assurance and appraisal services amount to €1.7m (2.3m) and other services to €1.1m (1.3m). No tax consultancy services were performed.

62 Contingent liabilities, other financial commitments

Munich Re enters into contingent liabilities in connection with its normal business operations. As at the reporting date, obligations from guarantees amounted to €15m (0m). The obligations from legal disputes totalled €4m (4m). Other contingent liabilities amounted to €1m (0m).

Like the evaluation process for other provisions, the assessment is made by experts in the affected units on the basis of the best estimate. Contingent liabilities are disclosed if there is only a potential obligation or there is a present obligation for which it is, however, deemed unlikely that an outflow of resources will occur, or it is not possible to make a sufficiently reliable estimate of the amount of the obligation.

ERGO companies have assumed unlimited liability for the sale of insurance products by insurance intermediaries acting exclusively on their behalf. In this respect, there is a risk of a claim being made by customers. In case of a claim, there is generally a possibility of recourse against the insurance intermediary or the latter's fidelity guarantee insurance carrier.

The application of fiscal regulations may yet be unresolved at the time of calculation of tax refund claims and tax liabilities. The calculation of tax items is based on the regulations most likely to be applied in each case. Regardless of this, the tax authorities may take a different view, which may give rise to additional tax liabilities.

In accordance with the German Insurance Supervision Act (VAG), all German life and health insurers of our Group are obliged to be members of a protection fund. For life insurers, the protection fund can levy special contributions of up to one per mille of total net technical provisions, in addition to a regular contribution of 0.2 per mille of total net technical provisions. For the health insurers, there is no pre-financing, but the fund may levy special contributions of up to two per mille of net technical provisions to fulfil its functions. This could give rise to a potential payment obligation of €159m (169m) at Group level. The functions and powers of the statutory protection fund for life insurance rest with Protektor Lebensversicherungs-AG, and those of the statutory protection fund for health insurance with Medicator AG.

Munich Re is a member of the German Nuclear Reactor Insurance Association (DKVG) and the Pharma Reinsurance Community. If another member of these pools is not able to meet their payment obligations, we may be held liable for a proportional share of their obligations. However, we consider the risk of such a liability arising to be remote.

Besides this, Munich Re has entered into various other financial obligations amounting to €1,429m (1,259m) for work and service contracts – and €2,667m (2,699m) for investment obligations, of which €9m (31m) is from our investments in joint ventures. At the end of the reporting period, there were loan commitments amounting to €24m (2,008m). In addition, loan commitments that were previously accounted for in accordance with IAS 37 are now classified as "at fair value through profit or loss" as per IFRS 9 – provided the financial instruments added later are accounted for at fair value. There are other financial commitments amounting to €13m (13m).

Munich Re has no other financial commitments of significance for the assessment of its financial position. No contingent liabilities have been entered into for the benefit of Board members.

63 Significant restrictions

Regulatory, legal or contractual restrictions and protective rights of non-controlling interests may restrict the Group's ability to access or use assets, and settle liabilities.

The carrying amounts of Group assets with restrictions on title can be found in the Notes to the consolidated balance sheet – Assets. The restrictions primarily result from contractual agreements, including pledged securities deposits to collateralise payment obligations from insurance business, the collateralisation of derivative transactions with securities and cash collateral or of bank liabilities with non-financial assets.

Individual national regulations require that assets held to cover insurance liabilities be managed separately. Generally there are special supervisory regulations governing access to these assets and their use.

In addition, we are subject to supervisory requirements that may restrict dividend payments or other capital distributions, loans and advance payments within the Group.

Due to supervisory requirements concerning equity, our subsidiaries Munich American Reassurance Company and Munich Reinsurance America Inc. can currently only pay dividends or transfer capital to the parent company with the approval of the competent US regulatory authority.

64 Leases

The right-of-use assets and lease liabilities associated with our leases can be found in the Notes to the consolidated balance sheet – Assets > 23 Other assets, and in the Notes to the consolidated balance sheet – Equity and liabilities > 31 Liabilities from financing activities.

Short-term leases with terms shorter than 12 months (and no purchase option) and leases for which the underlying asset is of low value are not recognised. Instead they are recognised through profit or loss as an expense of €1m (2m).

Munich Re also acts as the lessor. Operating leases mainly involve leased property.

Future minimum lease payments under operating leases

€m	31.12.2023	Prev. year
≤ 1 year	366	360
> 1 year and ≤ 5 years	1,097	1,100
> 5 years	1,118	1,245
Total	**2,581**	**2,706**

There were several finance leases for property at the end of the reporting period, which are listed in the table below:

Due dates

			31.12.2023			Prev. year
€m	Gross investment	Interest element	Net investment	Gross investment	Interest element	Net investment
Minimum lease payments ≤ 1 year	1	0	0	1	0	0
Minimum lease payments > 1 year and ≤ 5 years	5	1	4	2	1	1
Minimum lease payments > 5 years	72	55	17	69	55	13
Total minimum lease payments	**78**	**57**	**21**	**71**	**56**	**15**
Unguaranteed residual values	41	29	13	41	29	12
Total	**119**	**85**	**34**	**113**	**86**	**27**

65 Events after the balance sheet date

On 31 January 2024 – via its subsidiaries TS Texas II LP, Wilmington, and TS Louisiana II LP, Wilmington – Munich Re acquired 44,000 hectares of forest in Texas and Louisiana from an institutional investor and concluded a forest management contract. The forests will be managed professionally and sustainably so as to ensure long-term cash inflows for Munich Re by means of logging and systematic reforestation. The preliminary purchase price for the forest properties totals €230m: €117m for TS Texas II LP and €113m for TS Louisiana II LP, settled in cash. The provisional fair values of the assets and liabilities at the acquisition date comprised non-financial investments of €230m, of which €220m was attributable to biological assets and properties. No contingent liabilities existed at the acquisition date.

Munich Reinsurance Company initiated a share buy-back programme in February 2023. By the Annual General Meeting on 25 April 2024, shares for a maximum total value of €1bn (excluding incidental expenses) are to be bought back.

66 Earnings per share

There were no diluting effects to be disclosed for the calculation of earnings per share either in the financial year or in the previous year. Earnings per share can potentially be diluted in future through the issue of shares or subscription rights from amounts authorised for increasing the share capital and from contingent capital.

Earnings per share

		2023	Prev. year
Net result attributable to Munich Reinsurance Company equity holders	€m	4,606	5,313
Weighted average number of outstanding shares		135,976,812	139,364,438
Earnings per share	**€**	**33.88**	**38.12**

The number of outstanding shares decreased by 3,043,376 (2,455,748) over the course of the 2023 financial year owing to the share buy-back programme.

67 Proposal for appropriation of profit

Munich Reinsurance Company's net retained profits for 2023 according to its financial statements prepared on the basis of German GAAP accounting amounted to €2,011,227,360.00. The Board of Management will propose to shareholders at the Annual General Meeting that these net retained profits be used for payment of a dividend of €15.00 per dividend-bearing share, with the remaining amount being carried forward.

List of shareholdings as at 31 December 2023 pursuant to Section 313(2) of the German Commercial Code (HGB)

The following disclosures relate to our aggregated directly and indirectly held shareholdings (pursuant to Section 16(2) and (4) of the German Stock Corporation Act – AktG) in entities included in consolidation pursuant to Section 315e of the German Commercial Code, and in participating interests as defined in Section 271(1) of the German Commercial Code.

Company and registered seat	% share of capital
Consolidated subsidiaries	
13th & F Associates Limited Partnership, Washington, D.C.[1]	100.0000
40 Courcelles SAS, Paris	100.0000
320 Park Avenue Associates LLC, Dover, Delaware	100.0000
330 Madison Associates LLC, Dover, Delaware	100.0000
330 Madison Holdings LLC, Dover, Delaware	100.0000
1440 New York Ave. Associates LP, Dover, Delaware[1]	100.0000
Adelfa Servicios a Instalaciones Fotovoltaicas S.L., Santa Cruz de Tenerife	100.0000
AGRA Gesellschaft für landwirtschaftliche Entwicklung und Beteiligung GmbH, Berlin	100.0000
ALLYSCA Assistance GmbH, Munich	100.0000
American Alternative Insurance Corporation, Wilmington, Delaware	100.0000
American Digital Title Insurance Company, Brighton, Colorado	100.0000
American Family Home Insurance Company, Jacksonville, Florida	100.0000
American Modern Home Insurance Company, Amelia, Ohio	100.0000
American Modern Home Service Company, Amelia, Ohio	100.0000
American Modern Insurance Company of Florida Inc., Jacksonville, Florida	100.0000
American Modern Insurance Group Inc., Amelia, Ohio	100.0000
American Modern Lloyds Insurance Company, Dallas, Texas	100.0000
American Modern Property & Casualty Insurance Company, Amelia, Ohio	100.0000
American Modern Select Insurance Company, Amelia, Ohio	100.0000
American Southern Home Insurance Company, Jacksonville, Florida	100.0000
American Western Home Insurance Company, Oklahoma City, Oklahoma	100.0000
ATU Landbau GmbH & Co. KG, Munich	94.9000
Bagmoor Holdings Limited, London	100.0000
Bagmoor Wind Limited, London	100.0000
Bell & Clements (London) Ltd., London	100.0000
Bell & Clements (USA) Inc., Wilmington, Delaware	100.0000
Bell & Clements Inc., Herndon, Virginia	100.0000
Bell & Clements Ltd., London	100.0000
Blewett & Associates Inc., London, Ontario	75.0000
Bridgeway Insurance Company, Dover, Delaware	100.0000
Cardea Silva I LP, Wilmington, Delaware	100.0000
CBIG – Canadian Benefits Investment & Insurance Group Inc., Vancouver, British Columbia	67.4946
CBIG Investments Inc., Vancouver, British Columbia	100.0000
CBIG Mortgage Group Ltd., Vancouver, British Columbia	100.0000
Ceres Demetra GmbH, Munich	100.0000
Chinook Silva LLC, Wilmington, Delaware	100.0000
CITY OFFICE S.A., Brussels	100.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2018-24, Wilmington, Delaware	95.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2018-31, Wilmington, Delaware	95.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2019-05, Wilmington, Delaware	95.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2019-10, Wilmington, Delaware	95.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2019-40, Wilmington, Delaware	95.0000
Consumer Loan Underlying Bond (CLUB) Certificate Issuer Trust I Series 2019-47, Wilmington, Delaware	95.0000
Corion Pty Ltd, Sydney	100.0000
Cornwall Power (Polmaugan) Limited, London	100.0000
Countryside Renewables (Forest Heath) Limited, London	100.0000
D.A.S. Société anonyme belge d'assurances de Protection Juridique, Brussels	100.0000
D.A.S. Towarzystwo Ubezpieczen Ochrony Prawnej S.A., Warsaw	100.0000
Dansk Demetra ApS, Frederiksberg C	100.0000
DAS Holding N.V., Amsterdam	51.0000
DAS Law Limited, Bedwas	100.0000
DAS Legal Expenses Insurance Company Limited, Bedwas	100.0000
DAS Legal Services B.V., Amsterdam	100.0000
DAS Nederlandse Rechtsbijstand Verzekeringmaatschappij N.V., Amsterdam	100.0000
DAS Services Limited, Bedwas	100.0000
DAS UK Holdings Limited, Bedwas	100.0000
Digital Advantage Insurance Company, Dover, Delaware	100.0000
DKV Belgium S.A., Brussels	100.0000
DKV Deutsche Krankenversicherung Aktiengesellschaft, Cologne	100.0000
DKV Erste Real Estate GmbH & Co. KG, Düsseldorf	100.0000
DKV Pflegedienste & Residenzen GmbH, Cologne	100.0000
DKV Seguros y Reaseguros S.A. Española, Saragossa	100.0000
DKV Servicios S.A., Saragossa	100.0000
DKV Zweite Real Estate GmbH & Co. KG, Düsseldorf	100.0000
DMI Disability Management Institute Inc., Vancouver, British Columbia	100.0000
DWS Concept SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I4D), Luxembourg	100.0000
DWS Concept SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I6D o.N.), Luxembourg	100.0000

Company and registered seat	% share of capital
DWS Concept SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I7D o.N.), Luxembourg	100.0000
DWS Concept SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I8D o.N.), Luxembourg	100.0000
E&S Claims Management Inc., Herndon, Virginia	100.0000
EIG Co., Wilmington, Delaware	100.0000
ERGO Austria International AG, Vienna	100.0000
ERGO Beratung und Vertrieb AG, Düsseldorf	100.0000
ERGO Danismanlik A.S., Istanbul	100.0000
ERGO Deutschland AG, Düsseldorf	100.0000
ERGO Digital Ventures AG, Düsseldorf	100.0000
ERGO Direkt AG, Fürth	100.0000
ERGO DIREKT Versicherung AG, Fürth	100.0000
ERGO Elfte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO Fund I LP, Dover, Delaware[1]	100.0000
ERGO Generales Seguros y Reaseguros S.A., Madrid	100.0000
ERGO Group AG, Düsseldorf	100.0000
ERGO Grundstücksverwaltung GbR, Düsseldorf[1]	100.0000
ERGO Insurance (Thailand) Public Co. Ltd., Bangkok	86.9039
ERGO Insurance Company Single Member S.A., Athens	100.0000
ERGO Insurance N.V., Brussels	100.0000
ERGO Insurance Pte. Ltd., Singapore	100.0000
ERGO Insurance SE, Tallinn	100.0000
ERGO International Aktiengesellschaft, Düsseldorf	100.0000
ERGO International Services GmbH, Düsseldorf	100.0000
ERGO Invest SIA, Riga	100.0000
ERGO Krankenversicherung AG, Fürth	100.0000
ERGO Lebensversicherung Aktiengesellschaft, Hamburg	100.0000
ERGO Life Insurance SE, Vilnius	100.0000
ERGO Life S.A., Grevenmacher	100.0000
ERGO Neunte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO Pensionsfonds Aktiengesellschaft, Düsseldorf	100.0000
ERGO Pensionskasse AG, Düsseldorf	100.0000
ERGO Private Capital Dritte GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital ERGO Leben GmbH, Düsseldorf	100.0000
ERGO Private Capital Gesundheit GmbH, Düsseldorf	100.0000
ERGO Private Capital Komposit GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Pensionskasse GmbH, Düsseldorf	100.0000
ERGO Private Capital Victoria Leben GmbH, Düsseldorf	100.0000
ERGO Private Capital Vierte GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Vorsorge GmbH, Düsseldorf	100.0000
ERGO Private Capital Zweite GmbH & Co. KG, Düsseldorf	100.0000
ERGO Reiseversicherung AG, Munich	100.0000
ERGO Sechzehnte Beteiligungs-AG, Munich	100.0000
ERGO SU Erste Real Estate GmbH & Co.KG, Düsseldorf	100.0000
ERGO Technology & Services Management AG, Düsseldorf	100.0000
ERGO Technology & Services S.A., Gdańsk	100.0000
ERGO Versicherung Aktiengesellschaft, Düsseldorf	100.0000
ERGO Versicherung Aktiengesellschaft, Vienna	100.0000
ERGO Vida Seguros y Reaseguros S.A., Saragossa	100.0000
ERGO Vorsorge Lebensversicherung AG, Düsseldorf	100.0000
ERV Evropská pojišťovna a.s., Prague	100.0000
Euro-Center Holding SE, Prague	83.3333
Europaeiske Rejseforsikring A/S, Copenhagen	100.0000
Faunus Silva LLC, Wilmington, Delaware	100.0000
Flexitel Telefonservice GmbH, Berlin	100.0000
Forst Ebnath AG, Ebnath	100.0000

Company and registered seat	% share of capital
FOTOUNO S.r.l., Brixen	100.0000
FOTOWATIO ITALIA GALATINA S.r.l., Brixen	100.0000
FREE MOUNTAIN SYSTEMS S.L., Madrid	100.0000
FS Louisiana I LLC, Wilmington, Delaware	100.0000
FS Louisiana II LLC, Wilmington, Delaware	100.0000
FS San Augustine LLC, Wilmington, Delaware	100.0000
Fundo Invest Exclusivo referenciado di Munich Re Brasil, São Paulo[4]	99.7900
FW Żary Sp.z.o.o., Warsaw	100.0000
Gaucheret S.A., Ixelles	100.0000
GHGH Holdings Inc., Vancouver, British Columbia	100.0000
Global Standards LLC, Dover, Delaware	100.0000
Great Lakes Insurance SE, Munich	100.0000
Great Lakes Insurance UK Limited, London	100.0000
GroupHEALTH Global Benefit Systems Inc., Vancouver, British Columbia	100.0000
GroupHealth Northern Partners Inc., Vancouver, British Columbia	100.0000
GroupSource GP Inc., Vancouver, British Columbia	100.0000
GroupSource Limited Partnership, Calgary, Alberta[1]	100.0000
Groves, John & Westrup Limited, Liverpool	100.0000
Habiriscos – Investimentos Imobiliários, S.A., Lisbon	100.0000
Haley Silva LP, Wilmington, Delaware	100.0000
Hartford Steam Boiler (M) SDN BHD, Kuala Lumpur	100.0000
Hartford Steam Boiler (Singapore) Pte. Ltd., Singapore	100.0000
Hartford Steam Boiler International GmbH, Rheine	100.0000
Hartford Steam Boiler Ireland Limited, Dublin	100.0000
HMV GFKL Beteiligungs GmbH, Düsseldorf	100.0000
Houten Property B.V., Amsterdam	100.0000
HSB Brasil Servicos de Engenharia e Inspecao Ltda, São Paulo	100.0000
HSB Engineering Finance Corporation, Dover, Delaware	100.0000
HSB Engineering Insurance Limited, Manchester	100.0000
HSB Engineering Insurance Services Limited, London	100.0000
HSB Fund I LP, Dover, Delaware[1]	100.0000
HSB Group Inc., Dover, Delaware	100.0000
HSB International (India) Private Limited, Vadodara	100.0000
HSB Japan K.K., Tokyo	100.0000
HSB Secure Services Inc., Hartford, Connecticut	100.0000
HSB Solomon Associates Canada Ltd., Saint John, New Brunswick	100.0000
HSB Solomon Associates LLC, Dover, Delaware	100.0000
HSB Specialty Insurance Company, Hartford, Connecticut	100.0000
HSB Technical Consulting & Service (Shanghai) Co. Ltd., Shanghai	100.0000
Ibero Property Portugal – Investimentos Imobiliários S.A., Lisbon	100.0000
Ibero Property Trust S.A., Madrid	100.0000
IDEENKAPITAL Financial Service GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL GmbH, Düsseldorf	100.0000
IDEENKAPITAL Media Finance GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL Metropolen Europa GmbH & Co. KG, Düsseldorf	72.3477
iii-Fonds VICTORIA Lebensversicherung, Munich[4]	100.0000
IK Einkauf Objekt Eins GmbH & Co. KG, Düsseldorf	100.0000
IK Einkauf Objektmanagement GmbH, Düsseldorf	100.0000
IK Einkaufsmärkte Deutschland GmbH & Co. KG, Düsseldorf	52.0867
IK Premium Fonds GmbH & Co. KG, Düsseldorf	100.0000

Company and registered seat	% share of capital
IKFE Properties I AG, Zurich	66.7019
Imofloresmira – Investimentos Imobiliários S.A., Lisbon	100.0000
ITERGO Informationstechnologie GmbH, Düsseldorf	100.0000
ITERGO Service GmbH, Düsseldorf	100.0000
K & P Pflegezentrum Uelzen IMMAC Renditefonds GmbH & Co. KG, Düsseldorf	85.5944
KA Köln.Assekuranz Agentur GmbH, Cologne	100.0000
KS SPV 23 Limited, London	100.0000
Laren Silva I LP, Wilmington, Delaware	100.0000
Laurel Preston Hollow Associates LLC, Wilmington, Delaware	100.0000
LEGIAL AG, Munich	100.0000
Liberty Warehouse Associates LLC, Wilmington, Delaware	100.0000
Lietuva Demetra GmbH, Munich	100.0000
Lloyds Modern Corporation, Dallas, Texas	100.0000
Longial GmbH, Düsseldorf	100.0000
Lynt Farm Solar Limited, London	100.0000
MAGAZ FOTOVOLTAICA S.L.U., Alcobendas	100.0000
Manion Wilkins & Associates Ltd., Toronto, Ontario	64.7406
Marina Sp.z.o.o., Sopot	100.0000
MD Insurance Services Limited, Birkenhead	100.0000
MD Remedial Contractors Limited, Birkenhead	100.0000
MD Warranty Inspection Services Limited, Birkenhead	100.0000
MD Warranty Support Services Limited, Birkenhead	100.0000
MEAG Ambition, Munich[4]	100.0000
MEAG Anglo Celtic Fund, Munich[4]	100.0000
MEAG ATLAS, Munich[4]	100.0000
MEAG Benedict, Munich[4]	100.0000
MEAG Cash Management GmbH, Munich	100.0000
MEAG EDK Quantum, Munich[4]	100.0000
MEAG EDL CurryGov, Munich[4]	100.0000
MEAG EDS AGIL, Munich[4]	100.0000
MEAG ESUS 1, Munich[4]	100.0000
MEAG EUR Global 1, Munich[4]	100.0000
MEAG Euro 1, Munich[4]	100.0000
MEAG Euro 2, Munich[4]	100.0000
MEAG EURO-FONDS, Munich[4]	100.0000
MEAG European Prime Opportunities, Munich[4]	56.6867
MEAG Eurostar, Munich[4]	100.0000
MEAG EURO-Yield, Munich[4]	100.0000
MEAG FlexConcept – Basis, Luxembourg[4]	100.0000
MEAG FlexConcept – Eurobond, Luxembourg[4]	100.0000
MEAG FlexConcept – Wachstum, Luxembourg[4]	100.0000
MEAG GBP Global-STAR, Munich[4]	100.0000
MEAG German Prime Opportunities (GPO), Munich[4]	100.0000
MEAG HBG 1, Munich[4]	100.0000
MEAG HM Sach Rent 1, Munich[4]	100.0000
MEAG HMR 1, Munich[4]	100.0000
MEAG HMR 2, Munich[4]	100.0000
MEAG Hyperion Fund, Munich[4]	100.0000
MEAG IREN, Munich[4]	100.0000
MEAG Kapital 2, Munich[4]	100.0000
MEAG Kapital 5, Munich[4]	100.0000
MEAG Kubus 1, Munich[4]	100.0000
MEAG Lambda EUR EM Local, Grünwald[4]	100.0000
MEAG Lambda EUR, Grünwald[4]	100.0000
MEAG Lambda GBP, Grünwald[4]	100.0000
MEAG Lambda USD, Grünwald[4]	100.0000
MEAG Multi Life, Munich[4]	100.0000

Company and registered seat	% share of capital
MEAG Multi Sach 1, Munich[4]	100.0000
MEAG MUNICH ERGO AssetManagement GmbH, Munich	100.0000
MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH, Munich	100.0000
MEAG Munich Re Placement, Grünwald[4]	100.0000
MEAG New York Corporation, Dover, Delaware	100.0000
MEAG PEGASUS, Munich[4]	100.0000
MEAG Pension Invest, Munich[4]	100.0000
MEAG Pensionskasse Nord, Munich[4]	100.0000
MEAG Pensionskasse West, Munich[4]	100.0000
MEAG PREMIUM, Munich[4]	100.0000
MEAG Prof III Beteiligungsgesellschaft mbH, Munich	100.0000
MEAG Property Fund I, Munich[4]	100.0000
MEAG Property Fund III, Munich[4]	100.0000
MEAG RenditePlus, Munich[4]	100.0000
MEAG REVO, Munich[4]	100.0000
MEAG Spectrum, Munich[4]	100.0000
MEAG Venus, Munich[4]	100.0000
MEAG Vidas Rent 3, Munich[4]	100.0000
MEAG VISION, Munich[4]	100.0000
MEAG VLA, Munich[4]	100.0000
MedNet Holding GmbH, Munich	100.0000
MedVirginia Inc., Dover, Delaware	100.0000
Merkur Grundstücks- und Beteiligungs-GmbH, Düsseldorf	100.0000
Meshify Inc., Dover, Delaware	100.0000
Midland-Guardian Co., Amelia, Ohio	100.0000
MR Bazos LP, Dover, Delaware[1]	100.0000
MR Beteiligungen 2. EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen 2. GmbH, Munich[3]	100.0000
MR Beteiligungen 3. EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen 18. GmbH & Co. 2. Real Estate KG, Grünwald[2]	100.0000
MR Beteiligungen 18. GmbH & Co. 3. Real Estate KG, Grünwald[2]	100.0000
MR Beteiligungen 18. GmbH & Co. 4. Real Estate KG, Grünwald[2]	100.0000
MR Beteiligungen 18. GmbH & Co. Immobilien KG, Grünwald[2]	100.0000
MR Beteiligungen 18. GmbH & Co. Real Estate KG, Grünwald[2]	100.0000
MR Beteiligungen 19. GmbH, Munich	100.0000
MR Beteiligungen EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen GBP AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen UK AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen USD AG & Co. KG, Grünwald[2]	100.0000
MR Debt Finance GmbH, Grünwald	100.0000
MR Electra LP, Dover, Delaware[1]	100.0000
MR ERGO Beteiligungen GmbH, Grünwald	100.0000
MR Falcon LP, Dover, Delaware[1]	100.0000
MR Gotham LP, Dover, Delaware[1]	100.0000
MR Hunu LP, Dover, Delaware[1]	100.0000
MR Infrastructure Inc., Dover, Delaware	100.0000
MR Infrastructure Investment GmbH, Munich[3]	100.0000
MR Investment Inc., Dover, Delaware	100.0000
MR Jordan LP, Dover, Delaware[1]	100.0000
MR McQueen LP, Dover, Delaware[1]	100.0000
MR Olivia LP, Dover, Delaware[1]	100.0000
MR RENT UK Investment Limited, London	100.0000
MR Residential Holding LLC, Wilmington, Delaware	100.0000

Company and registered seat	% share of capital
MR US Multifamily Investment LLC, Dover, Delaware	100.0000
MRSG UK Services Limited, London	100.0000
Munich American Reassurance Company, Norcross, Georgia	100.0000
Munich Holdings Ltd., Toronto, Ontario	100.0000
Munich Holdings of Australasia Pty Ltd, Sydney	100.0000
Munich Life Holding Corporation, Dover, Delaware	100.0000
Munich Life Management Corporation Limited, Toronto, Ontario	100.0000
Munich Management Pte. Ltd., Singapore	100.0000
Munich Re America Corporation, Dover, Delaware	100.0000
Munich Re America Services Inc., Wilmington, Delaware	100.0000
Munich Re Automation Solutions Limited, Dublin	100.0000
Munich Re Capital Limited, London	100.0000
Munich Re CVC Investment Corp., Dover, Delaware	100.0000
Munich Re Digital Partners Limited, London	100.0000
Munich Re Digital Partners US Holding Corporation, Dover, Delaware	100.0000
Munich Re do Brasil Resseguradora SA, São Paulo	100.0000
Munich Re Energy Transition Finance Inc., Dover, Delaware	100.0000
Munich Re Fund I LP, Dover, Delaware[1]	100.0000
Munich Re Fund II LP, Dover, Delaware[1]	100.0000
Munich Re Life Insurance Company of Vermont, Burlington, Vermont	100.0000
Munich Re New Ventures Inc., Toronto, Ontario	100.0000
Munich Re of Bermuda Ltd., Hamilton, Bermuda	100.0000
Munich Re of Malta Holding Limited, Ta' Xbiex	100.0000
Munich Re of Malta p.l.c., Ta' Xbiex	100.0000
Munich Re PCC Limited, Ta' Xbiex	100.0000
Munich Re Specialty Group Insurance Services Inc., Boston, Massachusetts	100.0000
Munich Re Specialty Group Ltd., London	100.0000
Munich Re Specialty Group N.A. Inc., Wilmington, Delaware	100.0000
Munich Re Specialty Insurance (UK) Limited, Manchester	100.0000
Munich Re Syndicate Labuan Limited, Labuan	100.0000
Munich Re Syndicate Limited, London	100.0000
Munich Re Syndicate Singapore Ltd., Singapore	100.0000
Munich Re Trading LLC, Dover, Delaware	100.0000
Munich Re UK Services Limited, London	100.0000
Munich Re US Life Corporation, Norcross, Georgia	100.0000
Munich Re Ventures Inc., Dover, Delaware	100.0000
Munich Re Ventures LLC, Dover, Delaware	100.0000
Munich Re Weather & Commodity Risk Holding Inc., Dover, Delaware	100.0000
Munich Reinsurance America Inc., Wilmington, Delaware	100.0000
Munich Reinsurance Company of Africa Ltd, Johannesburg	100.0000
Munich Reinsurance Company of Australasia Limited, Sydney	100.0000
Munich Reinsurance Company of Canada, Toronto, Ontario	100.0000
Munich-American Holding Corporation, Wilmington, Delaware	100.0000
MunichFinancialGroup GmbH, Munich	100.0000
Munichre Service Limited, Hong Kong	100.0000
Nam Seng Insurance Public Co. Ltd., Bangkok	99.4677
New Reinsurance Company Ltd., Zurich	100.0000
nexible Versicherung AG, Nuremberg	100.0000
OIK Mediclin, Wiesbaden[4]	70.7073
Otway Silva Pty Limited, Melbourne	100.0000
Pan Estates LLC, Wilmington, Delaware	100.0000
Parachute Digital Solutions Inc., Wilmington, Delaware	100.0000
Pegasos Holding GmbH, Munich	100.0000
Picus Silva Inc., Wilmington, Delaware	100.0000
Poincaré N.V., Brussels	100.0000
Ponga Silva Limited, Rotorua	100.0000
Prosper Pass-Thru Trust I Series 2018-1, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2018-2, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-01, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-02, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-03, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-04, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-05, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2019-06, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2020-01, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2020-02, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2021-01, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2021-02, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2021-03, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2021-04, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2021-05, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-01, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-02, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-03, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-04, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-05, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-06, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-07, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-08, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2022-09, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-01, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-02, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-03, Wilmington, Delaware	95.0000

Company and registered seat	% share of capital
Prosper Pass-Thru Trust I Series 2023-04, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-05, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-06, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-07, Wilmington, Delaware	95.0000
Prosper Pass-Thru Trust I Series 2023-08, Wilmington, Delaware	95.0000
PS Louisiana I LLC, Wilmington, Delaware	100.0000
PS Louisiana II LLC, Wilmington, Delaware	100.0000
Raccoon Silva LLC, Camden, Delaware	100.0000
Relayr GmbH, Pullach i. Isartal	100.0000
Relayr Inc., Dover, Delaware	100.0000
Relayr Limited, Watford	100.0000
Relayr Sp. Z o.o., Katowice	100.0000
Renaissance Hotel Realbesitz GmbH, Vienna	60.0000
Roanoke Insurance Group Inc., Schaumburg, Illinois	100.0000
Roanoke International Brokers (MENA) Limited, Dubai	100.0000
Roanoke International Brokers Limited, London	100.0000
Saline Silva LP, Wilmington, Delaware	100.0000
Scout Moor Group Limited, London	100.0000
Scout Moor Holdings (No. 1) Limited, London	100.0000
Scout Moor Holdings (No. 2) Limited, London	100.0000
Scout Moor Wind Farm Limited, London	100.0000
Silvanus Vermögensverwaltungsgesellschaft mbH, Munich[3]	100.0000
Solarpark Fusion 3 GmbH, Düsseldorf	100.0000
Solomon Associates Limited, Farnborough	100.0000
Sopockie Towarzystwo Ubezpieczen Ergo Hestia Spolka Akcyjna, Sopot	100.0000
Sopockie Towarzystwo Ubezpieczen na Zycie Ergo Hestia Spolka Akcyjna, Sopot	100.0000
Specialty Insurance Services Corporation, Amelia, Ohio	100.0000
Strawinskyhuis B.V., Amsterdam	100.0000
Sun Energy & Partners S.r.l., Brixen	100.0000
Tellus Demetra LLC, Wilmington, Delaware	100.0000
Temple Insurance Company, Toronto, Ontario	100.0000
The Atlas Insurance Agency Inc., Amelia, Ohio	100.0000
The Boiler Inspection and Insurance Company of Canada, Toronto, Ontario	100.0000
The Hartford Steam Boiler Inspection and Insurance Company of Connecticut, Hartford, Connecticut	100.0000
The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Connecticut	100.0000
The Midland Company, Amelia, Ohio	100.0000
The Polytechnic Club Inc., Hartford, Connecticut	100.0000
The Princeton Excess and Surplus Lines Insurance Company, Wilmington, Delaware	100.0000
THEC 2019 Zrt. "v.a.", Budapest	100.0000
Tir Mostyn and Foel Goch Limited, London	100.0000
UAB Agra Aurata, Vilnius	100.0000
UAB Agra Corporation, Vilnius	100.0000
UAB Agra Optima, Vilnius	100.0000
UAB Agrofondas, Vilnius	100.0000
UAB Agrolaukai, Vilnius	100.0000
UAB Agrora, Vilnius	100.0000
UAB Agrovalda, Vilnius	100.0000
UAB Agrovesta, Vilnius	100.0000
UAB G.Q.F., Vilnius	100.0000

Company and registered seat	% share of capital
UAB Lila Holdingas, Vilnius	100.0000
UAB Sietuve, Vilnius	100.0000
UAB Terra Culta, Vilnius	100.0000
UAB Ukelis, Vilnius	100.0000
UAB Vasaros Brizas, Vilnius	100.0000
UAB VL Investment Vilnius 1, Vilnius	100.0000
UAB VL Investment Vilnius 2, Vilnius	100.0000
UAB VL Investment Vilnius 3, Vilnius	100.0000
UAB VL Investment Vilnius 4, Vilnius	100.0000
UAB VL Investment Vilnius 5, Vilnius	100.0000
UAB VL Investment Vilnius 6, Vilnius	100.0000
UAB VL Investment Vilnius 7, Vilnius	100.0000
UAB VL Investment Vilnius 8, Vilnius	100.0000
UAB VL Investment Vilnius 9, Vilnius	100.0000
UAB VL Investment Vilnius 10, Vilnius	100.0000
UAB VL Investment Vilnius, Vilnius	100.0000
UK Wind Holdings Ltd., London	100.0000
Unión Médica La Fuencisla S.A., Compañía de Seguros, Saragossa	100.0000
VHDK Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
Victoria Lebensversicherung Aktiengesellschaft, Düsseldorf	100.0000
Victoria US Property Investment GmbH, Düsseldorf	100.0000
Victoria Vierter Bauabschnitt GmbH & Co. KG, Düsseldorf	100.0000
Vier Gas Investments S.à r.l., Luxembourg	100.0000
Vorsorge Service GmbH, Düsseldorf	100.0000
welivit GmbH, Düsseldorf	100.0000
welivit Solarfonds GmbH & Co. KG, Düsseldorf	100.0000
welivit Solarfonds S.a.s. di welivit Solar Italia S.r.l., Bolzano	100.0000
WFB Stockholm Management AB, Stockholm	100.0000
Wind Farm Jenasen AB, Hässleholm	100.0000
Wind Farms Götaland Svealand AB, Hässleholm	100.0000
Windpark MR-N GmbH, Bremen	100.0000
Unconsolidated subsidiaries	
1880fwd GmbH, Munich	100.0000
Agrifin GmbH & Co. KG, Munich	100.0000
Aleama 150015 S.L., Valencia	100.0000
ANOVA GmbH, Rostock	100.0000
apinity GmbH, Munich	100.0000
Arridabra 130013 S.L., Valencia	100.0000
ARTES Assekuranzservice GmbH, Düsseldorf	100.0000
Badozoc 1001 S.L., Valencia	100.0000
Baqueda 7007 S.L., Valencia	100.0000
Beehive Demetra Limited, Christchurch	100.0000
Benefit Innovations Inc., Vancouver, British Columbia	100.0000
Benelogix Benefits Inc., Vancouver, British Columbia[4]	50.0000
Bobasbe 6006 S.L., Valencia	100.0000
Botedazo 8008 S.L., Valencia	100.0000
Callopio 5005 S.L., Valencia	100.0000
Camcichu 9009 S.L., Valencia	100.0000
Caracuel Solar Catorce S.L., Valencia	100.0000
Caracuel Solar Cinco S.L., Valencia	100.0000
Caracuel Solar Cuatro S.L., Valencia	100.0000
Caracuel Solar Dieciocho S.L., Valencia	100.0000
Caracuel Solar Dieciseis S.L., Valencia	100.0000
Caracuel Solar Diecisiete S.L., Valencia	100.0000
Caracuel Solar Diez S.L., Valencia	100.0000
Caracuel Solar Doce S.L., Valencia	100.0000

Company and registered seat	% share of capital
Caracuel Solar Dos S.L., Valencia	100.0000
Caracuel Solar Nueve S.L., Valencia	100.0000
Caracuel Solar Ocho S.L., Valencia	100.0000
Caracuel Solar Once S.L., Valencia	100.0000
Caracuel Solar Quince S.L., Valencia	100.0000
Caracuel Solar Seis S.L., Valencia	100.0000
Caracuel Solar Siete S.L., Valencia	100.0000
Caracuel Solar Trece S.L., Valencia	100.0000
Caracuel Solar Tres S.L., Valencia	100.0000
Caracuel Solar Uno S.L., Valencia	100.0000
Care4Business Versicherungsmakler GmbH, Vienna	100.0000
Centrum Pomocy Osobom Poszkodowanym Sp.z.o.o., Gdańsk	100.0000
CertAI GmbH, Munich	100.0000
Cominia Aktuarielle Services GmbH, Hamburg	74.9000
Comino Beteiligungen GmbH, Grünwald	100.0000
Compenso GP LLC, Wilmington, Delaware	100.0000
Cotatrillo 100010 S.L., Valencia	100.0000
DAS Legal Expenses Insurance Co. Ltd., Seoul	100.0000
DEAX Õigusbüroo OÜ, Tallinn	100.0000
DKV Erste Beteiligungsgesellschaft mbH i. L., Cologne	100.0000
DKV-Residenz am Tibusplatz gGmbH, Münster	100.0000
DKV-Residenz in der Contrescarpe GmbH, Bremen	100.0000
DYRISK GmbH, Munich	100.0000
ERGO (China) Management Company Limited, Beijing	100.0000
ERGO Fund Golden Aging, Brussels[4]	100.0000
ERGO Gourmet GmbH, Düsseldorf	100.0000
ERGO Health Management Services (Beijing) Co. Ltd, Beijing	100.0000
ERGO Infrastructure Investment Gesundheit GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Komposit GmbH, Düsseldorf	100.0000
ERGO Leben Erste Real Estate GmbH & Co. KG, Düsseldorf	100.0000
ERGO Leben Zweite Real Estate GmbH & Co. KG, Düsseldorf	100.0000
ERGO Mobility Solutions GmbH, Düsseldorf	100.0000
ERGO Private Capital ERGO Direkt GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital ERGO Kranken GmbH, Düsseldorf	100.0000
ERGO Private Capital GmbH, Düsseldorf	100.0000
ERGO Rechtsschutz Leistungs-GmbH, Munich	100.0000
ERGO Technology & Services Private Limited, Mumbai	100.0000
ERGO Travel Insurance Services Ltd., London	100.0000
ERGO UK SPECIALTY LIMITED, London	100.0000
ERGO Versicherungs- und Finanzierungs-Vermittlung GmbH, Hamburg	100.0000
ERGO Vorsorgemanagement GmbH, Vienna	100.0000
ERGO Zehnte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO Zwölfte Beteiligungsgesellschaft mbH, Munich	100.0000
ERGO-FESCO Broker Company Limited, Beijing	66.0000
Etics ITP s.r.o., Prague	100.0000
Etoblete 160016 S.L., Valencia	100.0000
EUROCENTER S.A., Palma de Mallorca	100.0000
Euro-Center (Cyprus) Ltd., Larnaca	100.0000
Euro-Center (Thailand) Co., Ltd., Bangkok	100.0000
Euro-Center Cape Town (Pty) Ltd, Cape Town	100.0000
Euro-Center Holding North Asia (HK) Pte. Ltd., Hong Kong	100.0000
Euro-Center Ltda., São Paulo	100.0000

Company and registered seat	% share of capital
Euro-Center Prague s.r.o., Prague	100.0000
Euro-Center Sydney Pty Ltd., Sydney	100.0000
Euro-Center USA Inc., Plantation, Florida	100.0000
EURO-CENTER YEREL YARDIM HIZMETLERI Ltd. Şti., Istanbul	100.0000
European Assistance Holding GmbH i. L., Munich	100.0000
Eurosos Assistance S.A., Athens	75.0000
Gamaponti 140014 S.L., Valencia	100.0000
GBG Vogelsanger Straße GmbH, Cologne	94.7826
Gebäude Service Gesellschaft Überseering 35 mbH, Hamburg	100.0000
goDentis – Gesellschaft für Innovation in der Zahnheilkunde mbH, Cologne	100.0000
Guanzu 2002 S.L., Valencia	100.0000
Hansekuranz Kontor GmbH, Münster	100.0000
Hartford Steam Boiler Colombia Ltda, Bogotá	100.0000
Hartford Steam Boiler UK Limited, Manchester	100.0000
Hestia Loss Control Sp.z.o.o., Sopot	100.0000
HSB Associates Inc., New York City, New York	100.0000
HSB Offset Print EaaS GmbH & Co. KG, Munich	100.0000
HSB Offset Print Subscription LLC, Dover, Delaware	100.0000
HSB Sheet Metal EaaS GmbH & Co. KG, Munich	100.0000
HSB Ventures Inc., Dover, Delaware	100.0000
Ideenkapital erste Investoren Service GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL Financial Engineering GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL Investment GmbH, Düsseldorf	100.0000
Ideenkapital Media Treuhand GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL Metropolen Europa Verwaltungsgesellschaft mbH, Düsseldorf	100.0000
IDEENKAPITAL PRORENDITA EINS Treuhandgesellschaft mbH, Düsseldorf	100.0000
IFS Europe Holding GmbH, Munich	100.0000
IFS US Holding LLC, Dover, Delaware	100.0000
IK Einkauf Objektverwaltungsgesellschaft mbH, Düsseldorf	100.0000
IK Einkaufsmärkte Deutschland Verwaltungsgesellschaft mbH, Düsseldorf	100.0000
IK FE Fonds Management GmbH, Düsseldorf	100.0000
IK Komp GmbH, Düsseldorf	100.0000
IK Objekt Bensheim GmbH, Düsseldorf	100.0000
IK Pflegezentrum Uelzen Verwaltungs-GmbH, Düsseldorf	100.0000
IK Property Treuhand GmbH, Düsseldorf	100.0000
IoT Equipment Financing Services GmbH, Munich	100.0000
IoT Equipment Financing Services LLC, Dover, Delaware	100.0000
IoT Financing Services LLC, Dover, Delaware	100.0000
JRP (London) Limited, London	100.0000
JRP Insurance Management Limited, London	100.0000
JRP Underwriting Ltd., London	100.0000
Junos Verwaltungs GmbH, Munich	100.0000
KQV Solarpark Franken 1 GmbH & Co. KG, Düsseldorf	100.0000
Larus Vermögensverwaltungsgesellschaft mbH, Munich	100.0000
m:editerran Power S.a.s. di welivit Solar Italia S.r.l., Bolzano	100.0000
Marbury Agency Inc., Amelia, Ohio	100.0000
MD Affinity Schemes Limited, Birkenhead	100.0000
MD Technical Surveyors Limited, Birkenhead	100.0000
MDIS (International) Limited, Birkenhead	100.0000
MEAG ERGO Pension I, Munich[4]	100.0000

Company and registered seat	% share of capital
MEAG European Infrastructure One GP S.à r.l., Munsbach	100.0000
MEAG European Infrastructure One SCSp SICAV-RAIF, Munsbach[4]	100.0000
MEAG FlexConcept – EuroGrowth, Luxembourg[4]	100.0000
MEAG Hong Kong Limited, Hong Kong	100.0000
MEAG IDF III GP S.à r.l., Luxembourg	100.0000
MEAG Institutional Fund GP S.à r.l., Luxembourg	100.0000
MEAG Luxembourg S.à r.l., Luxembourg	100.0000
MEAG Pension Rent, Munich[4]	100.0000
MEAG Pension Safe, Munich[4]	100.0000
MEAG SFEF GP S.à r.l., Munsbach	100.0000
MEAG Sustainable Forestry Equity Fund SCSp SICAV-RAIF, Munsbach[4]	100.0000
MEAG Vermögensanlage Komfort, Munich[4]	46.4617
MEAG Vermögensanlage Return (A+I Tranche), Munich[4]	61.4923
Mediastream Film GmbH i. L., Grünwald	100.0000
Mediastream Zweite Film GmbH i. L., Grünwald	100.0000
MedNet Bahrain W.L.L., Manama	100.0000
MedNet Egypt LLC, Cairo	100.0000
MedNet Europa GmbH, Munich	100.0000
MedNet Global Healthcare Solutions LLC, Abu Dhabi	100.0000
MedNet Greece S.A., Athens	78.7157
MedNet Jordan Co. W.L.L., Amman	100.0000
MedNet Saudi Arabia LLC, Jeddah	100.0000
MedNet SPC, Muscat	100.0000
MedNet UAE FZ LLC, Dubai	100.0000
MFI Munich Finance and Investment Holding Limited, Ta' Xbiex	100.0000
MFI Munich Finance and Investment Limited, Ta' Xbiex	100.0000
miCura Pflegedienste Bremen GmbH, Bremen	100.0000
miCura Pflegedienste Düsseldorf GmbH, Düsseldorf	100.0000
miCura Pflegedienste GmbH i. L., Cologne	100.0000
miCura Pflegedienste Hamburg GmbH, Hamburg	100.0000
miCura Pflegedienste Krefeld GmbH, Krefeld	100.0000
miCura Pflegedienste München/Dachau GmbH, Dachau	51.0000
miCura Pflegedienste München Ost GmbH i. L., Munich	65.0000
miCura Pflegedienste Münster GmbH, Münster	100.0000
miCura Pflegedienste Nürnberg GmbH, Nuremberg	51.0000
MPL Claims Management Ltd., London	100.0000
MPL LEGAL SERVICES Ltd., London	100.0000
MR Beteiligungen 2. UK AG & Co. KG, Grünwald	100.0000
MR Beteiligungen 3. GmbH, Munich	100.0000
MR Beteiligungen 15. GmbH, Munich	100.0000
MR Beteiligungen 17. GmbH, Munich	100.0000
MR Beteiligungen 18. GmbH, Grünwald	100.0000
MR Beteiligungen 20. GmbH, Munich	100.0000
MR Beteiligungen 21. GmbH, Munich	100.0000
MR Beteiligungen 22. GmbH, Munich	100.0000
MR Beteiligungen 24. GmbH, Munich	100.0000
MR Beteiligungen 25. GmbH, Munich	100.0000
MR Beteiligungen AG, Grünwald	100.0000
MR Equity Investment GmbH, Munich	100.0000
MR Financial Group GmbH, Munich	100.0000
MR Group Investment US Inc., Dover, Delaware	100.0000
MR HealthTech Ltd., Nicosia	100.0000
MR Risk Services 3. GmbH, Munich	100.0000
MR Risk Services 4. GmbH, Munich	100.0000
MR Solar GmbH & Co. KG, Düsseldorf	100.0000

Company and registered seat	% share of capital
MR Solar S.a.s. di welivit Solar Italia S.r.l., Bolzano	100.0000
MTC Mobility Technology Center GmbH, Garching	74.0000
Münchener de Argentina Servicios Técnicos S.R.L., Buenos Aires	90.0000
Münchener de Mexico S.A., Mexico City	100.0000
Münchener de Venezuela C.A. Intermediaria de Reaseguros, Caracas	100.0000
Munich American Reassurance Company PAC Inc., Norcross, Georgia[4]	0.0000
Munich Canada Systems Corporation, Toronto, Ontario	100.0000
Munich Health Daman Holding Ltd., Abu Dhabi	51.0000
Munich Re America Management Ltd., London	100.0000
Munich Re Automation Solutions GmbH, Munich	100.0000
Munich Re Automation Solutions Inc., Wilmington, Delaware	100.0000
Munich Re Automation Solutions K.K., Tokyo	100.0000
Munich Re Automation Solutions Pte. Ltd., Singapore	100.0000
Munich Re Automation Solutions Pty Ltd, Sydney	100.0000
Munich Re Capital Markets GmbH, Munich	100.0000
Munich Re Capital No.2 Limited, London	100.0000
Munich Re Group UK Plan Trustees Limited, London	100.0000
Munich Re Healthtech Societe Anonyme, Athens	100.0000
Munich Re India Services Private Limited, Mumbai	100.0000
Munich Re Investment Partners EUA Strategy FCP-RAIF, Luxembourg[4]	100.0000
Munich Re Investment Partners GmbH, Munich	100.0000
Munich Re Markets GmbH, Munich	100.0000
Munich Re Risk Solutions Ireland Limited, Dublin	100.0000
Munich Re Service GmbH, Munich	100.0000
Munich Re Serviços Ltda., São Paulo	100.0000
Munich Re Underwriting Agents (DIFC) Ltd., Dubai	100.0000
Munich Reinsurance Intermediary Inc., Wilmington, Delaware	100.0000
Munich-Canada Management Corporation Ltd., Toronto, Ontario	100.0000
Munichre Digital Solutions China Ltd., Beijing	100.0000
Naretoblera 170017 S.L., Valencia	100.0000
Nerruze 120012 S.L., Valencia	100.0000
nexible GmbH, Düsseldorf	100.0000
nexsurance GmbH, Düsseldorf	100.0000
NMU (Specialty) Limited, London	100.0000
Orrazipo 110011 S.L., Valencia	100.0000
P.A.N. Verwaltungs GmbH, Grünwald	100.0000
PRORENDITA DREI Verwaltungsgesellschaft mbH i. L., Düsseldorf	100.0000
PRORENDITA FÜNF Verwaltungsgesellschaft mbH i. L., Düsseldorf	100.0000
PRORENDITA VIER Verwaltungsgesellschaft mbH i. L., Düsseldorf	100.0000
Reaseguradora de las Américas S.A., Havana	100.0000
Right4U GmbH, Vienna	100.0000
Roanoke Insurance Group Canada Inc., Toronto, Ontario	100.0000
Rung Sup Somboon Co., Ltd., Bangkok[4]	49.0000
SAINT LEON ENERGIE S.A.R.L., Sarreguemines	100.0000
Sala GP LLC, Wilmington, Delaware	100.0000
Schloss Hohenkammer GmbH, Hohenkammer	100.0000
Schrömbgens & Stephan GmbH Versicherungsmakler, Düsseldorf	100.0000
Smart Thinking Consulting Management (Shanghai) Company Limited, Shanghai	100.0000
Solarfonds Göttelborn 2 GmbH & Co. KG, Düsseldorf[4]	34.4234

Company and registered seat	% share of capital
Sopockie Towarzystwo Doradcze Sp.z.o.o., Sopot	100.0000
Squalify RQx GmbH, Munich	100.0000
Stichting Aandelen Beheer D.A.S. Holding, Amsterdam	100.0000
Sustainable Finance Risk Consulting GmbH, Munich	100.0000
Sustainable Infrastructure GmbH, Munich	100.0000
TALARIA ONE DESIGNATED ACTIVITY COMPANY, Dublin[4]	0.0000
TAS Touristik Assekuranz-Service GmbH, Frankfurt am Main	100.0000
The Premier Guarantee Limited, Birkenhead	100.0000
Thipara GmbH, Hamburg	80.1000
Tillobesta 180018 S.L., Valencia	100.0000
Tree Trust GmbH, Munich	100.0000
Victoria Leben Erste Real Estate GmbH & Co. KG, Düsseldorf	100.0000
VICTORIA US Property Zwei GmbH i. L., Munich	100.0000
Victoria Vierter Bauabschnitt Management GmbH, Düsseldorf	100.0000
Viwis GmbH, Munich	100.0000
VV-Consulting Gesellschaft für Risikoanalyse, Vorsorgeberatung und Versicherungsvermittlung GmbH, Vienna	100.0000
Wattanasin Co., Ltd., Bangkok	100.0000
welivit New Energy GmbH, Düsseldorf	100.0000
welivit Solar España GmbH, Düsseldorf	100.0000
welivit Solar Italia s.r.l., Bolzano	100.0000
WNE Solarfonds Süddeutschland 2 GmbH & Co. KG, Düsseldorf	100.0000
wse Solarpark Spanien 1 GmbH & Co. KG, Düsseldorf	75.1243
Zacobu 110011 S.L., Valencia	100.0000
Zacuba 6006 S.L., Valencia	100.0000
Zacubacon 150015 S.L., Valencia	100.0000
Zafacesbe 120012 S.L., Valencia	100.0000
Zapacubi 8008 S.L., Valencia	100.0000
Zarzucolumbu 100010 S.L., Valencia	100.0000
Zetaza 4004 S.L., Valencia	100.0000
Zicobucar 140014 S.L., Valencia	100.0000
Zucaelo 130013 S.L., Valencia	100.0000
Zucampobi 3003 S.L., Valencia	100.0000
Zucarrobiso 2002 S.L., Valencia	100.0000
Zucobaco 7007 S.L., Valencia	100.0000
Zulazor 3003 S.L., Valencia	100.0000
Zumbicobi 5005 S.L., Valencia	100.0000
Zumcasba 1001 S.L., Valencia	100.0000
Zuncabu 4004 S.L., Valencia	100.0000
Zuncolubo 9009 S.L., Valencia	100.0000
Associated and joint ventures accounted for using the equity method	
1818 Acquisition LLC, Wilmington, Delaware	20.7300
2014 Sol I LLC, Wilmington, Delaware	50.0000
Arcapark SAS, Paris La Défense Cedex[8]	15.1000
Astoria Power Partners Holding LLC, Dover, Delaware	20.0000
Bazos CIV LP, Wilmington, Delaware[7]	100.0000
Bionic GmbH & Co. KG, Frankfurt am Main	50.0000
Consorcio Internacional de Aseguradores de Crédito S.A., Madrid[5]	15.0353
D.A.S. Difesa Automobilistica Sinistri, S.p.A. di Assicurazione, Verona	49.9920
EGM Wind SAS, Paris	40.0000
ERGO China Life Insurance Co. Ltd., Jinan, Shandong Province[7]	65.0000
Europai Utazasi Biztosito Zrt., Budapest	26.0000
Europäische Reiseversicherungs-Aktiengesellschaft, Vienna	25.0100
Global Aerospace Underwriting Managers Ltd., London[7]	51.0000
HDFC ERGO General Insurance Company Ltd., Mumbai	49.0849
Infra Foch Topco SAS, Puteaux[5]	10.8567
Invesco MEAG US Immobilien Fonds IV, Luxembourg	37.1670
Iqony Fernwärme GmbH, Essen	49.0000
Joint HR MR Private Equity GmbH, Munich	50.0000
KarstadtQuelle Finanz Service GmbH i. L., Düsseldorf	50.0000
King Price Financial Services (Pty) Ltd, Pretoria[5]	14.7751
Marchwood Power Limited, Southampton	50.0000
Maverick 67 Class B Holdco LLC, Wilmington, Delaware[7]	62.5000
Maverick 67 Holdco LLC, Wilmington, Delaware	50.0000
MEAG EuropeOfficeSelect EOS SCSp SICAV-RAIF, Munsbach	50.0000
MEAG INSTITUTIONAL FUND S.C.S. SICAV-RAIF – MEAG Infrastructure Debt Fund II, Luxembourg[5]	15.9298
MEDICLIN Aktiengesellschaft, Offenburg	35.0042
Next Insurance Inc., Wilmington, Delaware	29.4302
Poolbeg Investments Limited, London	37.5000
Sana Kliniken AG, Munich	22.5668
Saxon Land B.V., Amsterdam	50.0000
SNIC Insurance B.S.C. (c), Manama	22.5000
SR Texas Wind Holdings 1 LLC, Wilmington, Delaware	49.0000
Storebrand Helseforsikring AS, Oslo	50.0000
Super Home Inc., Dover, Delaware[5]	15.3250
Suramericana S.A., Medellín[5]	18.8678
Taishan Property & Casualty Insurance Co. Ltd., Jinan, Shandong Province	24.8983
Vier Gas Holdings S.à r.l., Luxembourg[5]	18.7500
Wind Fund I AS, Oslo	33.3333
Associates and joint ventures accounted for at fair value	
Agreenery GmbH, Oberhaching[8]	0.0000
Assistance Partner GmbH & Co. KG, Munich	21.6600
Augury Inc., Wilmington, Delaware[5]	7.3790
Bionic General Partner GmbH, Frankfurt am Main	50.0000
Capitola Insurance Inc., Wilmington, Delaware[5]	19.2700
carexpert KFZ-Sachverständigen GmbH, Mainz	25.0000
CDAT Software Inc., Vancouver, British Columbia	40.0000
CertX Holding AG, Fribourg	35.0000
Circulix GmbH, Berlin[8]	12.6300
Cyber Sepio Systems Limited, Tel Aviv[5]	10.7472
Dayforward Inc., Wilmington, Delaware[5]	8.2314
Fernkälte Geschäftsstadt Nord GbR, Hamburg[1]	37.4800
Finsure Investments (Private) Limited, Harare	24.5000
FlexFactory GmbH, Stuttgart	50.0000
Future Family Inc., Wilmington, Delaware[5]	12.8160
GIG City Nord GmbH, Hamburg	25.0000
GroupStrength Benefits Direct Inc., Vancouver, British Columbia	50.0000
High Definition Vehicle Insurance Inc., Dover, Delaware[5]	10.1970
Inshur Holding Corp., Wilmington, Delaware[5]	13.5920
Insify International B.V., Amsterdam[5]	10.4061
LCM Logistic Center Management GmbH, Hamburg	50.0000
MEAG EuropeOfficeSelect EOS GP S.à r.l., Munsbach	50.0000
OKAPI:Orbits GmbH, Braunschweig[5]	11.6600
Open German Fiber GmbH & Co. KG, Berlin	49.7500
Open German Fiber Management GmbH, Berlin	50.0000
Orange Charger Inc., Dover, Delaware[5]	16.9247
Orbit Fab Inc., Dover, Delaware[5]	6.5628

Company and registered seat	% share of capital
PERILS AG, Zurich[5]	10.0000
Span.IO Inc., Dover, Delaware[5]	7.8270
Starfish Space Inc., Wilmington, Delaware[5]	12.7972
Teko – Technisches Kontor für Versicherungen GmbH, Düsseldorf	30.0000
Tianjin Yihe Information Technology Co. Ltd., Tianjin	24.9000
Trident Global Assistance Inc., Etobicoke, Ontario	33.0396
versdiagnose GmbH, Hanover	49.0000
Volksbanken-Versicherungsdienst GmbH, Vienna	25.2319
VV Immobilien Verwaltungs und Beteiligungs GmbH i. L., Munich	30.0000
Zenner Inc., Middletown, Delaware[5]	10.9148
Companies included on a pro-rata basis (joint operation pursuant to IFRS 11)	
"Pensionsfonds" des Versorgungswerks MetallRente bei der Allianz Pensionsfonds AG, Stuttgart	17.5000
Shareholdings exceeding 5% of the voting rights in large companies as defined in Section 271(1) of the German Commercial Code (HGB)	
Extremus Versicherungs-Aktiengesellschaft, Cologne (equity: €61,746k; result for year: –€1,719k)	16.0000
Protektor Lebensversicherungs-AG, Berlin (equity: €7,856k; result for year: €2k)	10.7631
Other shareholdings as defined in Section 271(1) of the German Commercial Code (HGB)	
320 Park Avenue Holdings LLC, Wilmington, Delaware[6] (equity: €172,579k; result for year: –€1,287k)	25.0000
Acko Technology & Services Private Limited, Bangalore (equity: €310,014k; result for year: –€21,392k)	5.0000
Admiral Group Plc, Cardiff (equity: €125,209k; result for year: €287,981k)	1.7447
Air Doctor Ltd., Beit Nekofa[10] (equity: €–; result for year: €–)	2.7222
Amplify Life Insurance Company, Dover, Delaware[10] (equity: €–; result for year: €–)	10.1040
At-bay Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	3.7030
Autobahn Tank & Rast Gruppe GmbH & Co. KG, Bonn (equity: €0k; result for year: –€139,897k)	9.9980
Autobahn Tank & Rast Management GmbH, Bonn (equity: €45k; result for year: €3k)	10.0020
Azos Holdings, George Town, Grand Cayman[10] (equity: €–; result for year: €–)	6.3500
Ballistic Ventures I LP, Wilmington, Delaware[10] (equity: €–; result for year: €–)	1.7000
BitSight Technologies Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	0.3400
Craigmore Permanent Crop LP, Christchurch[6] (equity: €178,295k; result for year: –€9,829k)	27.5180
Deutsches Forschungszentrum für Künstliche Intelligenz GmbH, Kaiserslautern (equity: €30,439k; result for year: €1,029k)	2.5000
Dhipaya Insurance Co. Ltd. (Laos), Vientiane[9] (equity: €–; result for year: €–)	10.0000
Earlybird DWES Fund VII GmbH & Co. KG, Munich (equity: €146,810k; result for year: –€13,293k)	14.2857
Earlybird Growth Opportunities Fund V GmbH & Co. KG, Munich[6] (equity: €38,190k; result for year: –€6,297k)	20.0000

Company and registered seat	% share of capital
FIA Timber Partners II LP, Wilmington, Delaware[6] (equity: €141,385k; result for year: €141k)	39.0800
Ghost Security Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	1.0977
Green Acre Investments DE LP, Wilmington, Delaware[6] (equity: €1,401k; result for year: –€4,444k)	31.9361
Hancock Timberland XII LP, Wilmington, Delaware (equity: €308,974k; result for year: –€5,472k)	15.1500
heal.capital I GmbH & Co. KG, Berlin (equity: €36,143k; result for year: –€3,691k)	15.8888
HELIXintel Corporation, Wilmington, Delaware[10] (equity: €–; result for year: €–)	17.8920
IK Objekt Bensheim Immobilienfonds GmbH & Co. KG, Düsseldorf (equity: €5,480k; result for year: –€12,842k)	16.2445
Inspectify Inc., Dover, Delaware[10] (equity: €–; result for year: €–)	4.4700
Longroad Energy Holdings LLC, Wilmington, Delaware (equity: €1,366,393k; result for year: –€51,990k)	12.0000
M 31 Beteiligungsgesellschaft mbH & Co. Energie KG, Düsseldorf (equity: €1,407,093k; result for year: €94,758k)	18.6246
m:solarPOWER GmbH & Co. KG, Düsseldorf (equity: €615k; result for year: €165k)	0.0000
Manypets Ltd, London (equity: –€29,661k; result for year: –€48,126k)	10.1397
National Digital ID Co. Ltd., Bangkok (equity: €7,200k; result for year: €1,035k)	0.0028
Nova Labs Inc., Dover, Delaware[10] (equity: €–; result for year: €–)	3.8992
Nürnberger Beteiligungs-AG, Nuremberg (equity: €745,656k; result for year: €49,749k)	19.1038
Olivia Holdings LLC, Wilmington, Delaware (equity: €927,492k; result for year: €23,817k)	8.8000
Parametrix Group Holdings Inc., Wilmington, Delaware (equity: €836k; result for year: –€5,543k)	5.0000
Pendulum Intelligence Inc., Dover, Delaware[10] (equity: €–; result for year: €–)	8.6780
PRORENDITA FÜNF GmbH & Co. KG, Düsseldorf (equity: €3,021k; result for year: €818k)	0.0018
Rabidham Co. Ltd., Bangkok (equity: €54k; result for year: –€16k)	10.0000
Ridecell Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	1.9470
RMS Forest Growth International LP, George Town, Grand Cayman[6] (equity: €26,574k; result for year: €9,882k)	43.4700
Road Victims Protection Co. Ltd., Bangkok (equity: €207,787k; result for year: €3,444k)	4.8707
Salient Predictions Inc., Dover, Delaware[10] (equity: €–; result for year: €–)	7.7980
Saudi Enaya Cooperative Insurance Company, Jeddah (equity: €40,911k; result for year: –€2,072k)	2.1700
Sentra Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	8.2300
ShipIn Systems Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	3.4000
Shyft Moving Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	6.8000
Slice Labs Inc., Ottawa, Ontario[10] (equity: €–; result for year: €–)	8.1256

Company and registered seat	% share of capital
Solarpark 1000 Jahre Fürth GmbH & Co. KG, Düsseldorf (equity: €703k; result for year: €59k)	0.9091
Spectrum Labs Inc., Dover, Delaware[10] (equity: €–; result for year: €–)	4.2480
Stoik SAS, Paris (equity: €10,918k; result for year: –€3,010k)	9.0011
Stor-Skälsjön Vind Holding AB, Hässleholm[11] (equity: €158,949k; result for year: –€1k)	75.0000
T&R MLP GmbH, Bonn (equity: €29k; result for year: €0k)	10.0020
T&R Real Estate GmbH, Bonn (equity: €140,859k; result for year: –€10k)	10.0020
Team8 Capital I LP, George Town, Grand Cayman[10] (equity: €–; result for year: €–)	3.1300
Team8 Partners II LP, George Town, Grand Cayman[10] (equity: €–; result for year: €–)	5.8800
Thailand Insurance Institute, Bangkok (equity: €3,111k; result for year: €650k)	1.0051
Thunderbolt Technology Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	7.1524
Ticker Limited, Godalming (equity: –€5,005k; result for year: –€8,282k)	16.3600
Twelve Benefit Corporation, Wilmington, Delaware[10] (equity: €–; result for year: €–)	6.9330
ver.di Service GmbH, Berlin (equity: €102k; result for year: –€93k)	19.8000
welivit TOP SOLAR GmbH & Co. KG, Düsseldorf (equity: €101k; result for year: €47k)	0.0000
Zanskar Geothermal & Minerals Inc., Wilmington, Delaware[10] (equity: €–; result for year: €–)	4.8700

1 Munich Reinsurance Company or one of its consolidated subsidiaries is a fully liable partner in this company.
2 This fully consolidated German subsidiary with the legal form of a commercial partnership, as defined in Section 264a(1) of the German Commercial Code (HGB), intends to fulfil the conditions required pursuant to Section 264b of the Commercial Code and, in the 2023 financial year, to avail itself of the relevant provision exempting it from preparing annual financial statements. As defined in Section 291 of the Commercial Code, this Group financial statement also exempts the subsidiary from the potential requirement to publish consolidated financial statements pursuant to Section 290 of the Commercial Code.
3 This fully consolidated German subsidiary intends to fulfil the conditions required in Section 264(3) of the German Commercial Code (HGB) and, in the 2023 financial year, to avail itself of the relevant provision exempting it from preparing annual financial statements. As defined in Section 291 of the Commercial Code, this Group financial statement also exempts the subsidiary from the potential requirement to publish consolidated financial statements pursuant to Section 290 of the Commercial Code.
4 Control due to voting majority or other control pursuant to IFRS 10.
5 Significant influence owing to representation of Munich Re on the board of directors and/or supervisory body or an equivalent governing body of the associate.
6 No control and/or no significant influence, as it is a purely financial investment under the managerial responsibility of an external asset manager.
7 No control, since the articles of association or another agreement bind the relevant operations to a quorum which cannot be achieved by Munich Re.
8 Representation of Munich Re on the board of directors and/or supervisory body or an equivalent governing body of the entity, whose relevant activities require the unanimous consent of the parties sharing control.
9 No financial statements available.
10 This company is not required to disclose its annual financial statements in its country of domicile. Pursuant to Section 313(3) sentence 5 of the German Commercial Code (HGB), there is no requirement in such a case to disclose the equity and result for the year.
11 No control and no significant influence, as Munich Re does not have any decision-making rights with regard to the relevant activities to be performed until completion of the investment object.

Drawn up and released for publication,
Munich, 5 March 2024.

The Board of Management

The auditor's report reproduced below includes a "Report on the assurance on the electronic rendering of the consolidated financial statements and the combined management report prepared for publication purposes in accordance with Section 317(3a) HGB" ("separate report on ESEF compliance"). The subject matter (ESEF documents) to which the separate report on ESEF compliance relates is not attached. The assured ESEF documents can be inspected in, or retrieved from, the Unternehmensregister (German Company Register).

Translation from the German language of Independent auditor's report

To Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München

Report on the audit of the consolidated financial statements and of the combined management report

Opinions

We have audited the consolidated financial statements of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2023, and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the financial year from 1 January 2023 to 31 December 2023, and notes to the financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München for the financial year from 1 January 2023 to 31 December 2023. In accordance with German legal requirements, we have not audited the Group Statement on Corporate Governance pursuant to Sec. 315d of the German Commercial Code [Handelsgesetzbuch, HGB] which is published on the website referenced in the combined management report and is part of the combined management report, and the content of the Group non-financial statement pursuant to Sec. 315b HGB included in chapter Combined non-financial statement of the combined management report. We have not audited corporate information that is not part of the Group annual report and is referenced in the chapters Munich Re Group, Financial position and Munich Reinsurance Company (information reported on the basis of German accountancy rules) of the combined management report. In addition, we have not audited the content extraneous to management reports contained in section "Remuneration report of Munich Reinsurance Company" in chapter Munich Reinsurance Company (information reported on the basis of German accountancy rules), as well as the sections "Internal control system" and "Statement on the adequacy and effectiveness of the risk management system and the internal control system" of the chapter Risk Report of the combined management report.

Disclosures extraneous to management reports are such disclosures that are neither required pursuant to Sec. 315, 315a or Sec. 315b to 315d HGB nor pursuant to DRS 20.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e(1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2023 and of its financial performance for the financial year from 1 January 2023 to 31 December 2023, and

- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the above-mentioned Group Statement on Corporate Governance, the content of the Group non-financial statement, the sections "Remuneration report of Munich Reinsurance Company" in chapter Munich Reinsurance Company (information reported on the basis of German accountancy rules), as well as the sections "Internal control system" and "Statement on the adequacy and effectiveness of the risk management system and the internal control system" contained in the chapter risk report.

Pursuant to Sec. 322(3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the combined management report" section of our auditor's report. We are independent of the Group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10(2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5(1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2023 to 31 December 2023. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

Determination of the present value of expected future cash flows in the context of measuring the liability for remaining coverage in life and health insurance business

Reasons why the matter was determined to be a key audit matter

The When applying the general measurement model and the variable fee approach in accordance with IFRS 17, which is effective for the first time this year, the determination of the present value of expected future cash flows includes an estimate of future cash flows and the adjustment of this estimate to reflect the time value of money (discounting). Determining the present value of the expected future cash flows is a key aspect of measuring the liability for remaining coverage.

Future cash flows include all cash flows required to fulfil the contractual obligations within the contract boundary such as premium payments, benefit payments as well as administration and acquisition costs. They make up the greatest part of measuring the liability for remaining coverage. IFRS 17 requires an entity-specific estimate of all future cash flows. Entities shall incorporate all information available without undue cost or effort. The estimates shall be updated at each measurement date.

Estimation of future cash flows is subject to considerable judgement. Future cash flows are projected using actuarial models, factoring in a large number of possible scenarios and using assumptions on the future development of economic and non-economic variables. These include, in particular, assumptions relating to mortality, disability and morbidity, as well as interest-rate development, lapse rates, acquisition and administration costs, and inflation. The determination or revision of the assumptions is frequently subject to uncertainty, particularly because the assumptions are generally not based on observable market inputs. In primary insurance, management rules that are made depending on the development of the portfolio of investments and insurance contracts are also reflected in the scenarios. The projections generally extend over a long time horizon.

Under IFRS 17, an entity shall discount the estimate of future cash flows in order to reflect the time value of money. The discount rates shall reflect the characteristics of the cash flows – including liquidity characteristics – of the insurance contracts and be consistent with observable current market prices for financial instruments with cash flows whose characteristics are consistent with those of the insurance contracts in terms of timing, currency and liquidity. The discount rates used shall be updated at each measurement date.

Discount rates are determined using a bottom-up approach, with the Solvency II interest rate curves published by the European Insurance and Occupational Pensions Authority (EIOPA) serving as the starting point for risk-free interest rates. In the event of differences in liquidity between the insurance liabilities and the liquid reference instruments used in determining the risk-free interest rate, an illiquidity premium based on the EIOPA methodology for determining volatility adjustments is applied as a premium on the interest rate curve. Credit risks are not taken into account in the discount rates used.

In light of the uncertainty and the use of judgement in estimating future cash flows and determining the discount rates, there is a risk of incorrect measurement of the liability for remaining coverage. We therefore determined this to be a key audit matter.

Auditor's response

As part of our audit, we analysed the processes for estimating future cash flows and determining discount rates for risks of errors. Further, we evaluated the design and tested the operating effectiveness of the controls integrated in these processes in order to check the complete and correct capture and determination of future cash flows as well as the derivation of the discount rates in accordance with the relevant requirements of IFRS 17. For the estimation of future cash flows, this included in particular the assessment of the methodology applied, taking into account the defined management rules, and the assessment of the derivation of entity-specific assumptions, such as biometrics, policyholder behaviour and costs, on the basis of portfolio data.

We also performed substantive procedures to obtain an understanding of the model used for cash flow determination. Moreover, for a risk-based sample, we examined whether selected data were correctly included in the model calculation by reconciling them with the contract management systems. In addition, we assessed the plausibility of the assumptions underlying the model and checked the validations performed in this context for a risk-based sample. We checked the suitability of the scenario generator used for the assumed capital market scenarios and analysed the validation results. We also checked the appropriateness of the management rules and their derivation on a sample basis. We then analysed the calculated future cash flows for anomalies.

For primary life insurance business, we assessed the appropriateness of the estimates of future cash flows on the basis of the analysis, control and validation files provided.

In addition, we checked whether fixed and variable overheads were allocated to the groups of insurance contracts using systematic and rational methods.

We obtained an understanding of the method used to derive the discount rates to assess its suitability. In particular, we analysed the risk-free interest rates used and, where applicable, the illiquidity premiums applied. Where discount rates were derived for periods for which no risk-free interest rates were observable on the market, we checked the extrapolation of a long-term risk-free interest rate curve (ultimate forward rate). We also assessed the application of the discount rates derived using the bottom-up approach to the actuarial models.

We used our own actuaries in the course of our audit.

Our procedures did not lead to any reservations relating to the determination of the present value of expected future cash flows in the context of measuring the liability for remaining coverage.

Reference to related disclosures

The disclosures on the accounting policies applied are included in the notes to the consolidated financial statements in the sections Overarching accounting policies– Insurance contracts as well as Assets – B Reinsurance contracts held that are assets and Equity and liabilities – D Insurance contracts issued that are liabilities. In addition, the use of estimates and assumptions is explained in the section Accounting policies – Use of judgements and estimates in recognition and measurement. Further disclosures on items of the financial statements are presented in the sections Notes to the consolidated balance sheet – Assets (10) Reinsurance contracts held as well as Notes to the consolidated balance sheet – Equity and liabilities (26) Insurance contracts issued and (27) Liability for remaining coverage. Risk disclosures are included in the section Disclosures on risks from financial instruments and insurance contracts (53) Disclosures on further risks from insurance contracts of the notes to the consolidated financial statements and in the Risk report section of the combined management report.

Measurement of the liability for incurred claims in property-casualty insurance business

Reasons why the matter was determined to be a key audit matter

The measurement of the liability for incurred claims in property-casualty insurance business includes an estimate of future cash flows, the adjustment of this estimate to reflect the time value of money (discounting) and a risk adjustment for non-financial risk.

Estimating future cash flows includes all cash flows for incurred claims that have not yet been settled such as claims payments, claims settlement expenses and administration costs. IFRS 17 requires an entity-specific estimate of all future cash flows. Entities shall incorporate all information available without undue cost or effort. The estimates shall be updated at each measurement date.

Estimation of future cash flows is subject to considerable judgement. Future cash flows are projected using actuarial models, considering past experience and assumptions about future developments, including social, economic or technological factors. Expected future claims payments are estimated on the basis of historical observations for the entity's own portfolio (settlement patterns) and, if necessary, with reference to external reference data and expert estimates. In this context, past experience is used as a basis for making assumptions about future premiums and ultimate loss ratios, as well as the time frames, factors, speed of claims settlement, and inflation of claims. The assessment of major losses is considered separately.

Under IFRS 17, an entity shall discount the estimate of future cash flows in order to reflect the time value of money. The discount rates shall reflect the characteristics of the cash flows – including liquidity characteristics – of the insurance contracts and be consistent with observable current market prices for financial instruments with cash flows whose characteristics are consistent with those of the insurance contracts in terms of timing, currency and liquidity. The discount rates used shall be updated at each measurement date, using different interest rates as a reference for the update depending on the measurement model. Under the general measurement model, current interest rates are used as a reference, while the premium allocation approach uses the interest rates relevant at the date of the incurred claim.

Discount rates are determined using a bottom-up approach, with the Solvency II interest rate curves published by EIOPA serving as the starting point for risk-free interest rates. In the event of differences in liquidity between the insurance liabilities and the liquid reference instruments used in determining the risk-free interest rate, an illiquidity premium based on the EIOPA methodology for determining volatility adjustments is applied as a premium on the interest rate curve. Credit risks are not taken into account in the discount rates used.

IFRS 17 requires a risk adjustment for non-financial risk to be added to the present value of the expected future cash flows to account for the uncertainty about the amount and timing of the cash flows that arises from non-financial risk. The risk adjustment for non-financial risk shall be updated at each measurement date.

The determination of the risk adjustment for non-financial risk using the cost-of-capital method is derived from the internal Solvency II risk model and takes into account Group-wide risk diversification.

In light of the uncertainty and the use of judgement in estimating future cash flows and determining the discount rates as well as the risk adjustment for non-financial risk, there is a risk of incorrect measurement of the liability for incurred claims in property-casualty insurance business. We therefore determined this to be a key audit matter.

Auditor's response

As part of our audit, we analysed the processes for estimating future cash flows and for determining discount rates as well as the risk adjustment for non-financial risk for risks of errors. Further, we evaluated the design and tested the operating effectiveness of the controls integrated in these processes in order to check the complete and correct capture and determination of future cash flows as well as the derivation of the discount rates and the risk adjustment for non-financial risk in accordance with the relevant requirements of IFRS 17. For the estimation of future cash flows, this included in particular the assessment of the methodology applied as well as the derivation of entity-specific assumptions on the basis of historical claims development as well as assumptions on administration costs and claims settlement expenses.

We also performed substantive procedures to assess the suitability of the actuarial techniques and statistical methods applied as well as the derivation and plausibility of key assumptions used, including loss ratios and assumptions with regard to claims settlement. For the purpose of assessing the quality of estimates, we analysed the actual development of the previous year's liability for incurred claims based on the run-off results.

We also generated our own loss projections for the estimates of future cash flows for a risk-based selection of lines of business applying mathematical and statistical methods. We first calculated our best estimate and defined a range based on statistical probabilities, and then compared these with management's calculations.

We checked the calculation of the provisions for major losses for a systematic sample, taking into account the information and data available at the end of the reporting period.

With regard to measurement of the provisions for asbestos and environmental liability claims, we obtained an understanding of the procedures for validating the provisioned amount and certain methods and reconciled the comparative figures used with externally available market studies.

We assessed the derivation of the assumptions on the development of the consumer price, construction cost, wage growth and medical inflation indices, and the impacts thereof on the entire portfolio. Based on a random sample, we assessed the correct use of portfolio-specific inflation assumptions.

In addition, we checked whether fixed and variable overheads were allocated to the groups of insurance contracts using systematic and rational methods.

We obtained an understanding of the method used to derive the discount rates to assess its suitability. In particular, we analysed the risk-free interest rates used and, where applicable, the illiquidity premiums applied. Where discount rates were derived for periods for which no risk-free interest rates were observable on the market, we checked the extrapolation of a long-term risk-free interest rate curve (ultimate forward rate). We also assessed the application of the discount rates derived using the bottom-up approach to the actuarial models.

We obtained an understanding of the method used to derive the risk adjustment for non-financial risk to assess its suitability, and evaluated the derivation and plausibility of key assumptions used, including the Group-wide risk diversification. Moreover, we analysed the change in the risk adjustment for non-financial risk. We compared the change in the risk adjustment for non-financial risk for similar groups of insurance contracts in terms of consistency and analysed the relationship between the risk adjustment for non-financial risk and the fulfilment cash flows.

We used our own actuaries in the course of our audit.

Our procedures did not lead to any reservations relating to the measurement of the liability for incurred claims in property-casualty insurance business.

Reference to related disclosures
The disclosures on the accounting policies applied are included in the notes to the consolidated financial statements in the sections Overarching accounting policies – Insurance contracts as well as Assets – B Reinsurance contracts held that are assets and Equity and liabilities – D Insurance contracts issued that are liabilities. In addition, the use of estimates and assumptions is explained in the section Accounting policies – Use of judgements and estimates in recognition and measurement. Further disclosures on items of the financial statements are presented in the sections Notes to the consolidated balance sheet – Assets (10) Reinsurance contracts held as well as Notes to the consolidated balance sheet – Equity and liabilities (26) Insurance contracts issued and (28) Liability for incurred claims. Risk disclosures are included in the section Disclosures on risks from financial instruments and insurance contracts (53) Disclosures on further risks from insurance contracts of the notes to the consolidated financial statements and in the Risk report section of the combined management report.

Valuation of unlisted investments

Reasons why the matter was determined to be a key audit matter
The fair values of unlisted investments are mainly determined by using valuation models or values assessed by third parties. The primary parameters used are observable market inputs, such as interest rate curves based on the underlying terms and credit spreads. This applies particularly to the fair value measurement of unlisted fixed-interest debt instruments (registered bonds, borrower's note loans, infrastructure loans and other loans) and derivatives. In addition, unobservable inputs are used to measure certain investments – particularly real estate, real estate funds, investments in private equity funds, and alternative direct investments (such as infrastructure). The valuation models selected and the assumptions about inputs defined are judgemental. The greater the number of inputs used that are not observable in the market but are instead based on internal estimates, the greater the scope for judgement.

This matter was determined to be a key audit matter due to the judgements used in selecting the valuation models and the assumptions to be made with regard to the significant inputs. Moreover, unlisted investments contribute a substantial share of the investments in the consolidated balance sheet.

Auditor's response
As part of our audit, we obtained an understanding of the processes for the valuation of unlisted investments. We also tested the effectiveness of the controls integrated in the processes and designed to ensure the full and correct selection and recording of inputs as well as to ensure the correct application of the valuation models used.

We assessed whether the valuation models used ensured a reliable determination of fair values.

For a risk-based sample of unlisted fixed-interest debt instruments, we performed our own fair value calculations using independently determined valuation-relevant inputs (interest rate curves and spreads). We compared the results with management's valuations.

We performed our own fair value calculations for derivatives on a sample basis and compared them with the fair values determined by management.

Moreover, we checked the fair value measurements of alternative direct investments for a risk-based sample and assessed the calculation parameters used, considering the investment-specific circumstances. We compared the fair values of sub-portfolios of indirectly held real estate investments and of investments in private equity funds with external information. For directly held real estate investments, we checked the valuations for a risk-based sample.

Our procedures did not lead to any reservations relating to the valuation of unlisted investments.

Reference to related disclosures
The disclosures on the accounting policies applied are included in the sections Overarching accounting policies – Fair value and Assets – D Investments of the notes to the consolidated financial statements. In addition, the use of estimates and assumptions is explained in the section Accounting policies – Use of judgements and estimates in recognition and measurement. Further disclosures on the individual instruments are presented in the sections Notes to the consolidated balance sheet – Assets (11) Investment property as well as (16) Financial investments and Notes to

the financial instruments and fair value disclosures on assets and liabilities. Risk disclosures on market risk and credit risk are included in the section Disclosures on risks from financial instruments and insurance contracts (51) Disclosures on risks from financial instruments in the Risk report section of the combined management report.

Other information

The Supervisory Board is responsible for the report of the Supervisory Board. Management and the Supervisory Board are responsible for the Declaration of Conformity with the German Corporate Governance Code pursuant to Sec. 161 of the German Stock Corporation Act (AktG), which is part of the Group Statement on Corporate Governance, as well as for the remuneration report pursuant to Sec. 162 of the German Stock Corporation Act (AktG). Management is otherwise responsible for the other information. The other information comprises the above-mentioned Group Statement on Corporate Governance, the Group non-financial statement as well as the above-mentioned sections “Remuneration report of Munich Reinsurance Company” in chapter Munich Reinsurance Company (information reported on the basis of German accountancy rules) of the combined management report and sections “Internal control system” and “Statement on the adequacy and effectiveness of the risk management system and the internal control system” of the chapter risk report.

In addition, the other information comprises other parts of the Group annual report of which we received a version before issuing this auditor’s report, in particular:

- Munich Re at a glance
- Letter to shareholders
- Responsibility statement

but not the consolidated financial statements, the disclosures in the combined management report covered by our audit, or our auditor’s report.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report, or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and the Supervisory Board for the consolidated financial statements and the combined management report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e(1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group’s ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the combined management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e(1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the assurance on the electronic rendering of the consolidated financial statements and the combined management report prepared for publication purposes in accordance with Sec. 317(3a) HGB

Opinion

We have performed assurance work in accordance with Sec. 317(3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the combined management report (hereinafter the "ESEF documents") contained in the electronic file Munich_Re_ESEF-2023-12-31.zip and prepared for publication purposes complies in all material respects with the requirements of Sec. 328(1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the combined management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328(1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying combined management report for the financial year from 1 January 2023 to 31 December 2023 contained in the "Report on the audit of the consolidated financial statements and of the combined management report" above, we do not express any assurance opinion on the information contained within these renderings or on any other information contained in the file identified above.

Basis for the opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the combined management report contained in the file identified above in accordance with Sec. 317(3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410 (06.2022)). Our responsibility in accordance therewith is further described in the "Group auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm has applied IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of management and the Supervisory Board for the ESEF documents

Management is responsible for the preparation of the ESEF documents, including the electronic rendering of the consolidated financial statements and the combined management report in accordance with Sec. 328(1) Sentence 4, No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328(1) Sentence 4, No. 2 HGB.

In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328(1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Group auditor's responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Sec. 328(1) HGB). We exercise professional judgement and maintain professional scepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328(1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.

- Evaluate the technical validity of the ESEF documents, i.e. whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.

- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited combined management report.

- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Arts. 4 and 6 of the Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as Group auditor by the annual general meeting on 5 May 2023. We were engaged by the Chair of the Audit Committee of the Supervisory Board on 9 August 2023. We have been the Group auditor of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München without interruption since the financial year 2020.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

Other matters – Use of the auditor's report

Our auditor's report must always be read together with the audited consolidated financial statements and audited combined management report as well as the assured ESEF documents. The consolidated financial statements and combined management report converted to ESEF format – including the versions to be published in the Unternehmensregister [German Company Register] – are merely electronic renderings of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic format.

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Dr. Thomas Kagermeier.

Munich, 5 March 2024

EY GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft

Dr. Ott	**Dr. Kagermeier**
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Independent auditor's report on a limited assurance engagement

The assurance engagement performed by EY relates exclusively to the German version of the non-financial statement 2023 of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München. The following text is a translation of the original German Independent Assurance Report.

To Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, München

We have performed a limited assurance engagement on the non-financial statement included in the section "Combined non-financial statement" of the combined management report of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, München, (hereinafter the "Company"), which is combined with the non-financial statement of the Group, as well as the section "Munich Re Group" of the combined management report incorporated by reference, for the period from 1 January to 31 December 2023 (hereinafter the "non-financial statement").

Not subject to our assurance engagement are other references to disclosures made outside the non-financial statement as well as prior-year disclosures.

Responsibilities of the executive directors

The executive directors of the Company are responsible for the preparation of the non-financial statement in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB ["Handelsgesetzbuch": German Commercial Code] and Art. 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder as well as in accordance with their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as set out in various sections of the non-financial statement.

These responsibilities include the selection and application of appropriate methods for the preparation of the non-financial statement and making assumptions and estimates about individual non-financial disclosures that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as the executive directors consider necessary to enable the preparation of a non-financial statement that is free from material misstatement, whether due to fraud (manipulation of the non-financial statement) or error.

The EU Taxonomy Regulation and the Delegated Acts adopted thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in various sections of the non-financial statement. They are responsible for the defensibility of this interpretation. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

Independence and quality assurance of the auditor's firm

We have complied with the German professional requirements on independence as well as other professional conduct requirements.

Our audit firm applies the national legal requirements and professional pronouncements – in particular the BS WP/vBP ["Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer": Professional Charter for German Public Accountants/German Sworn Auditors] in the exercise of their Profession and the IDW Standard on Quality Management issued by the Institute of Public Auditors in Germany (IDW): Requirements for Quality Management in the Audit Firm (IDW QS 1) and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards as well as relevant statutory and other legal requirements.

Responsibilities of the auditor

Our responsibility is to express a conclusion with limited assurance on the non-financial statement based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" issued by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's non-financial statement is not prepared, in all material respects, in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as the interpretation by the executive directors disclosed in various sections of the non-financial statement. Not subject to our assurance engagement are other references to disclosures made outside the non-financial statement as well as prior-year disclosures.

In a limited assurance engagement, the procedures performed are less extensive than in a reasonable assurance engagement, and, accordingly, a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the auditor.

In the course of our assurance engagement we have, among other things, performed the following assurance procedures and other activities:

- Gain an understanding of the structure of the sustainability organisation and stakeholder engagement
- Inquiries of employees regarding the selection of topics for the non-financial statement, the risk assessment and the policies of the Company and the Group for the topics identified as material
- Inquiries of employees involved in the preparation of the non-financial statement about the preparation process, about the internal control system related to this process, and about disclosures in the non-financial statement
- Inquiries of employees responsible for data capture and consolidation as well as the preparation of the non-financial statement, to evaluate the reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for the assurance of the disclosures in the non-financial statement
- Identification of likely risks of material misstatement in the non-financial statement
- Inspection of relevant documentation of the systems and processes for compiling, aggregating and validating data
- Analytical procedures on selected disclosures in the non-financial statement at the level of the Company and the Group
- Inquiries and inspection of documents on a sample basis relating to the collection and reporting of selected data
- Evaluation of the presentation of the non-financial statement
- Reconciliation of selected disclosures with the corresponding data in the annual financial statements and management report
- Evaluation of the process to compile the disclosures according to the EU Taxonomy Regulation in the non-financial statement

In determining the disclosures in accordance with Art. 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

Assurance conclusion

Based on the assurance procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial statement of the Company for the period from 1 January to 31 December 2023 is not prepared, in all material respects, in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as the interpretation by the executive directors as disclosed in various sections of the non-financial statement.

We do not express an assurance conclusion on the other references to disclosures made outside the non-financial statement or prior-year disclosures.

Restriction of use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. As a result, it may not be suitable for another purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company alone. We do not accept any responsibility to third parties. Our assurance conclusion is not modified in this respect.

General Engagement Terms and liability

The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability towards third parties. We accept no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we will not update the report to reflect events or circumstances arising after it was issued, unless required to do so by law. It is the sole responsibility of anyone taking note of the summarised result of our work contained in this report to decide whether and in what way this information is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, 5 March 2024

EY GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft

Dr. Kagermeier	**Welz**
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Responsibility statement

"To the best of our knowledge, and in accordance with the applicable reporting principles and generally accepted accounting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the combined management report for Münchener Rück-versicherungs-Gesellschaft Aktiengesellschaft in München and the Group includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group."

Munich, 13 March 2024

Dr. Joachim Wenning

Dr. Thomas Blunck
Nicholas Gartside
Stefan Golling

Dr. Christoph Jurecka
Dr. Achim Kassow
Michael Kerner

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Münchener Rückversicherungs-Gesellschaft (Munich Reinsurance Company) is a reinsurance company organised under the laws of Germany. In some countries, including the United States, Munich Reinsurance Company holds the status of an unauthorised reinsurer. Policies are underwritten by Munich Reinsurance Company or its affiliated insurance and reinsurance subsidiaries. Certain coverages are not available in all jurisdictions.

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The official German original of this report is also available from the Company. In addition, you can find our annual and interim reports, along with further information about Munich Re and its shares, on the internet at www.munichre.com.

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Quarterly figures

		31.12.2023	30.9.2023	30.6.2023	31.3.2023
Balance sheet					
Investments	€m	218,462	209,957	209,699	210,580
Equity	€m	29,772	27,647	27,436	28,182
Insurance contracts issued and reinsurance contracts held (net)	€m	203,383	196,198	197,213	197,140
Balance sheet total	€m	273,793	264,698	263,780	263,591
Shares					
Share price	€	375.10	369.10	343.60	322.50
Munich Reinsurance Company's market capitalisation	€bn	51.2	50.4	46.9	45.2
Other					
Combined ratio					
Reinsurance – Property-casualty	%	91.6	82.0	80.5	86.5
ERGO Property-casualty Germany	%	97.5	88.2	88.1	81.2
ERGO International	%	89.5	87.9	88.1	95.4
Number of staff		**42,812**	**42,562**	**42,061**	**41,727**

€m	Total	Q4 2023	Q3 2023	Q2 2023	Q1 2023
1. Insurance revenue from insurance contracts issued	57,884	14,977	14,460	14,175	14,273
2. Insurance service expenses from insurance contracts issued	0				
Claims expenses	–41,481	–11,040	–10,189	–10,048	–10,204
Changes from underlying items	48	103	100	120	–275
Administration and acquisition costs	–8,617	–2,565	–2,068	–2,008	–1,977
Other insurance service expenses	0	0	0	0	0
	–50,051	**–13,502**	**–12,158**	**–11,935**	**–12,456**
3. Insurance service result from insurance contracts issued (1+2)	**7,834**	**1,475**	**2,302**	**2,240**	**1,817**
4. Insurance revenue ceded from reinsurance contracts held	–1,577	–505	–408	–366	–298
5. Income from reinsurance contracts held	788	285	119	231	153
6. Insurance service result from reinsurance contracts held (4+5)	**–789**	**–220**	**–289**	**–135**	**–145**
7. Insurance service result (3+6)	**7,045**	**1,255**	**2,014**	**2,105**	**1,672**
8. Result from insurance-related financial instruments	501	101	207	55	138
9. Total technical result (7+8)	**7,545**	**1,356**	**2,221**	**2,159**	**1,809**
10. Investment result	5,374	2,405	760	596	1,612
11. Currency result	–292	–499	309	44	–145
12. Investment result for unit-linked life insurance	816	405	–79	163	327
13. Insurance finance income or expenses from insurance contracts issued	–5,490	–2,274	–940	–885	–1,391
14. Insurance finance income or expenses from reinsurance contracts held	99	31	25	23	20
15. Insurance finance income or expenses (13+14)	**–5,391**	**–2,243**	**–915**	**–861**	**–1,371**
16. Net financial result (10+11+12+15)	**507**	**67**	**75**	**–59**	**423**
17. Other operating income	1,316	462	272	283	299
18. Other operating expenses	–3,667	–1,300	–792	–810	–764
19. Operating result (9+16+17+18)	**5,702**	**585**	**1,776**	**1,573**	**1,768**
20. Net finance costs	–168	–42	–42	–42	–42
21. Taxes on income	–936	461	–565	–377	–455
22. Net result (19+20+21)	**4,597**	**1,004**	**1,169**	**1,154**	**1,271**
Thereof: Attributable to Munich Reinsurance Company equity holders	4,606	1,011	1,168	1,153	1,275
Attributable to non-controlling interests	–9	–7	1	1	–5

€	Total	Q4 2023	Q3 2023	Q2 2023	Q1 2023
Earnings per share	**33.88**	**7.51**	**8.61**	**8.45**	**9.29**

Important dates 2024

27 February 2024
Balance sheet media conference for 2023 consolidated financial statements (preliminary figures)

14 March 2024
Publication of the Group Annual Report 2023

25 April 2024
Annual General Meeting

8 May 2024
Quarterly Statement as at 31 March 2024

8 August 2024
Half-Year Financial Report as at 30 June 2024

7 November 2024
Quarterly Statement as at 30 September 2024

Important dates 2025

26 February 2025
Balance sheet media conference for 2024 consolidated financial statements (preliminary figures)

19 March 2025
Publication of the Group Annual Report 2024

30 April 2025
Annual General Meeting

8 May 2025
Quarterly Statement as at 31 March 2025

8 August 2025
Half-Year Financial Report as at 30 June 2025

11 November 2025
Quarterly Statement as at 30 September 2025