somewhat different

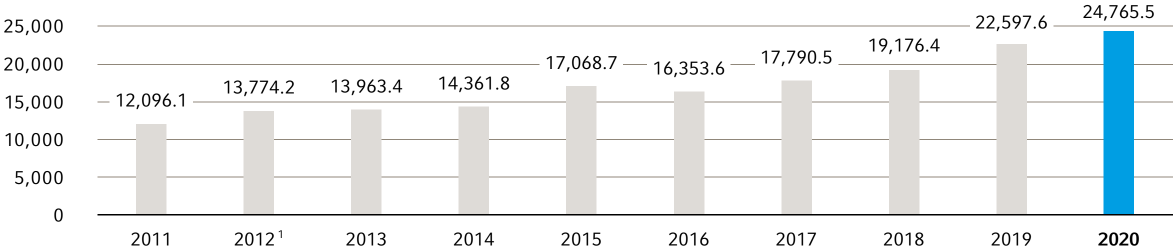
Striving for sustainable outperformance

Annual Report 2020

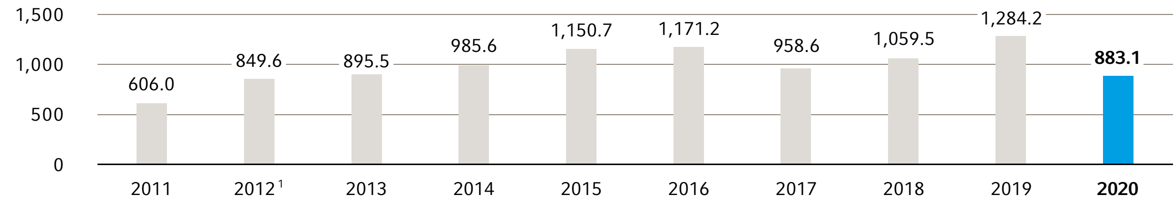
hannover re®

An overview

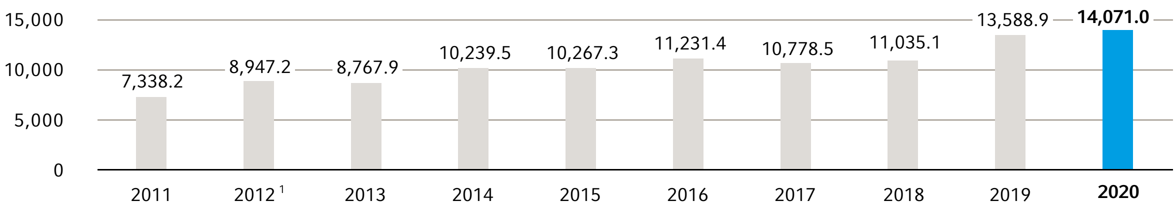
Gross premium I 01
in EUR million



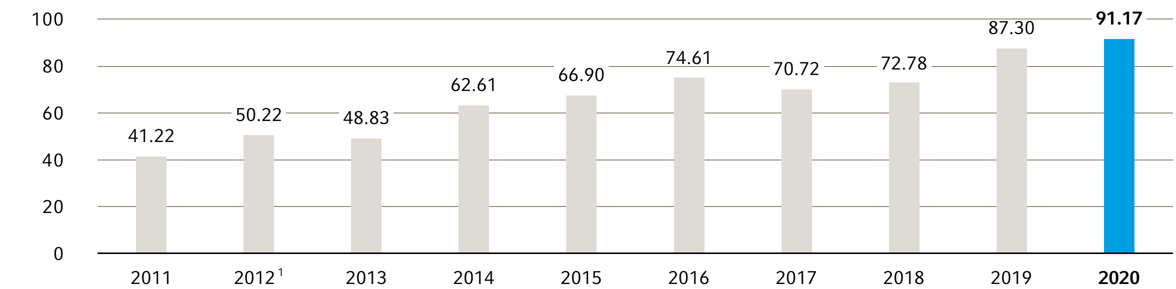
Group net income I 02
in EUR million



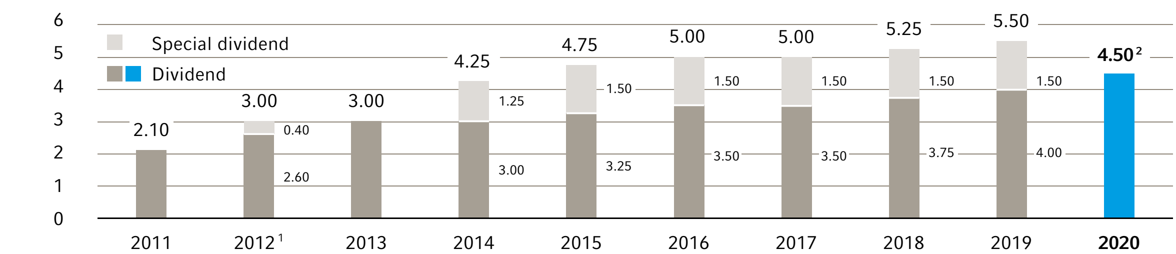
Policyholders' surplus I 03
in EUR million



Book value per share I 04
in EUR



Dividend I 05
in EUR



1 Restated pursuant to IAS 8
2 Proposed dividend

Key figures

in EUR million	2020	+/– previous year	2019	2018	2017	2016[1]
Results						
Gross written premium	24,765.5	+9.6%	22,597.6	19,176.4	17,790.5	16,353.6
Net premium earned	21,355.9	+8.2%	19,729.7	17,289.1	15,631.7	14,410.3
Net underwriting result[2]	(693.7)		(9.7)	156.9	(253.6)	448.1
Net investment income	1,688.1	-3.9%	1,757.1	1,530.0	1,773.9	1,550.4
Operating profit (EBIT)	1,214.1	-34.5%	1,853.2	1,596.6	1,364.4	1,689.3
Group net income	883.1	-31.2%	1,284.2	1,059.5	958.6	1,171.2
Balance sheet						
Policyholders' surplus	14,071.0	+3.5%	13,588.9	11,035.1	10,778.5	11,231.4
Equity attributable to shareholders of Hannover Rück SE	10,995.0	+4.4%	10,528.0	8,776.8	8,528.5	8,997.2
Non-controlling interests	844.4	+2.2%	826.5	765.2	758.1	743.3
Hybrid capital	2,231.6	-0.1%	2,234.4	1,493.1	1,492.0	1,490.8
Investments (excl. funds withheld by ceding companies)	49,220.9	+3.3%	47,629.4	42,197.3	40,057.5	41,793.5
Total assets	71,439.8	+0.1%	71,356.4	64,508.6	61,196.8	63,594.5
Share						
Earnings per share (basic and diluted) in EUR	7.32	-31.2%	10.65	8.79	7.95	9.71
Book value per share in EUR	91.17	+4.4%	87.30	72.78	70.72	74.61
Dividend	542.7	-18.2%	663.3	633.1	603.0	603.0
Dividend per share in EUR	4.50[3, 4]	-18.2%	4.00 + 1.50[4]	3.75 + 1.50[4]	3.50 + 1.50[4]	3.50 + 1.50[4]
Share price at year-end in EUR	130.30	-24.4%	172.30	117.70	104.90	102.80
Market capitalisation at year-end	15,713.8	-24.4%	20,778.9	14,194.3	12,650.6	12,397.4
Ratios						
Combined ratio (property and casualty reinsurance)[2]	101.6%		98.2%	96.5%	99.8%	93.7%
Large losses as percentage of net premium earned (property and casualty reinsurance)[5]	11.2%		7.5%	7.9%	12.3%	7.8%
Retention	90.1%		90.0%	90.7%	90.5%	89.3%
Return on investment (excl. funds withheld by ceding companies)	3.0%		3.5%	3.2%	3.8%	3.0%
EBIT margin[6]	5.7%		9.4%	9.2%	8.7%	11.7%
Return on equity (after tax)	8.2%		13.3%	12.2%	10.9%	13.7%

1 Restated pursuant to IAS 8
2 Including expenses on funds withheld and contract deposits
3 Proposed dividend
4 Dividend of EUR 4.50 for 2020, dividend of EUR 4.00 plus special dividend of EUR 1.50 for 2019, dividend of EUR 3.75 plus special dividend of EUR 1.50 for 2018, dividend of EUR 3.50 plus special dividend of EUR 1.50 for 2017 and dividend of EUR 3.50 plus special dividend of EUR 1.50 for 2016
5 Hannover Re Group's net share for natural catastrophes and other major losses in excess of EUR 10 million gross as a percentage of net premium earned
6 Operating result (EBIT)/net premium earned

The Group worldwide

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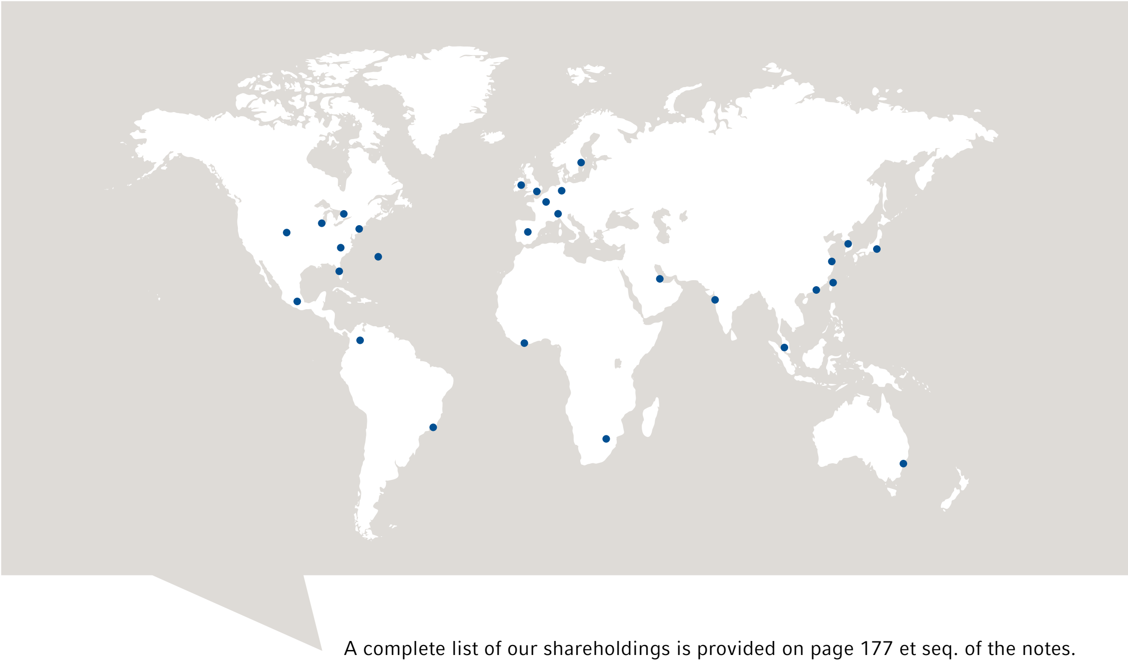

A complete list of our shareholdings is provided on page 177 et seq. of the notes. The addresses of the Hannover Re Group's branch offices and subsidiaries abroad are to be found in the section "Further information" on page 270 et seq.

Strategic business groups

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Hannover Re Group

Property & Casualty reinsurance

Regional Markets
- Americas
- APAC
- EMEA (including CIS)

Worldwide Markets
- Facultative Reinsurance
- Structured Reinsurance and Insurance-Linked Securities
- Aviation and Marine
- Agricultural Risks
- Credit, Surety and Political Risks

Life & Health reinsurance

Financial Solutions

Risk Solutions
- Longevity
- Mortality
- Morbidity

Strategy Cycle 2021–2023

Striving for sustainable outperformance

In some 50 years Hannover Re has matured into a global player that tackles risks and challenges with equal success. We intend to write the next chapter of our success story as a financially robust reinsurer – through a partnership-based approach and with the extensive decision-making powers entrusted to our experts.

In the current strategy cycle we want to leverage the intrinsic strengths associated with our power of innovation, our team of people and our market positioning on the global level and put them at the service of our clients around the world in our striving to deliver sustainable outperformance.

Contents

Preserving strengths – Creating opportunities

Proven strengths must be consistently reinvigorated if a company is to be guided successfully into the future. The current strategy cycle bears the hallmarks of global challenges to which Hannover Re is responding with the Group's entire power of innovation.

Mr. Henchoz, let's start with a backward glance – what were the defining features of the strategy cycle that has just ended?

Henchoz: Our last strategy period witnessed enormous challenges, not only due to the Covid-19 pandemic but also because of volatile international markets throughout. In the midst of these adversities, we remained committed with unremitting efforts to all our stakeholders. Guided by the previous cycle's vision of "creating value through reinsurance", we managed to achieve our strategic targets between 2018 and 2020 and outperformed the industry.

What was the basis for these outstanding achievements?

Henchoz: The key strengths that have enabled us to preserve our position of excellence are our underwriting discipline, our partnership-based client relationships, our lean operating model and our highly efficient capital management. Furthermore, our strong underwriting culture and our ability to create value for clients allowed us to grow the business profitably, as demonstrated by the outstanding premium and earnings growth. We also achieved a relatively low cost of capital and high returns on equity thanks to our efficient risk and capital management. Moreover, our lean operating model combined

"Our strong underwriting culture and our ability to create value for clients allowed us to grow the business profitably, as demonstrated by the outstanding premium and earnings growth."

Jean-Jacques Henchoz

with our robust financial strength offers competitive advantages that assure our prosperity even during unfavourable market phases.

In concrete terms, what are the goals for the new strategy cycle?

Henchoz: Building on the aforementioned core strengths as well as on the experience gained from previous cycles and our analysis of the market environment, we have developed our new strategy with the vision "striving for sustainable outperformance". Our future success will be grounded on these strengths, complemented by four strategic initiatives aimed at enhancing our future readiness.

We want to reinforce our status in the reinsurance market as a preferred business partner and an innovation catalyst, with a special focus on client-centricity and digital partnerships. Besides this, we see particularly promising opportunities in the fast-growing Asia-Pacific (APAC) region and will adapt our flexible organisational set-up accordingly.

We shall also conduct a comprehensive talent management programme to attract and retain a strong and dedicated workforce. Lastly, the entire blueprint is based on the sound foundations of strong governance, risk management, compliance and corporate social responsibility.

"Building on our core strengths as well as on the experience gained from previous cycles and our analysis of the market environment, we have developed our new strategy with the vision 'striving for sustainable outperformance'."

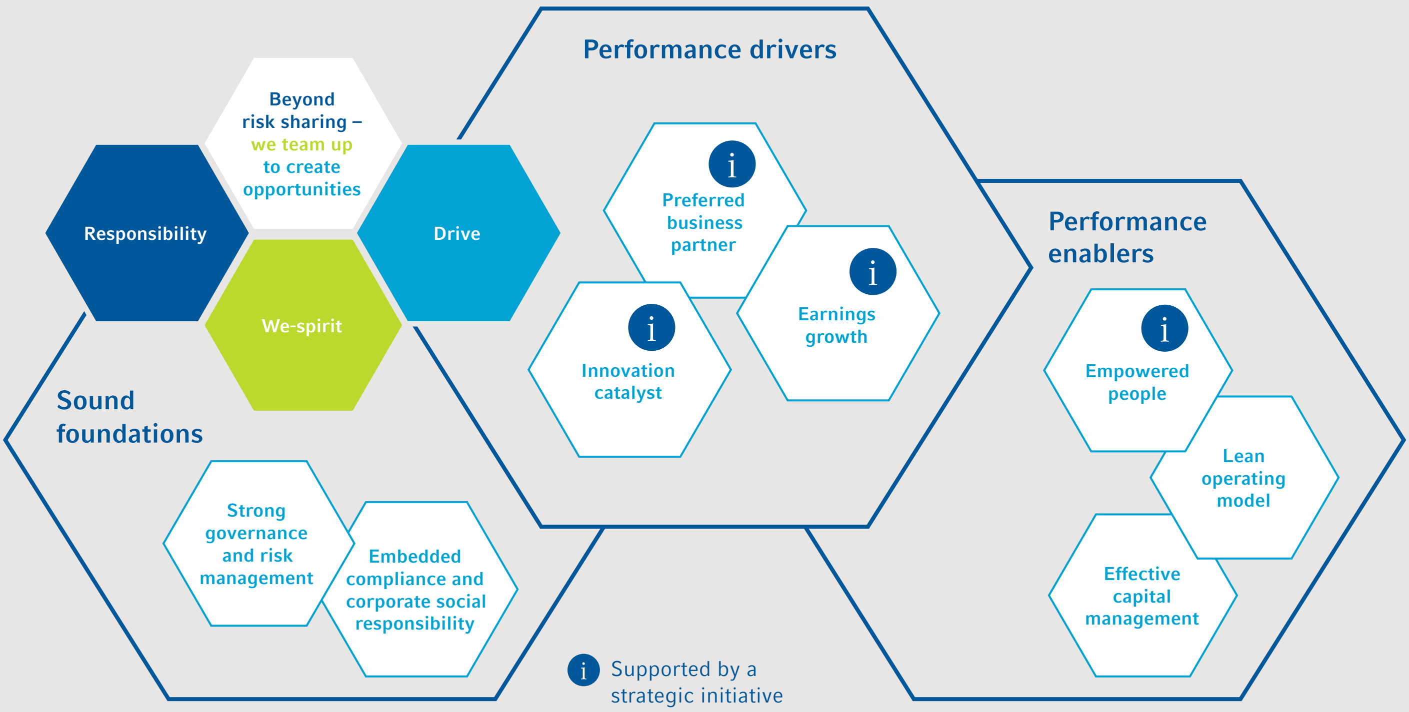
Jean-Jacques Henchoz

Right now, the reinsurance industry is seeing the emergence of various elements of uncertainty. What are you doing to counteract them?

Henchoz: The Covid-19 pandemic, climate change, the competitive (re)insurance market, geopolitical factors as well as technical and societal changes bring continuous uncertainty. What remains invariable is our commitment to our strategy and to our purpose and values. I am truly proud of the sense of responsibility, the we-spirit and the drive of our employees shown in the way they respond to changes. They live up to our purpose: "Beyond risk sharing – we team up to create opportunities."

Our Group strategy 2021–2023

Our present strategy derives from the overarching purpose and values. The purpose explains the meaning of our existence: "Beyond risk sharing – we team up to create opportunities." Our values, composed of responsibility, we-spirit and drive, determine the way in which we do business and reflect the core success factors of our company culture. Our success going forward is dependent on all the strategic aspects of our Group strategy.



Our successful business model and the former ten strategic principles have found their way onto the strategy map. In our "striving for sustainable outperformance", we have defined governance, risk management, compliance and corporate social responsibility as the foundations to pursue our business growth as a trusted global reinsurance partner.

Our performance drivers build on proven strengths and address the global trends impacting the insurance and reinsurance industry. In order to achieve outperformance in an ever-changing environment, we strive to be the preferred business partner for our clients, to maximise earnings growth in the most promising areas and to foster innovation in the (re)insurance markets.

The fields that we define as performance enablers – empowered people, lean operating model and effective capital management – have proven indispensable for outperforming the industry over the last decade. They have made us strong from the very outset and are now at the core of our "somewhat different" approach.

The interplay between sound foundations, performance drivers and performance enablers will help us achieve our strategic goals and in turn bring our purpose and values into all our activities.

Target Matrix
Strategy cycle 2021–2023

Business group	Key data	**Strategic targets**
Group	Return on equity[1]	900 bps above risk-free
	Solvency ratio[2]	≥ 200%
Property & Casualty reinsurance	Gross premium growth[3]	≥ 5%
	EBIT growth[4]	≥ 5%
	Combined ratio	≤ 96%
	xRoCA[5]	≥ 2%
Life & Health reinsurance	Gross premium growth[3]	≥ 3%
	EBIT growth[4]	≥ 5%
	Value of New Business (VNB)[6]	≥ EUR 250 million
	xRoCA[5]	≥ 2%

1 After tax; risk-free: five-year average return of ten-year German government bonds
2 According to our internal capital model and Solvency II requirements
3 Average annual growth at constant exchange rates
4 Average annual growth; based on normalised EBIT 2020
5 Excess return (one-year economic profit in excess of the cost of capital) on allocated economic capital
6 Based on Solvency II principles; pre-tax reporting

We provide diversified solutions to protect people and their property and mitigate investment risks.

Sound foundations

Strong governance and risk management

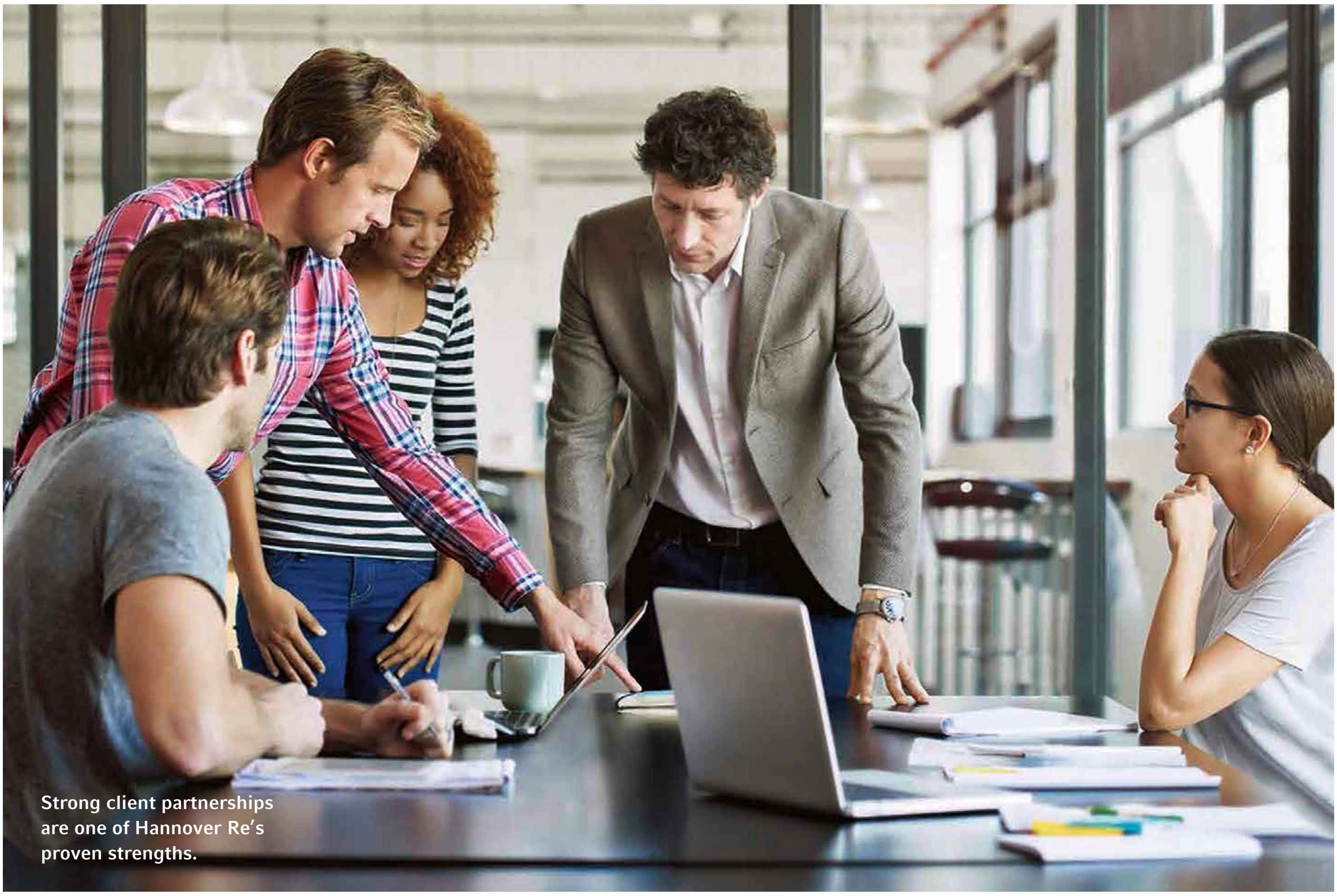
Our goal is to secure a strong capital position and financial flexibility.

As an internationally operating reinsurer, we face a broad diversity of risks directly connected with our business activities. During the strategy cycle 2021 – 2023 we will manage our risk exposure to achieve a high probability of positive IFRS earnings and distributable German GAAP income, operate with an excellent solvency ratio and superior financial strength ratings, and maintain an effective and efficient governance system. The principles of our risk management approach are set out in the risk strategy approved and regularly reviewed by the Executive Board. We utilise our risk capacities according to the risk appetite defined in the limit and threshold system.

Embedded compliance and corporate social responsibility

Our sustainability strategy strengthens our commitment to high environmental, social and governance standards.

Embedded compliance and corporate social responsibility are essential elements of our Group strategy. Beyond conforming to legal requirements, compliance also means to us a Group-wide understanding of ethics and integrity. It is our basic attitude with which we make our business decisions and attend to our customers, investors, employees and other stakeholders. Corporate social responsibility defines our responsibility towards the environment and society. It includes all economic and legal responsibilities and also extends to ethical and philanthropic perspectives. Our objectives and targets for material action fields – namely transparency, core business, employees and commitment – are set out in detail in our Sustainability Strategy 2021–2023.


Strong client partnerships are one of Hannover Re's proven strengths.

Performance drivers

Preferred business partner

Our goal is to enhance the earnings growth, margins and profit contributions of key clients through a holistic customer management approach.

Hannover Re is one of the financially strongest reinsurers in the world. We do not compete with our primary insurance clients. Instead, we offer risk management solutions at competitive terms for all types of risks. We also help our clients optimise their sales and underwriting processes and offer them access to our expertise worldwide. Our customers value our short time to market, empowered employees and entrepreneurial mindset. As a manifestation of our client-centricity, we aspire to be the best in client and broker surveys for the respective markets.

Strategic initiative: Client Excellence

Our strategic initiative "Client Excellence" aims to establish state-of-the-art customer relationship management so as to increase our client-centricity and proactively respond to the strategic needs of our customers.

Innovation catalyst

We make every effort to be the go-to partner for innovative solutions and deliver local innovation on a global scale.

For decades, we have been a catalyst for innovation. Our track record of innovation comprises new products and solutions in traditional reinsurance business, in structured reinsurance and also in alternative risk transfer. Hannover Re systematically analyses trends, business ideas and possibilities with the aim of generating new business and fostering sustainable growth. Opportunities that promise access to innovative technologies are given preferential consideration. We work continuously to strengthen our digital partnerships and embrace the challenges and opportunities brought by digital change.

Strategic initiative: Innovation and Digital Strategy

Through our strategic initiative "Innovation and Digital Strategy" we support our customers in the (ongoing) development of digital solutions so as to maximise the opportunities offered by the digital transformation and optimally exploit the worldwide scaling of new business ideas.

Earnings growth

We aim for outperformance in earnings growth in our Property & Casualty and Life & Health business groups.

Hannover Re has a record of profitable growth going back many years. Our strong underwriting culture encourages us to consistently pursue emerging business opportunities. We pay particular attention to the comprehensive understanding and assessment of risks and to the adjustment of technical pricing. Our strong operating cash flow and constantly growing assets under own management support our successful investment strategy. We aim to expand our state-of the-art financial solutions portfolio in Life & Health reinsurance and grow our own funds in step with our company's growth and the strong operating cash flow. Not only that, we want to act on opportunities in the Asia-Pacific, the world's fastest growing economic region.

Strategic initiative: Asia-Pacific Growth

The strategic initiative "Growth in the Asia-Pacific" is designed to increase our market share in the APAC region by tapping into opportunities resulting from demographic changes and leveraging the digital transformation in the region for our benefit.

Delegation of responsibilities and accountability are deeply embedded in Hannover Re's culture.

Performance enablers

Empowered people

We are dedicated to becoming one of the best places to work in the industry.

Delegation of responsibilities and accountability are deeply embedded in our culture. The success of our company depends directly on the success of our employees. We therefore pay particularly close attention to the qualifications, experience and commitment of our staff. Our talent development strategy is an integral part of the Group strategy and supports the growth of our employees as well as of the organisation. Guided by our purpose and values, we team up to create opportunities and to move our organisation to the next level.

Strategic initiative: Talent Management

The goal of our strategic initiative "Talent Management" is to enhance our employer brand as well as to systematically identify and further unleash the potential of our people.

Lean operating model

We strive to preserve our lean operating model as an essential competitive advantage.

We firmly believe that our low expense ratio – compared with our peers – gives us a competitive advantage. To this end, our effective and efficient organisation is precisely aligned with our business processes. Our lean operating model enables flat hierarchies, fast decision-making and cost leadership. This is a good starting point to develop a truly agile, customer-centric organisation that allows flexible resource allocation within a robust framework. In addition, we leverage the opportunities opened up by automation to support our business activities. Investments are strictly oriented towards efficiency and future profits.

Effective capital management

We aim for reliable and increasing dividend payments.

We provide strong financial support to our customers. Our financial strength is evidenced by a solvency ratio threshold of 200% and excellent ratings from the rating agencies. Our capital and liquidity level provides our clients with the utmost certainty. At the same time, we offer attractive and reliable returns to our bondholders and shareholders. In times when our shareholders' equity is growing faster than our profits, we are prepared to use special dividends to balance equity and profit growth. For the purpose of optimising our overall cost of capital we use alternatives such as hybrid capital and we transfer risks to the capital or retrocession markets. In addition, our active volatility management greatly contributes to the effectiveness of our capital management.

We face up to future challenges with our "somewhat different" approach. Our purpose and our values reflect a robust corporate culture founded on partnership. Our strategy combines the proven strengths of our business model with ambitious future prospects:
As we seek to further extend our market position among the top reinsurers, we systematically cultivate segments that offer considerable future potential – for ourselves and our clients.

Together we create opportunities.

Somewhat different.

About us

Hannover Re, with gross premium of more than EUR 24 billion, is the third-largest reinsurer in the world.

We transact all lines of property & casualty and life & health reinsurance and are present on all continents with more than 3,000 staff. Established in 1966, the Hannover Re Group today has a network of more than 170 subsidiaries, branches and representative offices worldwide. The German business of the Hannover Re Group is transacted by our subsidiary E+S Rück.

The rating agencies most relevant to the insurance industry have awarded both Hannover Re and E+S Rück very good financial strength ratings: Standard & Poor's AA- "Very Strong" and A.M. Best A+ "Superior".

For our investors

Jean-Jacques Henchoz,
Chairman of the
Executive Board

Dear Shareholders,
Ladies and Gentlemen,

As I write these words the world still finds itself facing an exceptional situation. Our sympathies go out to all those who have lost family or friends to the coronavirus or been otherwise impacted. With the vaccine roll-out now underway, there are nevertheless clear signs of hope in the fight against the pandemic.

At Hannover Re, we play our part in mitigating the consequences of Covid-19 by supporting clients in our accustomed role as a partner and by quickly and reliably living up to our coverage commitments. The 2020 financial year with its very particular challenges has once again demonstrated just how robust Hannover Re is. Our business model is designed to manage extreme events. We ensure this through our highly diversified portfolio, excellent risk management, disciplined underwriting policy and successful strategies in the areas of investments and retrocessions. What is more, our outstanding capital strength enables us to support our clients around the world with tailor-made reinsurance solutions.

All of this is backed by our employees, who not only need to deal with the changeover to largely remote working from home but also have to cope with various challenges in their family lives as well. On behalf of the entire Executive Board, I would therefore like to take this opportunity to express even more deeply my gratitude for the enormous dedication shown by my colleagues. It is thanks to them that Hannover Re was able to demonstrate not only its special focus on the customer but also its exceptionally strong profitability and risk-carrying capacity in this extraordinary financial year. Despite considerable payments made to our clients, we were able to report good Group net income of EUR 883 million and even increased our shareholders' equity.

In the property and casualty reinsurance renewals at 1 January 2021, which are particularly important for our company, we were also able to write appreciably more business at significantly better prices and conditions. After a protracted soft market phase and with interest rates coming under added pressure, we anticipate sustained improvement in prices and conditions on both the insurance and reinsurance markets and for some time now we have already been seeing rising demand for high-quality reinsurance protection. Hannover Re is superbly positioned to benefit from these market dynamics.

For this reason, we have decided to omit payment of a special dividend for 2020 and instead make maximum use of the opportunities opening up in the market. For the 2020 financial year the Executive Board and Supervisory Board of Hannover Re will propose to the Annual General Meeting that an increased ordinary dividend of EUR 4.50 per share should be paid out. The resulting payout ratio, at 61 percent of Group net income, is well above the ratio of 35 to 45 percent that we normally aim for.

With a view to ensuring that Hannover Re continues to enjoy above-average profitability, we revised our Group strategy as part of the regular review cycle. In this context, we shall preserve and build on the company's existing strengths. For our 2021 to 2023 strategy cycle we have identified a number of topics, such as in the areas of talent management, customer-centricity and innovation as well as in the systematic expansion of our footprint in Asia. Through prudent investments we shall thereby ensure that Hannover Re is able to fully leverage its competitive advantages going forward, as it has in the past.

The theme of sustainability will also feature prominently in our new strategy. In this respect, we want to take further actions over the next three years by supporting the expansion of climate-friendly technologies on the underwriting side and in our investments and by scaling back our exposure to technologies that are harmful to the climate. Furthermore, we have set ourselves the goal of increasing our efforts to close the protection gap in developing countries and bringing greater diversity to Hannover Re, especially on the management level.

As the Executive Board of Hannover Re, we would like to thank you most sincerely for the trust that you, our valued shareholders as well as our clients and business partners, place in us each and every day. In times of crisis such as these trust is a precious commodity, and we shall do everything in our power to live up to the trust placed in us by leading Hannover Re securely and with the necessary foresight into a profitable future.

Yours sincerely,

Jean-Jacques Henchoz
Chairman of the Executive Board

Executive Board of Hannover Rück SE

As of 31 December 2020

Dr. Michael Pickel

Property & Casualty Reinsurance
- Germany, Switzerland, Austria and Italy
- Latin America, Iberian Peninsula and Agricultural Risks
- North America

Group Legal Services
Run-Off Solutions

Silke Sehm

Property & Casualty Reinsurance
- Continental Europe and Africa
- Catastrophe XL (Cat XL)
- Structured Reinsurance and Insurance-Linked Securities

Retrocessions

Sven Althoff

Property & Casualty Reinsurance
- Asia, Australia and Middle East
- Aviation and Marine
- Credit, Surety and Political Risks
- United Kingdom, Ireland and London Market
- Facultative Reinsurance

Coordination of Property & Casualty Business Group
Quotations

Jean-Jacques Henchoz

Chairman
Compliance
Controlling
Innovation Management
Human Resources Management
Internal Auditing
Risk Management
Corporate Development
Corporate Communications

Clemens Jungsthöfel
Finance and Accounting
Information Technology
Investment and
Collateral Management
Facility Management

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

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

The Hannover Re share

- Share price climbs to new record high of EUR 192.40 in February
- Share performance overall reflects volatile markets due to coronavirus pandemic
- Proposed dividend of EUR 4.50

Equity markets in the shadow of the coronavirus pandemic

Developments on global capital markets were dominated by the coronavirus pandemic in the financial year just ended. On top of this, further geopolitical and economic issues inflicted additional volatility on the capital markets. At the beginning of the year, for example, the conflict between the United States and Iran pushed the price of oil sharply higher and took a toll on equity markets, which nevertheless quickly bounced back. While the upward trajectory seen on the markets in 2019 initially looked set to continue, the rapid international spread of the coronavirus in early March prompted an abrupt downturn. On 11 March 2020 the WHO officially declared the coronavirus outbreak to be a pandemic. With trade halted and lockdowns put in place at this time, economic output slumped in many parts of the world.

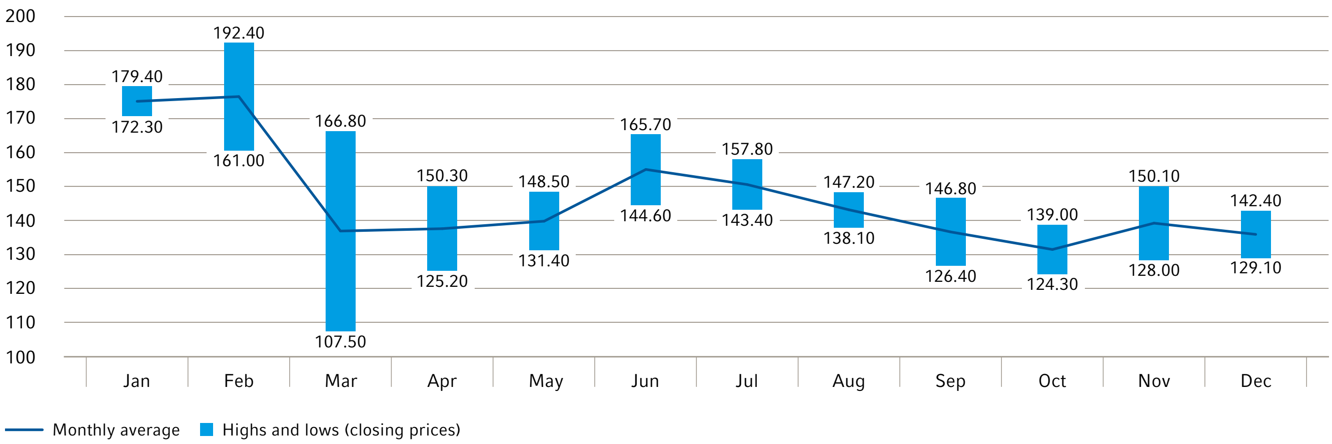
As the year progressed equity and credit markets rallied with surprising speed, driven by massive monetary and fiscal support programmes. Combined with the hope that the pandemic could soon be contained through authorisation of multiple vaccines, these measures led to an increasingly conciliatory mood on the markets as the year drew to a close. What is more, the agreement reached between the European Union and the United Kingdom towards year-end on a Brexit trade pact after tough negotiations gave European stock exchanges added momentum.

The German DAX index had entered the year at 13,249 points. By 19 February 2020 it had already climbed to what was then the all-time high of 13,789, before the international spread of the coronavirus triggered steep price plunges on stock exchanges around the world. On 18 March 2020 the DAX closed at 8,442 points, having shed almost 40 percent of its value compared to February. In the days that followed the DAX again recovered somewhat – the German bellwether index closed out the day on 31 March at 9,936. This direction was sustained over the rest of the year. In the fourth quarter the DAX picked up added impetus and reached its highest level for 2020 shortly before year-end on 28 December 2020 at 13,790. On 30 December 2020 the DAX closed out the year with a gain of 3.5% at 13,719 points.

The MDAX, which began the year at 28,313 points, performed only marginally better in the first six months. As part of the general market turmoil the index slid below 18,000 at times and fell to its lowest point of the year on 18 March 2020 at 17,909. Yet the index went on to climb steadily higher as the year progressed. Shortly before year-end it reached its high point for the year of 30,912 on 29 December 2020, before finally closing out with a gain of 8.8% at 30,796 points. Movements were similarly positive on the US S&P 500 and Dow Jones Industrial indices, which closed 16.3% and 7.2% up on the year respectively. The MSCI World index also ended the year 14.1% higher at 2,690 points.

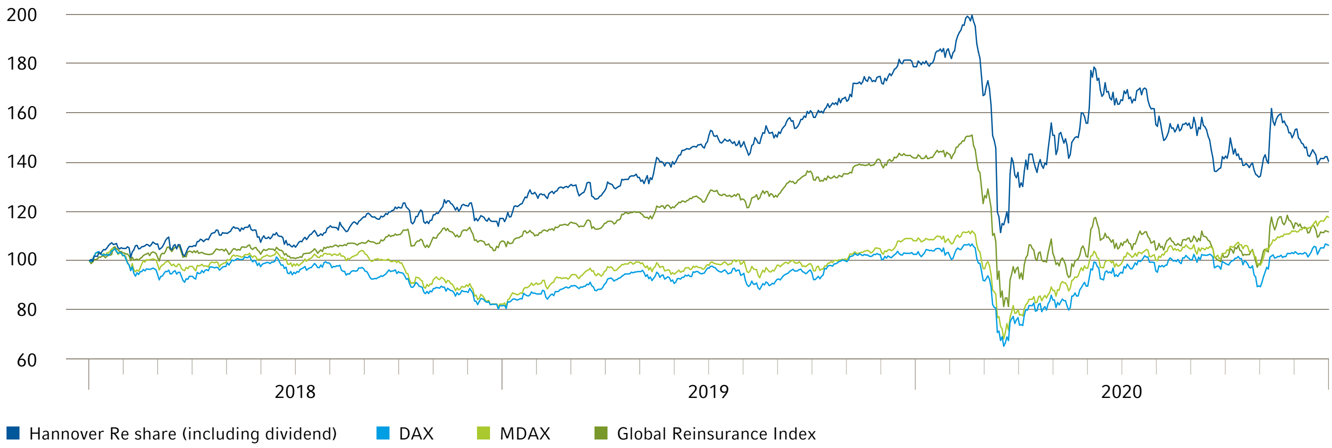
Highs and lows of the Hannover Re share I 09

in EUR



Relative performance of the Hannover Re share I 10

in %



The Hannover Re share

Having performed very favourably in 2019, the Hannover Re share stood at EUR 172.30 going into the year. Buoyed by positive news from the treaty renewals as at 1 January 2020, the share price rose steadily into the middle of February before reaching its highest point of the year and new all-time record of EUR 192.40 on 19 February 2020. Caught up in the massive price slumps on equity markets in March, the Hannover Re share also fell sharply despite positive news around the 2019 annual financial statement and touched its lowest point of the year on 16 March 2020 at EUR 107.50. Against the backdrop of the coronavirus pandemic and the associated heightened uncertainties surrounding the loss experience and the capital market environment, Hannover Re withdrew its earnings guidance for the current year on 21 April 2020 through an ad hoc disclosure. Despite this, the share had rallied to EUR 165.70 by the beginning of June 2020, only to move in a rather choppy sideways direction as the year progressed. Following Hannover Re's move – as one of the first companies in the European insurance sector – to release new profit guidance for 2020 as well as an outlook for 2021 together with the publication of its 9-month figures on 4 November, the share price climbed to EUR 150.10 on 10 November 2020 – only to slip back again over the rest of the year. The Hannover Re share closed out the year down 24.4% at EUR 130.30. The performance including reinvested dividends therefore stood at -21.4%. Looked at over the year as a whole, the Hannover Re share was thus virtually on a par with the international Global Reinsurance (Performance) Index (-21.2%), although its performance lagged behind the domestic benchmark DAX and MDAX indices.

In a three-year comparison, the Hannover Re share delivered a performance (including reinvested dividends) of 40.3%. It thus continues to clearly outperform the benchmark DAX (+6.2%) and MDAX (+17.5%) indices as well as the Global Reinsurance Index (+11.7%) over this period.

Based on the year-end closing price, Hannover Re's market capitalisation totalled EUR 15.7 billion at the end of the 2020 financial year. According to the MDAX rankings drawn up by Deutsche Börse AG, the company placed eleventh at the end of December in terms of its free float market capitalisation and fourteenth by trading volume.

With a book value per share of EUR 91.17, the Hannover Re share showed a price-to-book ratio of 1.43 at the end of the year under review; it was thus below the average MDAX price-to-book ratio of 2.14 at year-end. Compared to the average price-to-book ratio for its peer group, the Hannover Re share continues to be significantly better valued.

Dividend

The Executive Board and the Supervisory Board intend to propose to the Annual General Meeting on 5 May 2021 that a dividend of EUR 4.50 per share should be distributed. The ordinary dividend would thus be EUR 0.50 higher than the previous year's ordinary dividend. Based on the year-end closing price, this produces a dividend yield of 3.5%.

Annual General Meeting

In view of the coronavirus pandemic the Annual General Meeting of Hannover Rück SE on 6 May 2020 was held for the first time in the form of a virtual annual general meeting without the presence of shareholders or their authorised proxies. Altogether, around 82% of the share capital was represented, a similar figure to the previous year.

The shareholders approved the proposal made by the Executive Board and Supervisory Board for payment of a gross dividend amounting to EUR 5.50 per share. It is made up of an ordinary dividend, which was increased by a further 25 cents to EUR 4.00 per share, and an unchanged special dividend of EUR 1.50 per share.

All items on the agenda were adopted by a majority of more than 90% of the represented voting rights. The results of the votes and the attendance were published on the company's website following the Annual General Meeting. The next Annual General Meeting will be held on Wednesday, 5 May 2021.

Dialogue with the capital market

With travel restrictions imposed virtually worldwide as a consequence of the coronavirus pandemic, all investor conferences and roadshows since March 2020 have been held exclusively in a virtual format by means of an audio or video broadcast. The Executive Board and representatives of the Investor Relations department were thereby once again able in 2020 to maintain a continuous dialogue with institutional investors, analysts and private investors and meet the increased demand for information resulting from the impacts of the Covid-19 pandemic on the insurance industry.

In regional terms, the focus of our efforts remained on the financial centres of Europe and North America. The number of participations in capital market conferences and roadshow days was virtually unchanged at 13 (previous year: 16) and 12 (11) respectively. In the year under review, however, investors increasingly tended to seek direct contact with the Investor Relations department through conference calls and video conferences, which doubled in number year-on-year.

A central theme in these communication activities revolved around the losses that the coronavirus pandemic would cause for the insurance industry and also for Hannover Re. In the second half of the year attention also increasingly turned to the opportunities that might arise in our core business. It remains the case that a growing tendency to align investments with sustainability criteria can be observed among investors, as a consequence of which questions relating to Hannover Re's sustainability efforts as well as ESG (environmental, social and governance) issues continued to be asked more widely. The unveiling of the new Group strategy for the years 2021–2023 was the main theme of Hannover Re's 23rd Investors' Day. This was broadcast as a webcast on 21 October 2020 from a recording studio in Hannover.

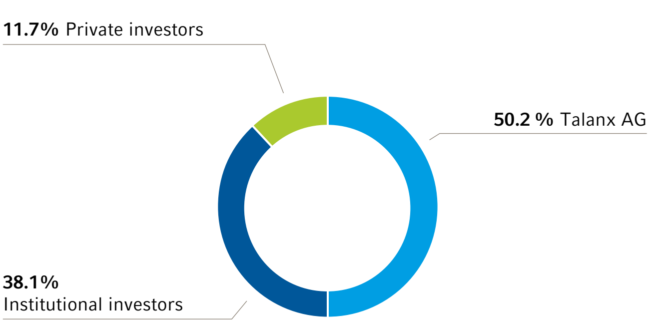
Sustainability reporting and ratings

Along with traditional financial considerations, non-financial key performance indicators are coming to play an increasingly important role in the evaluation of companies on the capital market. In the financial year just ended, therefore, Hannover Re again reported extensively on sustainability and ESG topics. The publications took the form of a combined non-financial information statement that forms an integral component of the Group management report as well as a stand-alone sustainability report compiled in accordance with the internationally recognised reporting standards of the Global Reporting Initiative (GRI). In 2020, as in prior years, we cultivated a regular dialogue with ESG analysts on the investor side, supervisory authorities, insurance industry associations and other stakeholders. In addition, Hannover Re participates in the feedback processes of multiple ESG rating agencies. The company has been awarded ratings by, among others, CDP, CSA/DJSI, ISS ESG, MSCI, Sustainalytics and VigeoEiris and is listed in the FTSE4Good, the Global Challenges Index and the sustainability index of Deutsche Börse (DAX50 ESG). Hannover Re also became a signatory to the UN Principles for Responsible Investment (UN PRI) in the year under review.

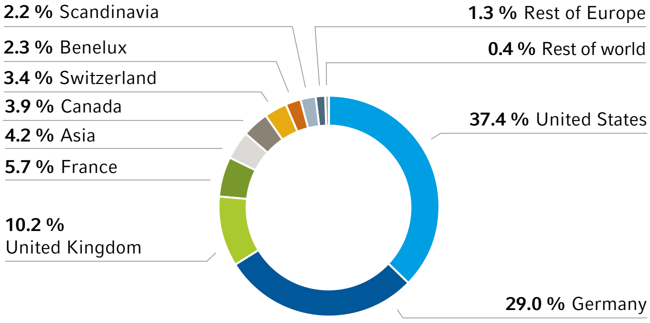
Shareholder structure

Our share register showed some 64,200 shareholders at the end of the year, another increase in the number of shareholders year-on-year (55,200). The largest shareholders at year-end were Talanx AG with 50.2% and Deutsche Asset Management Investment GmbH with a reported 3.02% of the voting rights. Of the remaining shares outstanding, by far the bulk – at 35.1% – were held by other institutional investors such as banks, insurers and investment companies (previous year in total: 32.5%); private investors held 11.7% (11.2%). Our shareholders include investors who pay particularly close attention to sustainability criteria.

Shareholder structure as at 31 December 2020 | 11



Geographical breakdown of the shares held by institutional investors | 12



Basic information **I 13**

Securities identification number	840 221
International Securities Identification Number (ISIN)	DE 000 840 221 5
Ticker symbols	HNR1 (Bloomberg), HNRGn (Reuters), HVRRY (ADR)
Exchange listings	
Germany	Xetra, Frankfurt, Munich, Stuttgart, Hamburg, Berlin, Düsseldorf, Hannover (official trading: Xetra, Frankfurt and Hannover)
United States	American Depositary Receipts (Level 1 ADR program; 2 ADR = 1 share)
Market segment	Prime Standard
Index membership	MDAX
First listed	30. November 1994
Number of issued shares (as at 31 December 2020)	120,597,134
Common shares (as at 31 December 2020)	EUR 120,597,134.00
Share class	No-par-value registered shares

Key figures **I 14**

in EUR	2020	2019	2018	2017	2016
Number of shares in million	120.6	120.6	120.6	120.6	120.6
Annual low[1]	107.50	116.40	104.70	95.95	84.12
Annual high[1]	192.40	175.20	125.30	115.65	106.20
Year-opening price[1]	172.30	117.70	104.90	102.80	105.65
Year-ending price[1]	130.30	172.30	117.70	104.90	102.80
Market capitalisation at year-end in EUR million	15,713.8	20,778.9	14,194.3	12,650.6	12,397.4
Equity attributable to shareholders of Hannover Rück SE in EUR million	10,995.0	10,528.0	8,776.8	8,528.5	8,997.2
Book value per share	91.17	87.30	72.78	70.72	74.61
Earnings per share (basic and diluted)	7.32	10.65	8.79	7.95	9.71
Dividend per share	4.50[2, 3]	4.00 + 1.50[3]	3.75 + 1.50[3]	3.50 + 1.50[3]	3.50 + 1.50[3]
Cash flow per share	26.79	20.81	18.45	14.05	19.33
Return on equity (after tax)[4]	8.2%	13.3%	12.2%	10.9%	13.7%
Dividend yield[5]	3.5%	3.2%	4.5%	4.8%	4.9%
Price-to-book (P/B) ratio[6]	1.4	2.0	1.6	1.5	1.4
Price/earnings (P/E) ratio[7]	17.8	16.2	13.4	13.2	10.6
Price-to-cash flow (P/CF) ratio[8]	4.9	8.3	6.4	7.5	5.3

1 Xetra daily closing prices from Bloomberg
2 Proposed dividend
3 Dividend of EUR 4.50 for 2020, dividend of EUR 4.00 plus special dividend of EUR 1.50 for 2019, dividend of EUR 3.75 plus special dividend of EUR 1.50 for 2018 and dividend of EUR 3.50 plus special dividend of EUR 1.50 for 2017 and 2016
4 Earnings per share/average of book value per share at start and end of year
5 Dividend per share/year-end closing price
6 Year-end closing price/book value per share
7 Year-end closing price/earnings per share
8 Year-end closing price/cash flow (from operating activities) per share

Combined management report

Foundations of the Group

Business model

- Worldwide reinsurance, transacting all lines of property & casualty and life & health reinsurance with the goal of achieving the broadest and most balanced possible regional and line-based diversification
- Competitive advantages due to our low cost of capital and administrative expense ratio
- Financial strength secured through sophisticated risk management

With a gross premium volume of more than EUR 24 billion, the Hannover Re Group is the third-largest reinsurer in the world. Hannover Rück SE is a European Company, Societas Europaea (SE), based in Hannover, Germany. We transact reinsurance in our Property & Casualty and Life & Health business groups.

The strategy pursued in both property & casualty and life & health reinsurance supports our Group's paramount mission, namely: "Striving for sustainable outperformance". Our entire business operations are geared to our goal of being the preferred business partner for our clients. It is for this reason that our clients and their concerns form the focus of our activities.

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

We also strive for the broadest possible diversification and hence an efficient risk balance. This is achieved by accepting reinsurance risks with mostly little or no correlation in our Property & Casualty and Life & Health business groups across all lines of business as well as by maintaining a global presence. In conjunction with efficient capital management, this is the key to our comparatively low cost of capital.

Guided by a clearly defined risk appetite, the Executive Board steers the company using risk management techniques so as to be able to act on business opportunities while securing our financial strength on a lasting basis.

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

In the Property & Casualty reinsurance business group we consider ourselves to be a reliable, flexible and innovative market player that ranks among the best in any given market. Cost leadership, effective cycle management and superlative risk management are the key elements of our competitive positioning.

In the Life & Health reinsurance business group we are recognised – as customer surveys confirm – as one of the top players for traditional covers and a leading provider of structured solutions. We achieve this standing by opening up new markets for our company and by identifying trends in order to anticipate the future needs of our customers.

Management system

Value-based management

Our integrated system of enterprise management constitutes the basis for attainment of our strategic objectives. Located at its core are, first and foremost, our profit and growth targets, which are summarised for the Group and its business groups in the so-called target matrix. In addition to traditional performance indicators geared to the IFRS balance sheet, our system of strategic targets also includes economic targets derived from our internal capital model approved by the regulator and from the economic equity pursuant to Solvency II reporting. The targets are regularly analysed and adjusted in the context of the strategy review conducted at periodic intervals. Given that reinsurance business is subject to cyclical fluctuations, our primary focus is on medium- and long-term attainment of the strategic targets across the cycle. With our internal management system Performance Excellence (PE) we have at our disposal a consistent method Group-wide that enables us to steer the development of the company as well as to measure and hence also evaluate the extent to which we have achieved our strategic objectives. The decentralised approach used by PE is of special importance in this context: every single organisational unit defines and continuously examines its contributions to execution of the Hannover Re Group strategy and develops improvement initiatives.

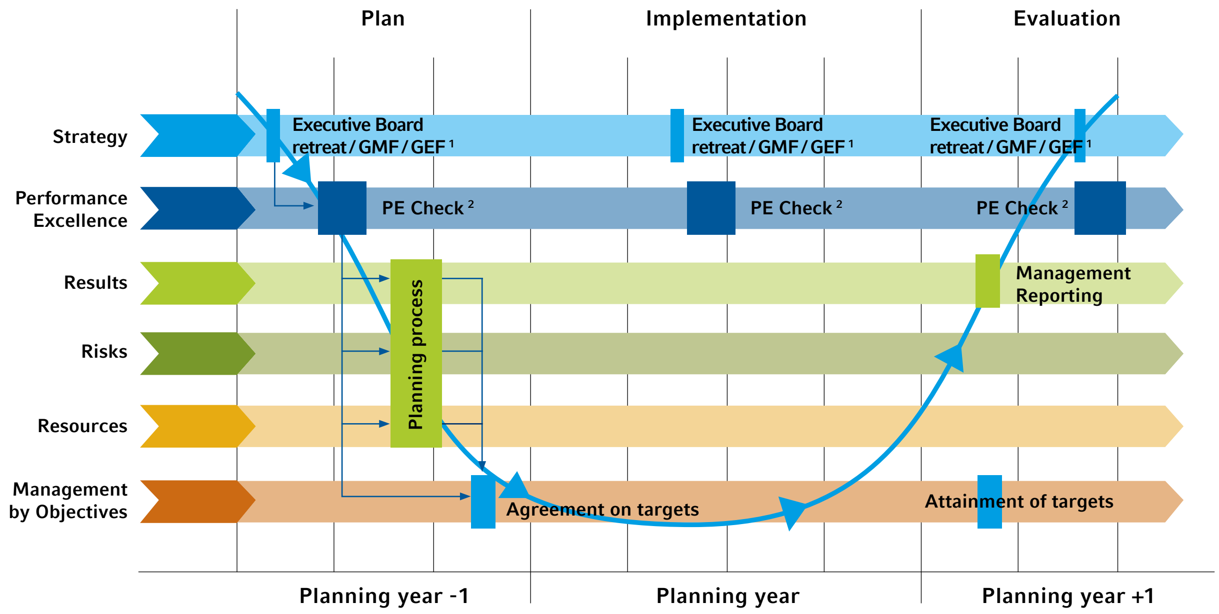
Target attainment[1] **M 01**

Business group	Key data	Targets for 2020	Target attainment 2020	2019	2018	Ø 2018–2020[2]
Group	Investment return[3]	≥ 2.7%	3.0%	3.4%	3.2%	3.2%
	Return on equity[4]	≥ 9.0%	8.2%	13.3%	12.2%	11.1%
	Growth in earnings per share	≥ 5%	-31.2%	21.2%	10.5%	-2.7%
	Economic value creation[5]	≥ 6.0%	6.0%	13.1%[14]	8.2%	8.7%
	Solvency ratio[6]	≥ 200%	235.2%	250.7%[14]	246.0%	243.6%
Property & Casualty reinsurance	Gross premium growth	3 – 5%[7]	15.8%	20.4%	16.2%	17.5%
	Combined ratio	≤ 97%[8]	101.6%	98.2%	96.5%	99.0%
	EBIT margin[9]	≥ 10%	5.9%	10.0%	12.2%	9.1%
	xRoCA[10]	≥ 2%	0.9%	0.1%	9.0%	3.1%
Life & Health reinsurance	Gross premium growth	3 – 5%[11]	4.7%	6.7%	4.6%	5.3%
	Value of New Business (VNB)[12]	≥ EUR 220 million	EUR 778 million	EUR 663 million	EUR 290 million	EUR 577 million
	EBIT growth	≥ 5%[13]	-32.5%	106.6%	12.5%	16.2%
	xRoCA[10]	≥ 2%	17.6%	11.8%[14]	-2.2%	9.3%

1 This table contains information that has not been audited by the independent auditor
2 Annual average growth, otherwise weighted averages
3 Excluding effects from ModCo derivatives
4 After tax; target: 900 basis points above the five-year average return on ten-year German government bonds
5 Growth in the economic equity including dividend paid
Target: 600 basis points above the five-year average return on ten-year German government bonds
6 In accordance with our internal capital model and Solvency II requirements
7 Average over the reinsurance cycle; at constant exchange rates
8 Including large loss budget of EUR 975 million; target until 2018: 96%
9 EBIT/net premium earned
10 Value contribution relative to allocated economic capital
11 Organic growth only; target: annual average growth over a three-year period; at constant exchange rates
12 Based on Solvency II principles; pre-tax reporting
13 Annual average growth over a three-year period
14 Minor differences compared to the Annual Report 2019. The figures are based on the final Solvency II year-end reporting

System of value-based management:
Performance Excellence (PE) combines the strategic and operational levels

M 02



[1] The Global Management Forum (GMF) and the Global Executive Forum (GEF) bring together senior managers of the Hannover Re Group from around the world for the purpose of defining strategic orientations. The parameters developed here serve as the basis for the subsequent planning process.
[2] Verification and elaboration of contributions to the Group strategy

Management by Objectives

The key indicators from the target matrix are integrated into the individual agreements on objectives with managers. When it comes to the definition of objectives, the participants take into account not only standardised financial indicators but also non-financial variables derived from the strategic parameters.

Management Reporting

The annual Management Reporting presents in detail the respective degree of target attainment for each individual treaty/regional department and service unit as well as for the two business groups of Property & Casualty and Life & Health reinsurance and for the Group as a whole. On this basis performance controlling is carried out, potential scope for improvement and refinement is identified and performance-oriented remuneration components defined in the context of Management by Objectives are established.

Capital allocation

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

IVC – the strategic management ratio

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

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

In this way, we can

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

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

The adjusted economic profit is comprised of two factors: the IFRS Group net income recognised after tax and the change in the balancing items for differences between economic valuations and amounts stated in the IFRS balance sheet. By way of the latter we make allowance in the value determination for changes in the fair values of assets not recognised in income under IFRS as well as for the change in economic effects in the technical Solvency II balance sheet items that are not recognised in the IFRS balance sheet. In addition, interest on hybrid capital already recognised in the IFRS Group net income and the non-controlling interest in profit and loss are included back in the calculation.

Intrinsic Value Creation and excess return on capital allocated[1] **M 03**

	2020		2019[2]		2018	
in EUR million	IVC	xRoCA	IVC	xRoCA	IVC	xRoCA
Property and casualty reinsurance	53.9	0.9%	5.2	0.1%	458.9	9.0%
Life and health reinsurance	653.5	17.6%	421.8	11.8%	(76.8)	-2.2%
Investments[3]	245.4	4.1%	483.4	8.4%	(7.0)	-0.1%
Group	**952.6**	**6.0%**	**910.2**	**6.2%**	**375.0**	**2.5%**

[1] This table contains information that has not been audited by the independent auditor
[2] Differences compared to the Annual Report 2019 arise out of the final figures from the final Solvency II year-end reporting.
[3] Income above risk-free interest rate after deduction of risk-appropriate cost of capital

The allocated capital consists of the economic equity pursuant to Solvency II including non-controlling interests and the hybrid capital. Capital is allocated to the profit centres as described above according to the risk content of the business in question. A systematic distinction is made here between the assumption of underwriting risks, on the one hand, and investment risks, on the other. Under the IVC calculation, therefore, only risk-free interest income on the generated cash flows is allocated to the business segments of property & casualty and life & health reinsurance. The investment income above and beyond risk-free is allocated in its entirety to the functional area of investments and included in the IVC after deduction of the risk-appropriate cost of capital and the administrative expenses.

In calculating the cost of capital, our assumption – based on a Capital Asset Pricing Model (CAPM) approach – is that the investor's opportunity costs are 450 basis points above the risk-free interest rate, meaning that economic value is created above this threshold. Our strategic return on equity target of 900 basis points above risk-free thus already contains a substantial target value creation. We allocate equity sparingly and use equity substitutes to optimise our average cost of capital, which amounted to (unaudited by the independent auditor) 4.1% in 2020 (previous year: 3.9%).

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

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

Operational management system

A number of IFRS-based financial performance indicators are also embedded in our strategic system of targets and coordinated with our parameters for value creation derived from the internal capital model. We use these indicators for operational management within the year, in part because they are available promptly and also because they already provide initial pointers as to whether we are likely to achieve our higher-order strategic objectives. These are for both business groups the growth in gross premium, for property and casualty reinsurance the combined ratio, for life and health reinsurance the EBIT growth and for the Group as a whole the return on investment. Non-financial performance indicators, on the other hand, are not used for operational management within the year.

Research and development

In the context of our innovation activities we continuously develop products and solutions that deliver value added both for Hannover Re and for our clients. Our innovation and digitalisation initiatives are enshrined in our Group strategy.

By way of example, our move to give capital market players direct access to insurance risks as far back as the mid-1990s through our "K" transactions puts us among the industry pioneers. The intervening years have seen the subsequent evolution of a market for so-called insurance-linked securities, which is one of the fastest growing markets in the insurance sector.

Not only that, through our active involvement and the provision of financial assistance we support scientific initiatives geared to developing products, solutions or markets that will be crucial success factors going forward in the viability of any reinsurance undertaking. Over the past four years, for example, we have launched and held two ideas competitions in which we opened up new business opportunities on both the primary and reinsurance side. Another example of Hannover Re's development activities is our own internal model for risk management under Solvency II that caters to the requirements of various stakeholders (regulators, rating agencies, capital providers) and was one of the first in Europe to be approved by the national financial regulator (Federal Financial Supervisory Authority = BaFin).

Reinsurance business is founded on the comprehensive understanding and active management of risks. Our specialists therefore continuously analyse known risks with an eye to changes in their structure and probability of occurrence, while at the same time focusing on the early detection of newly emerging risks and working to provide our clients with appropriate solutions tailored to their needs. This has significantly supported growth over the past five years, especially in structured reinsurance. Above and beyond this, Hannover Re makes systematic efforts to identify new business opportunities in order to achieve sustainable growth and strengthen the profitable development of the company.

In organisational terms, the exploration of market trends and development of innovative products at Hannover Re are tasks assigned to the individual market units. In addition, business opportunities and innovations that cut across markets and segments are coordinated by the "Group Performance & Strategy Development" team and pursued by means of interdisciplinary projects in which various market and service units participate.

Report on economic position

Macroeconomic climate and industry-specific environment

- Economic developments worldwide shaped by Covid-19 pandemic
- Low interest rate environment remains a drag on the insurance industry
- Capital markets experiencing continued volatility
- Considerable losses again incurred from natural catastrophes

Macroeconomic climate

The **world economy** was overshadowed by the Covid-19 pandemic throughout much of 2020. Viewed over the course of the year, global output contracted by 3.8% (previous year: +3.0%) compared to 2019. The rapid spread of the coronavirus triggered a massive collapse in economic activity in the first half of the year. Going into the autumn, global production rallied and picked up sharply in many areas: in the third quarter it climbed by almost 9% and thereby beat even optimistic expectations. In the final months another wave of infection and corresponding measures to contain it put the brakes on this recovery. Despite the associated darkening of the economic mood, the indicator of worldwide economic activity nevertheless continued on its fundamentally upward trajectory. In contrast to the spring, however, the implications for manufacturing, world trade and commodity prices remained limited.

The recovery in the service sectors was mixed: while the retail industry quickly moved back towards a normal level, other service sectors experienced significant declines. Most notably, the situation in sectors with lively social contacts – such as hospitality and entertainment – remained critical. Similarly, service sectors involving cross-border traffic such as aviation and tourism were very hard hit.

From a regional perspective, China and Taiwan, in particular, recovered relatively quickly, surpassing 2019 production levels in the final quarter of the year. Other countries – including the United States, some Eurozone members and Japan – were still below prior-year levels even in the closing quarter. Over the year as a whole, dramatic slumps in gross domestic product were recorded which in some instances were clearly in excess of 10%, including for example in the United Kingdom (-11.3%), India (-7.9%) and Argentina (-12.3%) as well as in countries where tourism plays a particularly key role such as Spain (-11.0%), Croatia (-8.5%), Greece (-8.9%), Thailand (-6.4%) and the Philippines (-9.8%).

Even though they still have to be resolved, global trade tensions took a back seat in 2020 owing to the pandemic crisis. The US and Europe continued to impose punitive tariffs on one another, as did the US and China.

United States

The pandemic hit the US especially hard, swiftly plunging the country into a deep recession in the spring. Altogether, some 22 million jobs were lost in the critical phase. Of those, more than half were regained by November with the help of economic stimulus packages totalling around USD 2.7 trillion. In December the US Congress reached agreement on USD 900 billion in additional financial aid so as to alleviate the impacts of the second wave of coronavirus. Over the year as a whole, gross domestic product fell by 3.6% compared to 2019 (+2.2%). Consumer demand, which had still been robust in the previous year, softened by almost 4% and equipment spending – which had similarly been trending higher in the prior year – slipped by 6%. The decline in imports and exports even reached double digits. This was countered by an increase of 1.2% in government spending. The jobless rate surged from 3.7% to 8.1%.

Europe

In the Eurozone, too, gross domestic product contracted sharply in the course of the year. The loss of value creation was especially marked in manufacturing, trade, transportation and hospitality as well as other service sectors. Spain, France and Italy were exceptionally heavily impacted. Governments here found themselves compelled to take particularly far-reaching measures that dramatically restricted business activity. With a view to buttressing the economy and preventing strains on capital markets, the European Central Bank (ECB) increased its asset purchase programme in March by EUR 120 billion. The ECB additionally launched a new EUR 750 billion emergency purchase programme, which it boosted by a further EUR 600 billion in May. The Eurozone economy picked up appreciably in the summer months as measures to contain the pandemic were eased. In the autumn, however, governments again felt obliged to take extensive actions, which in turn stifled economic activity in the Eurozone as the year drew to a close. Looked at over the year as a whole, economic output fell by 7.2% in 2020 (+1.3%). Consumer prices edged only marginally higher year-on-year by 0.3% (+1.2%). Unemployment rose from 7.5% to 8.1%.

With a decline of 11.3% (+1.3%), the economic slump experienced by the United Kingdom in 2020 was worse than average in its severity. The government here was relatively slow to act, only to subsequently bring in particularly strict measures in response to the threat posed by Covid-19. What made things worse for the UK economy was the continued difficult course of Brexit negotiations on a comprehensive trade agreement, with successful finalisation of a deal remaining uncertain until well into December. Faced with this climate, the labour market proved relatively resilient: the jobless rate increased only slightly from 3.8% to 4.2%.

Germany

Gross domestic product contracted by 5.2% year-on-year in Germany (+0.6%). The decline was significantly less than had been initially anticipated. This can be attributed to an especially marked economic upswing driven in the third quarter primarily by industrial output and foreign trade. Numerous service sectors were also able to resume their activities as the year progressed. From November onwards economic development was overshadowed by the renewed imposition of restrictions to curb the pandemic.

The situation as a whole depressed purchasing habits in 2020: private consumer spending was down by 6.3% (+1.6%). Corporate spending also retreated by 6.3%, although domestic turnover for equipment spending and the output of capital goods manufacturers in October pointed to significant upward momentum. Construction investments, which had been on a high level going into the year, grew by 2.5% in 2020 (+3.8%).

During the autumn exports already made good roughly two thirds of the slump seen in the first six months and were still roughly 7% below the previous year's level in the third quarter. Corporate optimism in the importing countries was again temporarily dented in the fourth quarter. Over the year as a whole exports fell by 9.8% in 2020 (+1.0%). Imports contracted by 8.9% (+2.6%).

The jobless rate rose by 0.9 percentage points year-on-year to 5.9% as the domestic working population shrank by 450,000. The increase in consumer prices – in part moderated by the cut in value-added tax – was 0.5% (1.4%) averaged over the year as a whole.

Asia

Emerging markets in Asia recovered at a relatively quicker pace in the course of 2020. They benefited from their specialisation in consumer goods and the increased need for personal and medical protective equipment. From an annual perspective, output fell short of the previous year by 1.6% (+5.5%). In China, which was already able to effectively fight the pandemic at an early stage, industrial production already bounced back appreciably in the spring. Viewed over the year as a whole, the Chinese economy grew by 1.8% in 2020 (+6.1%). The Indian economy, on the other hand, fared considerably more poorly. After posting robust growth in the previous year (+4.9%), economic output in 2020 collapsed by 7.9% in the face of what had already been a strained debt situation.

Gross domestic product in Japan contracted by 5.2% relative to the previous year (+0.3%). Thanks to supplementary budgets and bond purchases in the spring, however, the decline in most sectors was limited to a scale that can be seen from time to time in normal economic cycles. Foreign trade was particularly hard hit: both imports and exports were sharply lower.

Capital markets

In the first half of the year under review the investment climate – which in recent years had repeatedly proven challenging – eclipsed at times anything seen on capital markets in the past ten years. After initial euphoria in January, the closing weeks of the first quarter brought violent market reactions to the rapid spread and possible economic consequences of the coronavirus pandemic. They went hand-in-hand with sharp volatility in all asset classes and across all markets. Interest rates with minimal risk on the important fixed-income markets for our company again fell sharply – starting out from what was already a very low point at the end of the previous year –, only to languish on a depressed level ever since. This was evident for both euro- and sterling-denominated bonds, but was especially striking in the US dollar area. Credit spreads were initially notable for very sharp increases and the highest levels of volatility measured to date. They normalised again towards year-end and volatility also decreased.

On equity markets the picture was a similar one. The precipitous declines at the end of the first quarter gave way to an opposite movement at a similarly historic pace, with the result that many stock markets – viewed over the year as a whole – actually posted significant gains. The area of alternative investments also came under heavy pressure at times, only to surprise with unexpectedly high valuations by the end of the year. Valuations in the real estate sector were relatively stable, although the possibility that the effects of the current situation will be reflected in upcoming reporting periods cannot be ruled out.

The massive monetary and fiscal measures taken by individual governments, which especially in some European countries and in Japan took on considerable dimensions relative to the respective gross domestic product, had the anticipated effect. Such supportive actions, however, also make it easier for bubbles to form.

The suspension of the requirement to file for insolvency in Germany and the resulting lowest level of corporate insolvencies since 1990 in no way reflects the actual economic development and must not cause us to lose sight of the rise in insolvencies expected in the coming period. In general terms, too, it will be important to pay close attention to just how the exit from these measures is managed.

The continuing unsettled global political landscape, imminent political changes in the United States and the implications of the last-minute negotiated solution for the United Kingdom's withdrawal from the European Union are additional factors with the potential to influence the development of the world economy and we intend to follow them closely.

Emerging markets were once again heavily affected by the trade dispute between the US and China, which in essential respects will likely continue under a new US President. Nevertheless, it is the case that many of the emerging countries came through the Covid-19 crisis in good or very good economic shape over the course of the year, as reflected in share prices too. The recovery in countries primarily focused on commodity exports was, however, slowed by what were still rather muted levels of consumption and problems affecting supply chains in the Western world.

The approval and distribution of vaccines has meanwhile become a cause for hope. At the same time, there is a risk that local lockdowns will hamper economic recovery – not only in emerging countries. What is more, volatility is likely to remain high.

The US economy proved to be relatively robust despite the coronavirus crisis. This can be attributed not least to heavy intervention by the Federal Reserve, which pressed ahead with the expansionary interest rate policy already embarked on in the previous year and responded in March by making further sharp cuts. The European Central Bank launched an extensive asset purchase programme for bonds issued by governments and corporate entities in order to support them in this time of crisis.

All in all, then, the policies pursued by central banks in our main currency areas were consistent, albeit differing in the measures adopted and scale thereof. The ECB kept the key interest rate for the Eurozone at a historically low 0.0%. The Bank of England trimmed its benchmark interest rate in two increments from 0.75% to the current 0.1%. The US Federal Reserve similarly lowered the base rate for the US dollar in two increments, making even sharper cuts in March from 1.75% to an average of 0.25%.

The euro gained significant ground against the US dollar over the course of the year, climbing from USD 1.12 to USD 1.23. The euro also moved higher against the British pound, rising from GBP 0.85 to GBP 0.90. The Australian dollar ultimately held steady against the euro at AUD 1.60 despite marked volatility during the year.

Industry-specific environment

For the international (re)insurance industry, 2020 turned out to be another challenging year. The Covid-19 crisis featured particularly prominently, given its significant impact on the general environment for the day-to-day business conducted by insurers. Thus, for example, it was essential to safeguard compliance with the supervisory requirements for proper business organisation and to ensure that the demands placed on regulated emergency management were met. At the same time, the insurance industry was also called upon to pivot in its business operations to a work-from-home basis. Furthermore, the risks confronting insurers on the capital markets became more acute. Declines in share and bond prices in the context of the Covid-19 crisis subsequently exacerbated the pressure on the solvency of insurers.

As an additional factor, it remains to be seen what rulings will become established in court practice – above all in business interruption insurance in countries such as the United Kingdom, Germany, Australia and South Africa – and what losses this will ultimately mean for insurers. On the other hand, government assistance, e.g. to prop up trade credit insurers, alleviated to some extent the adverse developments in specific lines of business, while other lines such as motor insurance benefited from lower claims expenditure as traffic volumes declined.

The planned adoption of the new international accounting standard **IFRS 17** by the International Accounting Standards Board (IASB) continued to be an important concern in the year under review. IFRS 17 will replace the interim standard IFRS 4, which has been in force since 2005, and is intended to make it easier to compare insurers through a consistent worldwide basis for the recognition of insurance contracts. In June 2020 the IASB published proposed amendments to IFRS 17. In this context it was decided to defer the date of initial application of IFRS 17 to 1 January 2023. The standard is, however, only mandatory for the consolidated financial statements of capital-market-oriented insurance companies. At the same time, the application of the financial instruments standard **IFRS 9** was also deferred, with the result that all insurers will have to apply IFRS 9 and IFRS 17 simultaneously from 2023 onwards.

In Europe the **Solvency II** prudential regime is currently undergoing a multi-step review by the European Commission. Against this backdrop, the European Commission instructed the European Insurance and Occupational Pensions Authority (EIOPA) to take a close look at large parts of Solvency II. EIOPA submitted its proposals to the European Commission in December 2020. Overall, the recommendations made by EIOPA will lead to a tightening of the requirements placed on insurance undertakings, although simplifications will be made in some areas. The European Commission is expected to release a draft directive incorporating amendments towards the end of 2021 and then set in motion the legislative procedure with the European Council and European Parliament.

In addition, the European Commission intends to enshrine sustainability aspects in Solvency II for the first time. It is envisaged that insurers will be required in future to integrate climate risks into their underwriting policy and align their risk management and investing activities with environmental considerations. A draft Commission Delegated Regulation was already published in 2020.

All in all, the issue of **sustainability** has increasingly moved front and centre for political institutions and corporations. The topic attracted attention in Europe with the unveiling of the European Green Deal by the European Commission in December 2019. The primary objective of the Green Deal is to establish Europe as the world's first climate-neutral continent by 2050. This will involve a complete transformation of the energy sector, industry, transportation and agriculture in a shift away from fossil-based energy towards sustainability and climate protection.

The coronavirus pandemic has further accelerated processes of social transformation that will also have implications for the (re)insurance industry. Due to the deep inroads made into public life as part of efforts to slow the spread of the virus and given the shift towards more widespread working from home, the issue of **digitalisation** has gained massive added impetus. The industry will see this manifested in various ways, including through the growing adoption of hybrid forms of work and communication, in the design of digital insurance solutions and in increasing cross-sector partnerships. Technological progress is now so advanced that computer systems are able to analyse enormous quantities of data and provide ever more useful support in many areas of work and life. At the same time, the risks posed by cybercrime must not be underestimated. On the whole, though, digitalisation offers considerable potential for innovation.

Business development

- Good result in a financial year dominated by the Covid-19 pandemic
- Gross premium grows by 12.0% adjusted for exchange rate effects
- Large loss expenditure in property and casualty reinsurance well over budget owing to the pandemic
- Pleasing investment income; return on investment higher than target
- Group net income of EUR 883 million beats adjusted full-year guidance
- Shareholders' equity rises to EUR 11.0 billion; return on equity reaches 8.2%

Hannover Re is the third-largest reinsurer in the world. Thanks to our global positioning with more than 170 subsidiaries, branches and representative offices around the world, we have a far-reaching international network and extensive technical expertise. On this basis, we are able to offer traditional, tailor-made and innovative reinsurance solutions and cultivate new business opportunities.

The markets for property and casualty reinsurance as well as for life and health reinsurance have been fiercely competitive for a number of years. Furthermore, results in property and casualty reinsurance have had to absorb heavy losses from natural catastrophes in recent years. In the 2020 financial year the Covid-19 pandemic and its repercussions presented an added challenge for insurers and reinsurers alike across multiple lines of business.

Against this backdrop, Hannover Re can look back on an exceptional year in which we demonstrated our high level of reliability for our customers and at the same time our robust risk-carrying capacity and profitability. Despite the global crisis and the considerable payments made to our clients, this enabled us to report a good Group profit. We significantly boosted our reserves for losses anticipated from the Covid-19 pandemic once again at the end of the year as part of our prudent approach to risk management.

The pandemic and its direct as well as indirect effects on personal, social and economic life similarly had wide-ranging implications for Hannover Re in the 2020 financial year. Our paramount concern is protecting the health and safety of our workforce and providing reliable support for our customers. The majority of our more than 3,000 employees around the world are working largely from home. Thanks to our technologically advanced organisational setup, both the move from office to home and the changeover in ongoing business operations to predominantly mobile working passed off smoothly.

It was first and foremost the performance of the **Property & Casualty reinsurance** business group that was shaped by the impacts of the Covid-19 pandemic in the financial year just ended. The payments and amounts reserved in property and casualty reinsurance for Covid-19-related losses came to altogether EUR 950 million net and are attributable primarily to the insurance lines of business interruption, trade credit and event cancellation. Of this total amount, 65% was allocated to IBNR reserves for losses that have been incurred but not yet reported in accordance with our prudent reserving policy.

Particularly owing to the strains from the pandemic, our expenditures for large losses – including those from natural disasters and human-caused losses – exceeded our budget expectations by EUR 620 million. The combined ratio in property and casualty reinsurance increased accordingly in the financial year just ended to 101.6% (previous year: 98.2%).

In view of the considerable major loss expenditure in recent years and the further exacerbation of the low interest rate environment in 2020, a sustained improvement in prices and conditions for reinsurance protection can be seen in property and casualty business after years of declining prices. Thanks to its comparatively low administrative expenses and cost of capital as well as its above-average financial strength, Hannover Re has been and remains able to successfully assert itself in the market. Based on our positioning as one of the largest and most robustly capitalised reinsurers in the world, we enjoy sustained very good access to profitable business. Although this is encouraging, further action is still needed on the underwriting side. For us, technical profitability remains the top priority when it comes to taking on risks.

Our **Life & Health reinsurance** business group was similarly impacted by the effects of the Covid-19 pandemic, albeit to a far lesser extent than in property and casualty reinsurance. Altogether, the paid losses and reserves relating to Covid-19 in life and health reinsurance amounted to EUR 261 million – the bulk of which stemmed from illnesses and deaths in the United States, our largest single market. Losses were also incurred in regions such as Australia, Europe or Latin America. The pandemic and the associated strains for the entire insurance industry further boosted what had already been generally strong demand in financial solutions business, where we offer our customers individual reinsurance solutions designed to improve their solvency, liquidity and capital position.

Leaving aside the pandemic-related losses, business developed in line with our expectations. Furthermore, special income was again generated from investments in connection with participating interests.

The Group gross premium booked by Hannover Re increased by 9.6% as at 31 December 2020 to EUR 24.8 billion (EUR 22.6 billion). At constant exchange rates growth would have reached 12.0%. The level of retained premium was virtually unchanged at 90.1% (90.0%). Net premium earned rose by 8.2% to EUR 21.4 billion (EUR 19.7 billion). The increase would have been 10.6% at unchanged exchange rates. Given that no acquisitions were made in the financial year, the growth is purely organic.

The **investment income** generated by Hannover Re showed pleasing stability despite the turmoil on capital markets and thus played an important part in the good overall result for the year under review. The slightly higher write-downs on alternative investments and significantly lower current income in our portfolio of inflation-linked bonds contrasted with higher realised gains booked in connection with portfolio regrouping activities. The return on investment stood at 3.0% and thus came in higher than our target level of around 2.7%. This can be attributed in large measure to the pleasing profit booked from realised gains, which was higher than anticipated, and also to a one-time effect from measurement of a participating interest at equity.

Other income improved by 41.3% to EUR 441.4 million, supported by a higher-than-expected positive contribution from exchange rate movements – especially affecting the main currencies relevant to our company and here first and foremost the US dollar.

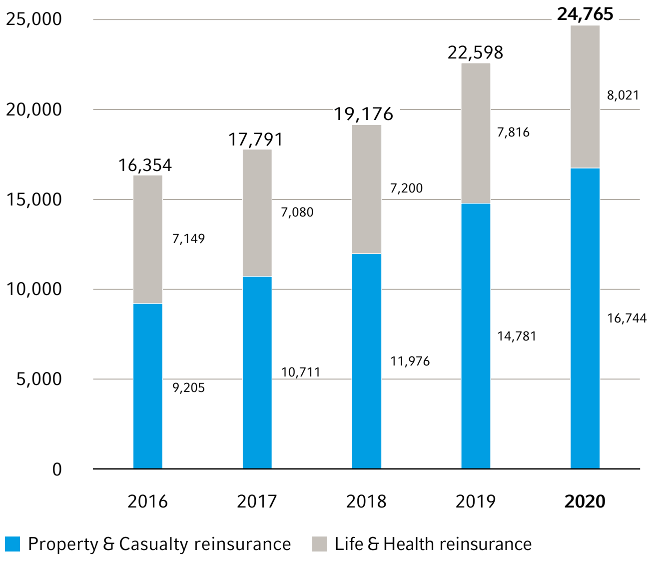
The operating profit (EBIT) declined by 34.5% to EUR 1,214.1 million (EUR 1,853.2 million). Group net income was 31.2% lower than in the previous year at EUR 883.1 million (EUR 1,284.2 million). We thus outperformed the guidance provided in the third quarter of more than EUR 800 million. We had withdrawn our original earnings guidance of around EUR 1.2 billion in April on account of the pandemic-related losses. Earnings per share for the Hannover Re Group stood at EUR 7.32 (EUR 10.65).

Hannover Re's equity position – measured in terms of the capital adequacy ratio which is still comfortably in excess of threshold levels – remains very robust. The equity attributable to shareholders of Hannover Re rose to EUR 11.0 billion (EUR 10.5 billion) as at 31 December 2020. The return on equity stood at 8.2% (13.3%). The book value per share reached EUR 91.17 (EUR 87.30). We were able to achieve and in some cases even substantially outperform all the forecasts shown in the table "Business development in the year under review", which we adjusted in the course of the financial year.

The total policyholders' surplus, consisting of shareholders' equity, non-controlling interests and hybrid capital, amounted to EUR 14.1 billion (EUR 13.6 billion) as at 31 December 2020.

A detailed overview of the development of our two business groups – Property & Casualty reinsurance and Life & Health reinsurance – and the performance of our investments is provided on pages 37 to 56.

Gross premium by business group **M 04**
in EUR million



Business development in the year under review M 05

	Guidance 2020	Target attainment 2020
Gross premium growth (Group)	Gross premium growth of around 5%[1]	+12.0% at constant exchange rates +9.6% not adjusted for currency effects
Gross premium growth for Property & Casualty reinsurance	solid growth[1]	+15.8% at constant exchange rates +13.3% not adjusted for currency effects
Gross premium growth for Life & Health reinsurance	moderate growth[1,2]	+4.7% at constant exchange rates +2.6% not adjusted for currency effects
Return on investment[3]	around 2.7%	3.0%
Group net income	around EUR 1.2 billion[4]/≥ EUR 800 million[5]	EUR 883.1 million

1 At constant exchange rates
2 Organic growth only
3 Excluding effects from ModCo derivatives
4 Assuming stable capital markets and/or major loss expenditure in 2020 that does not exceed EUR 975 million
5 On 21 April 2020 the guidance was withdrawn and on 4 November the guidance for the expected Group net income was revised to ≥ EUR 800 million.

Overall assessment of the business position

The development of business in 2020 was shaped by the Covid-19 pandemic, which had wide-ranging impacts on all aspects of life in society and on the world economy. Against this backdrop, Hannover Re can look back on an extraordinary financial year in which we were able to demonstrate our high dependability for our clients combined with our robust risk-bearing capability and profitability. On this basis, despite the global crisis and the considerable payments made to our clients, we were able to report a good Group profit and even increased our shareholders' equity.

The effects of the Covid-19 pandemic were particularly evident in our Property & Casualty reinsurance business group, and here most notably in the lines of business interruption, trade credit and event cancellation insurance. In combination with the expenditures incurred from natural catastrophes, large losses in the 2020 financial year exceeded our expectations for the fourth year in succession. At the same time, interest rates continued to fall. In response to these challenges, a marked improvement in prices and conditions can be observed in many lines on both the insurance and reinsurance side.

The Covid-19 pandemic was similarly a defining issue in the Life & Health reinsurance business group, even though the scale of payments made to our clients in this regard was significantly lower than in property and casualty reinsurance. The bulk of these expenditures were for death benefits in the United States. Leaving aside the pandemic-related strains, the losses were within the bounds of our expectations.

On the investment side, too, Hannover Re recorded strains related directly or indirectly to the pandemic, primarily in connection with inflation-linked bonds and in the form of impairments on high-yield bonds and private equity funds.

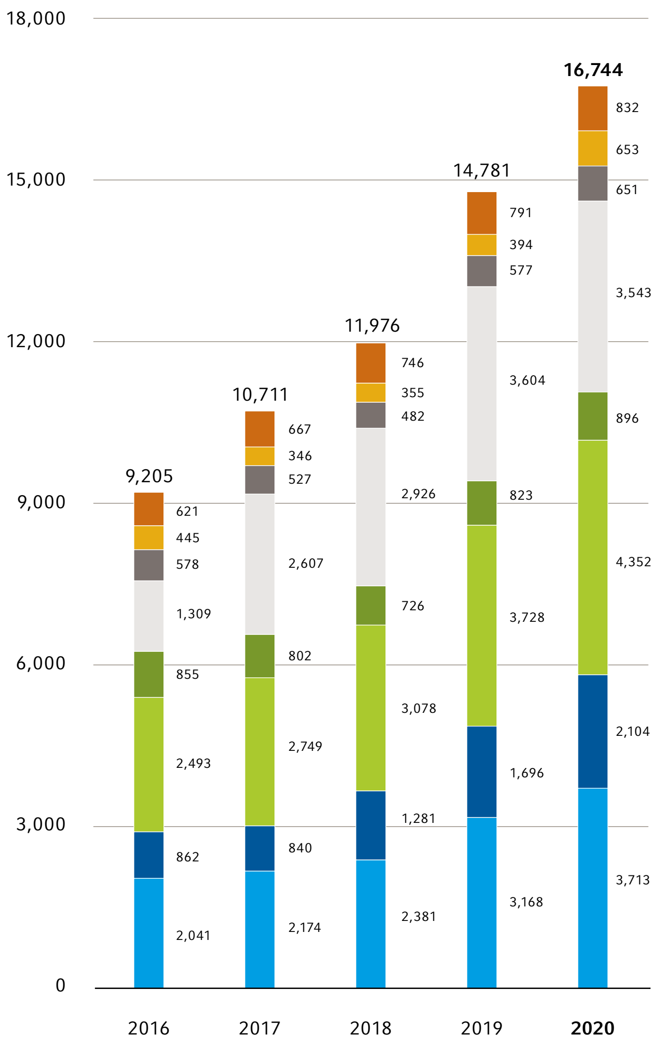
At the same time, Hannover Re's shareholders' equity increased thanks to, among other things, the sustained strong positive cash flow and the rise in unrealised gains on fixed-income securities. Hannover Re's continued very solid capital base constitutes the foundation for our superb positioning as one of the largest and most financially robust reinsurers in the world. At the time of preparing the management report, it remains the case that both the business position of the Group and its financial strength can be assessed as very good. Within the framework of our Group strategy we determine our necessary equity resources according to the requirements of our internal capital model, solvency regulations, the expectations of rating agencies for our target rating and the expectations of our clients and shareholders.

Results of operations

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

Property & Casualty reinsurance at a glance

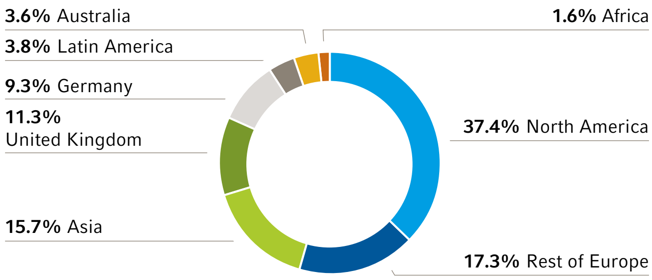
Gross premium in Property & Casualty reinsurance **M 06**
in EUR million



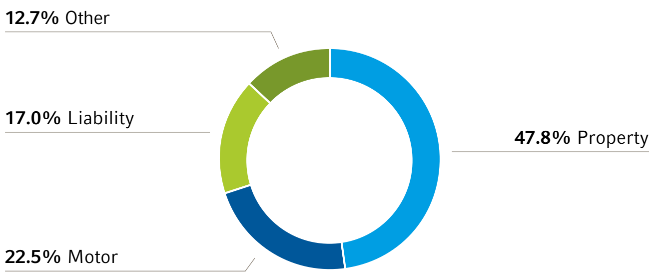
Regional Markets
- Americas
- APAC
- EMEA (including CIS)

Worldwide Markets
- Facultative Reinsurance
- Structured Reinsurance and Insurance-Linked Securities
- Aviation and Marine
- Agricultural Risks
- Credit, Surety and Political Risks

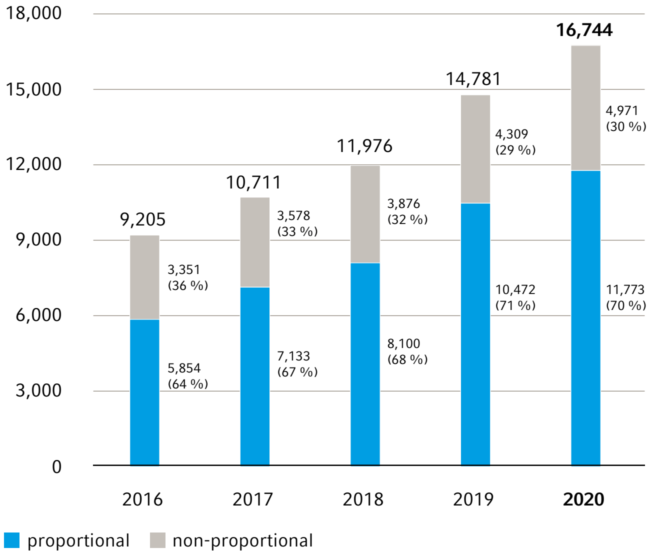
Geographical breakdown of gross premium in 2020 **M 07**



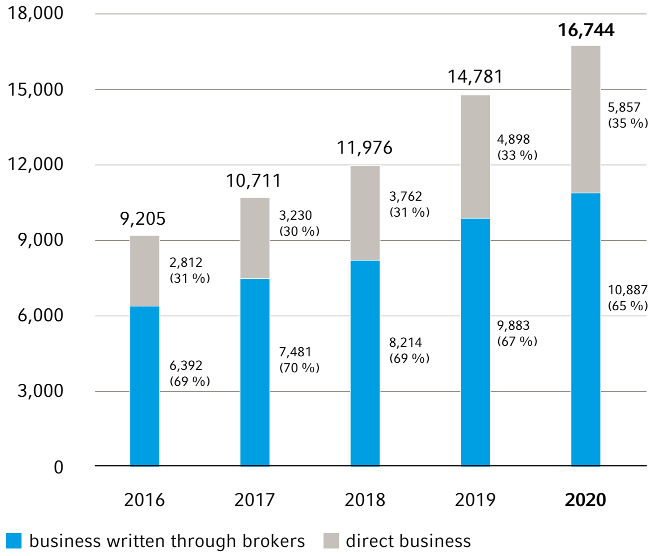
Gross premium by lines of business in 2020 **M 08**



Breakdown of proportional and non-proportional treaties by volume **M 09**
in % and in EUR million



Breakdown into business written through brokers and direct business **M 10**
in % and in EUR million



Property & Casualty reinsurance

- Gross premium in the Property & Casualty reinsurance business group grows by 15.8% adjusted for exchange rate effects
- Increasingly better prices and conditions over the course of the year
- Expenditures for losses from the Covid-19 pandemic of altogether EUR 950 million
- Combined ratio rises to 101.6%
- Result declines by 28.8% to EUR 620 million

Accounting for 68% of our total gross premium volume, Property & Casualty reinsurance is Hannover Re's largest business group.

Property and casualty reinsurance markets around the world were overshadowed by the impacts of the Covid-19 pandemic and associated insured losses in the financial year just ended. Profitability has also been adversely affected by the renewed pressure on interest income. Particularly in our important investment regions in Europe and North America, interest rates declined even further in the year under review owing to the far-reaching economic support packages rolled out by governments to mitigate the impacts of the pandemic.

In order to deliver on the returns expected by capital providers, sustained improvement in the prices and conditions for reinsurance protection was necessary and achievable on the reinsurance market over the course of financial year. Particularly under loss-affected programmes, price increases mostly running into double-digit percentages were recorded. Yet even in the case of contracts that had been spared losses, primary insurers and reinsurers alike were able to obtain improvements. As a further factor, we noted that primary insurers – in addition to generally stronger demand for high-quality reinsurance protection – are also increasingly looking for tailored solutions designed to provide solvency relief.

In the treaty renewals as at 1 January 2020 we had already achieved an average price increase of 2.3% on the renewed business. Our main renewal season, in which we renegotiated 67% of our portfolio in property and casualty reinsurance (excluding facultative business and structured reinsurance), thus delivered the expected solid outcome for our company, while at the same time showing pleasing growth of 14.0% in the renewed business at constant exchange rates.

In the further rounds of renewals during the 2020 financial year the improvements in prices and conditions gained added momentum against the backdrop of Covid-19 pandemic impacts.

In the 1 April treaty negotiations we already noticed that the pace of market hardening was accelerating and we booked an average price increase of 4.4% along with sustained strong premium growth. Business in Japan is traditionally renewed at this time of the year and treaties also come up for renewal – albeit on a smaller scale – in the markets of Australia, New Zealand, Asia and North America.

This trend continued undiminished in the 1 June and 1 July renewals, when we secured additional – sometimes substantial – improvements in prices and conditions that reached double-digit percentages. On average, prices rose by 5.1% with further double-digit premium growth. Parts of the North American portfolio, natural catastrophe risks and some risks in credit and surety reinsurance were renewed on these dates. The main renewal season in Australia and New Zealand also took place at this time. Particularly appreciable premium increases were achieved for programmes or regions that had suffered losses, but in some instances improvements were also obtained for covers that had remained loss-free.

In natural catastrophe business we retained our profit-oriented underwriting policy. Our risk appetite, which we specify in relation to the available economic capital, remained unchanged year-on-year in 2020.

Despite heavy strains for Hannover Re from the pandemic, business opportunities also opened up at the same time – for example in the form of stronger demand for high-quality reinsurance protection and tailored coverage concepts. As a further consideration, measures imposed to contain the pandemic, such as lockdowns, reduced the claims frequency in certain lines. This was especially evident in motor insurance.

Gross written premium in the Property & Casualty reinsurance business group rose by 13.3% to EUR 16.7 billion (previous year: EUR 14.8 billion). At constant exchange rates the increase would have been 15.8%. The level of retained premium remained stable at 90.3% (90.3%). Net premium earned grew by 11.0% to EUR 14.2 billion (EUR 12.8 billion); adjusted for exchange rate effects, growth would have amounted to 13.5%.

Major losses in the 2020 financial year exceeded our expectations for the fourth year in succession. Most notably, paid claims and loss reserves for the Covid-19 pandemic led to significant underwriting losses.

In property and casualty reinsurance we paid out or reserved altogether EUR 950.1 million for Covid-19-related losses. Of this, EUR 330.9 million was attributable to reported claims and EUR 619.2 million to IBNR reserves, which we set aside under our prudent reserving policy for losses that have already been incurred but not yet reported to us. The split of the total amount into the various lines is as follows: business interruption insurance 22%, trade credit insurance 26%, event cancellation insurance 21% and other lines 31%. Particularly in trade credit insurance but also under liability covers, the uncertainty surrounding future loss advices from our cedants is comparatively high, prompting us to further reinforce our reserves at year-end – above all in these areas.

All in all, major losses including Covid-19-related losses amounted to EUR 1,594.9 million. We had set aside a large loss budget of EUR 975 million for 2020. Along with the strains resulting from the pandemic, the most severe major losses incurred in the year under review included a storm that impacted eastern parts of the United States to the tune of EUR 111.0 million for Hannover Re's net account, hurricane Laura at a cost of EUR 87.5 million and the explosion at the Port of Beirut in an amount of EUR 86.6 million. We generally consider events for which we expect gross loss payments of more than EUR 10 million to be major losses.

The underwriting result including interest and expenses on funds withheld and contract deposits stood at EUR -223.5 million (EUR 235.4 million). The combined ratio rose to 101.6% (98.2%). The primary factor here was the aforementioned expenditures connected with the pandemic.

The investment income booked for the Property & Casualty reinsurance business group contracted by 7.4% to EUR 990.1 million (EUR 1,069.4 million). The operating profit (EBIT) fell by 35.3% to EUR 831.3 million (EUR 1,285.8 million). The EBIT margin stood at 5.9% (10.0%). The contribution made by property and casualty reinsurance to Group net income deteriorated by 28.8% to EUR 620.3 million (EUR 871.7 million).

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

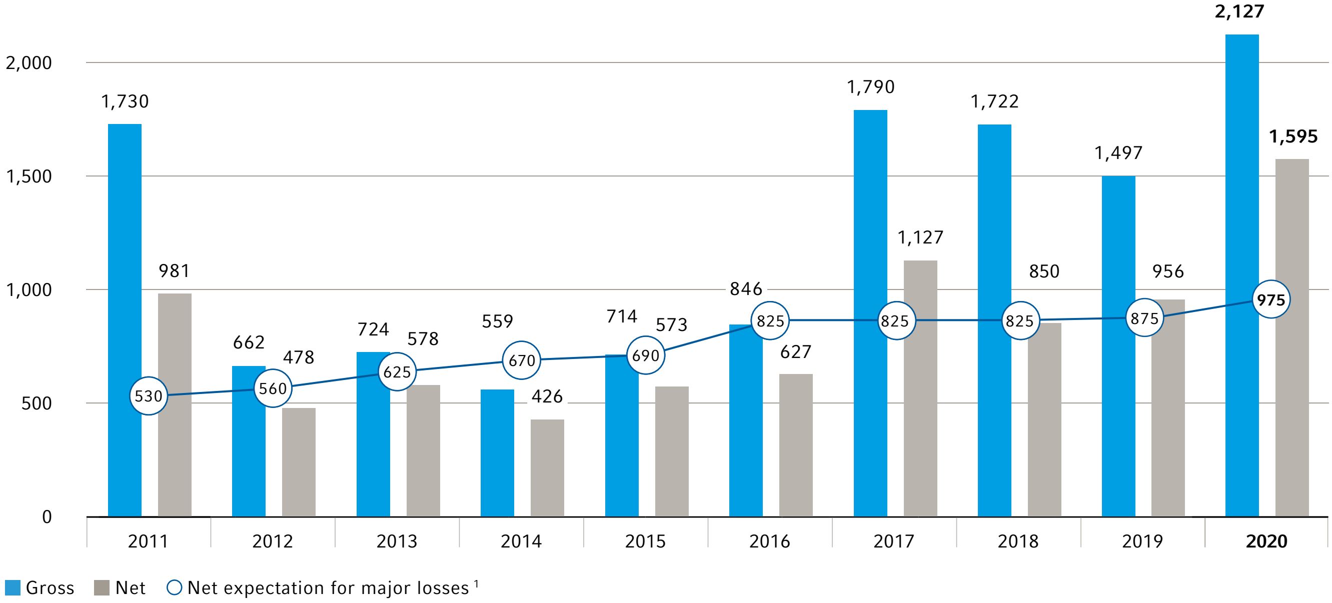
Key figures for Property & Casualty reinsurance **M 11**

in EUR million	2020	+/– previous year	2019	2018	2017	2016
Gross written premium	16,744.1	+13.3%	14,781.3	11,976.0	10,710.9	9,204.6
Net premium earned	14,205.4	+11.0%	12,797.6	10,804.2	9,158.7	7,985.0
Underwriting result[1]	(223.5)	-195.0%	235.4	372.8	15.5	503.1
Net investment income	990.1	-7.4%	1,069.4	1,035.1	1,209.3	900.9
Operating result (EBIT)	831.3	-35.3%	1,285.8	1,322.6	1,120.2	1,340.3
Group net income	620.3	-28.8%	871.7	929.1	837.3	949.9
Earnings per share in EUR	5.14	-28.8%	7.23	7.70	6.94	7.88
EBIT margin[2]	5.9%		10.0%	12.2%	12.2%	16.8%
Retention	90.3%		90.3%	90.7%	89.7%	88.5%
Combined ratio[1]	101.6%		98.2%	96.5%	99.8%	93.7%

1 Including expenses on funds withheld and contract deposits
2 Operating result (EBIT)/net premium earned

Property & Casualty reinsurance: Major loss trend[1]
in EUR million

M 12



[1] Natural catastrophes and other major losses in excess of EUR 10 million gross (until 31 December 2011: in excess of EUR 5 million gross)

Property & Casualty reinsurance: Key figures for individual markets and lines in 2020

L 13

	Gross premium 2020 in EUR million	Change in gross premium relative to previous year	Gross premium 2019 in EUR million	EBIT 2020 in EUR million	Combined ratio 2020	Target combined ratio 2020	EBIT 2019 in EUR million	Combined ratio 2019
Regional Markets								
Americas	3,713.1	+17.2%	3,168.2	99.4	107.8%	96.1%	362.0	100.2%
APAC	2,104.3	+24.1%	1,695.7	164.4	98.7%	98.4%	6.1	109.4%
EMEA (including CIS)	4,352.2	+16.7%	3,728.4	142.3	103.5%	94.8%	462.1	94.4%
Worldwide Markets								
Facultative Reinsurance	896.2	+8.9%	822.9	183.5	88.2%	98.1%	111.4	95.5%
Structured Reinsurance and Insurance-Linked Securities	3,542.8	-1.7%	3,603.7	124.8	98.5%	100.6%	104.0	98.3%
Aviation and Marine	651.0	+12.8%	577.0	236.3	62.0%	96.6%	146.4	78.0%
Agricultural Risks	652.5	+65.5%	394.2	(16.8)	106.3%	93.7%	(12.1)	108.7%
Credit, Surety and Political Risks	832.0	+5.2%	791.1	(102.6)	119.8%	94.5%	105.6	93.5%

Regional markets

Americas

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

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

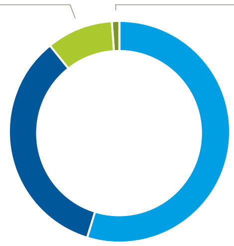
Although the North American market was heavily affected by the Covid-19 pandemic in the financial year just ended, the premium volume booked by primary insurers remained broadly stable. Rates on the primary side climbed by 10% on average. Numerous critical sectors of the economy were exempted from lockdown measures, with the result that many businesses – such as in the construction industry – remained active and hence needed insurance protection. The jobless rate nevertheless rose sharply from the end of the first quarter onwards, which negatively impacted premiums in workers' compensation insurance. Appreciable premium reductions were also recorded in retail insurance business, especially in private motor insurance, where insurers in many US states and Canadian provinces paid out premium refunds. However, these scarcely had implications for the reinsurance side, given that private motor insurance business is often not passed on to reinsurers.

In 2020, once again, an elevated frequency of large losses from natural disasters was a hallmark of the year in many regions. Indeed, 2020 set a new record for the number of tropical storms in the Atlantic, which caused various losses and damage in the Caribbean and the United States. These were joined by extensive wildfires in the western United States, tornados, hailstorms and a so-called "derecho" storm – a severe windstorm event in the Midwest with windspeeds comparable with a category 4 hurricane.

Even as the year got underway Hannover Re was already able to look back on highly satisfactory 1 January renewals. Rates continued to trend favourably over the course of the financial year, with consistent improvements in prices and conditions achieved through the entire period under review. On the conditions side, a particular focus within the year was on the limitation and exclusion of covers for pandemic risks. Nevertheless, it was also possible to increasingly exclude other systemic risks such as non-specific ("silent") cyber risks. Our cyber portfolio, on the other hand, continued to grow.

On the whole, we were satisfied with our results in the North American market. We were able to acquire new accounts, while at the same time expanding long-standing good customer relationships and further strengthening our footprint in the market.

Property & Casualty reinsurance: Gross premium in the Americas by lines of business in % M 14



Even against the current backdrop of the Covid-19 pandemic, demand for primary insurance covers in **Latin America** continued to trend higher in the financial year just ended. Natural catastrophe risks and social unrest prompted stronger demand for high-quality risk protection. The underlying growth in some countries of South and Central America combined with the withdrawal of certain market players led to a hardening in primary and reinsurance conditions, first and foremost in Chile and Brazil.

In the second half of the year Latin America was again heavily impacted by unrest in multiple countries. In light of this increased exposure, considerable adjustments were made on both the primary and reinsurance side, especially in the assessment of political risks and the pricing for corresponding covers.

Demand for catastrophe covers remained high and continued to trend upwards on account of various losses in the region. The ongoing adjustment of original rates brought considerably more attractive margins in Chile and Brazil.

While the pandemic led to a slight slowing of economic growth in local markets, demand for insurance protection will continue to rise sharply over the long term.

Hannover Re also enjoyed undiminished lively interest among customers in the development of coverage concepts based on parametric indices. These are particularly well suited to countries with a low insurance density. In 2020, for example, we partnered with Global Parametrics to support the coverage of coral reefs in Mexico and have already made a payment in this regard due to a hurricane.

Building on the good growth already recorded in 2019, the premium volume in our Americas reporting category again surged sharply in the year under review by 17.2% to EUR 3,713.1 million (EUR 3,168.2 million). The combined ratio deteriorated to 107.8% (100.2%), principally due to losses connected with the pandemic and from storms. The operating profit (EBIT) contracted to EUR 99.4 million (EUR 362.0 million).

Asia-Pacific

The **Asia-Pacific** was the region with the strongest economic growth in the world despite Covid-19 and is developing into one of the largest insurance markets globally. This growth went hand-in-hand with further significant business opportunities in the financial year just ended, in part because the insurance density is still lower than in more mature markets.

Hannover Re continued to expand its footprint in the region in 2020 with a network of local subsidiaries, branches and representative offices. We assist our clients in this growth region with their development as they face up to the challenges of the coming years through concepts to reinforce their capital resources or by optimising the distribution and design of their products. The progressive densification of Asia's urban centres is another factor driving the design of suitable insurance solutions to protect against natural disasters and efforts to further boost insurance density. The closing of protection gaps gives insurers and reinsurers a chance to underscore their social relevance.

Furthermore, Hannover Re launched an Asia-Pacific strategic initiative in order to leverage the region's growth potential even more heavily. The purpose of this measure is to preserve the competitive edge deriving from short decision channels, maximum local authorities and cost-effective services.

The Asia-Pacific region was similarly affected by the Covid-19 pandemic as the 2020 financial year progressed, although it was otherwise impacted less heavily by large and individual losses than in the previous year.

After numerous loss-free years for industrial risks, the Japanese property market incurred a fire loss relating to an individual risk at a semiconductor factory in late October. This was a significant coinsurance loss that affected all the participating reinsurers. Natural catastrophes losses, on the other hand, were pleasingly limited in scale during the year under review.

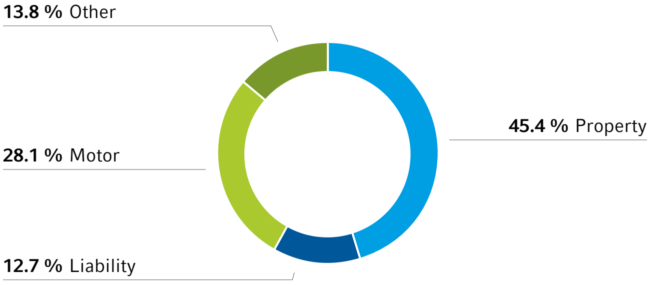
Aside from the severe flooding in the south of the country, China did not see any other appreciable insured catastrophe losses. The reinsurance market, which tends towards proportional business, struggled for adequate profitability across various lines. Business nevertheless performed satisfactorily in 2020. Our local branch positioned itself through (product) partnerships and grew its business.

The 2020 financial year was a very good one for business in Southeast Asia, with few reinsured losses. Our branch in Malaysia extended its range of services tailored for specific customer needs and further expanded its position in the region.

The situation facing what is still our young branch in India was shaped by competition among insurers and reinsurers alike. We were nevertheless able to keep on growing in the property insurance lines. The burden of losses and hence also the result were in line with our expectations.

Responsibility for Australia and New Zealand rests with our branch in Sydney. A high frequency of catastrophe losses was booked here, together with considerable expenditures due to the bushfires at the turn of the year 2019/2020. Further losses were associated with Covid-19. The market hardened sharply in response, with favourable implications for our risk appetite. We expanded the portfolio at significantly better conditions in the renewals as at 1 July 2020.

Property & Casualty reinsurance: Gross premium in Asia-Pacific by lines of business in % M 15



The gross premium volume in the Asia-Pacific region grew by 24.1% to EUR 2,104.3 million (EUR 1,695.7 million). The combined ratio improved to 98.7% (109.4%). The operating profit (EBIT) increased to EUR 164.4 million (EUR 6.1 million).

Europe, Middle East and Africa (including CIS countries)

In **Continental Europe** the situation in primary and reinsurance business was patchy overall. The protracted low interest rate level, a continued high loss frequency and additional pandemic-related strains brought about improvements in prices and conditions for Hannover Re.

Western Europe, and here especially France, was hard hit by Covid-19 in the financial year just ended. Substantial expenditures were incurred in the event cancellation and business interruption lines, for which we set aside sufficient loss reserves. In addition, a large number of losses were recorded in France from flooding and drought. Large losses from prior years also continued to prove a drag on run-off results. Prices in insurance and reinsurance business consequently moved higher in the year under review. We scaled back our shares in areas where we were unable to achieve our margin requirements. Demand for industrial insurance covers remains strong.

In Italy the business closure losses due to Covid-19 were negligible. If anything, we saw a potential for losses from general liability business, even though no significant notifications were received in this regard in the financial year just ended. In common with other countries, profitability in the motor line picked up appreciably on the back of a lower claims frequency.

In the markets of Central and Eastern Europe the pandemic further exacerbated what was already a difficult economic situation owing to numerous (partial) lockdowns, even though no significant Covid-19-related losses were recorded in this region. Prices on the reinsurance side rose on account of the ongoing need for remediation in industrial business as well as under loss-affected treaties; our profit expectations were realised. On the whole, the premium quality improved and we boosted our volume accordingly.

In Northern Europe we benefited from our local presence and the associated customer intimacy. We are satisfied with our results and the development of our portfolio. We continued to expand our client relationships and were also successful in booking profitable growth on the back of multiple new business opportunities.

When it came to natural catastrophe business in Continental Europe, Hannover Re recorded stable rate developments and improved prices for loss-impacted programmes in the financial year just ended. This was especially true of the considerable losses caused in Europe by Covid-19.

All in all, we were satisfied with the premium and rate trend in Continental European countries. Demand for reinsurance capacity remained high and we were able to further expand our position in the market. In 2020 we once again played an active role in closing the protection gap under insurance covers and we took part in numerous initiatives to this end.

Responsibility for the **German** market within the Hannover Re Group is assigned to our subsidiary E+S Rückversicherung AG. As the "dedicated reinsurer for Germany", E+S Rück is a sought-after partner thanks to its very good rating and the continuity of its business relationships and it is one of the market leaders in property and casualty reinsurance with a share of around 17% in its domestic market.

Business in Germany was clearly shaped in part by Covid-19 in the course of 2020. The steps taken to contain the pandemic and their repercussions on many companies' operations were felt particularly acutely by small and mid-sized enterprises (SMEs), leading to significant loss expenditures in business closure insurance. The same was true of event cancellation insurance, albeit not on the same scale.

Premium growth in the German primary insurance market softened appreciably year-on-year at 1.2%. The highest-volume property insurance lines – namely homeowners' insurance and industrial lines – continued to deliver above-average premium growth, driven in particular by continued coverage extensions – among other things for natural perils in private business – and rehabilitation efforts in the industrial segment. On the claims side, there were signs of further improvement in homeowners' insurance compared to the previous year. This went hand-in-hand with a reduction of around 3 percentage points in the forecast combined ratio and a positive underwriting result. There was still a considerable need for remedial action in commercial and industrial property lines. High loss expenditures, particularly in business closure insurance due to Covid-19, led to an expected deterioration in the combined ratio on the market, which declined by a good 10 percentage points to around 107% for the financial year just ended.

The need for remedial action in industrial lines continued to be accommodated through adjustments to the scope of coverage and premium increases. The German Insurance Association (GDV) published Model Terms and Conditions for Business Closure Insurance in commercial business in December 2020. In addition, the GDV noted significant limitation or adjustment of the pandemic exposure market-wide. E+S Rück shares the GDV's view that a pandemic cannot be covered across the board by the insurance industry and it supports the development of a joint solution based on public-private partnership.

In motor insurance the burden of losses was sharply lower, leading to very good results. This can be attributed in particular to the steps taken to contain Covid-19, which temporarily prompted an appreciable drop in the distances driven and hence a significantly lower claims frequency. Even though some allowance was made for this state of affairs in the reinsurance treaties, E+S Rück benefited from the favourable claims situation on the motor insurance market and was able to further grow its portfolio.

The market for natural perils reinsurance was spared any sizeable hail events in the summer, and the loss expenditure was, if anything, below average overall in 2020. Storm Sabine (otherwise known as Ciara) was a noteworthy event.

In the **United Kingdom, Ireland and the London Market** the results delivered by our property and casualty reinsurance business were heavily affected by Covid-19 in 2020. Profits for primary insurers were especially hard hit in the area of contingency covers. In property reinsurance, pandemic-related claims were asserted in the business interruption line. Although liability business was influenced by uncertainties surrounding the scale of pandemic losses, the losses actually notified at the reporting date proved to be modest. It was gratifying to note that the large losses incurred from natural perils were on a lower level than in prior years. All in all, Covid-19 led to clear market hardening on the primary insurance side.

In 2019 another change was made to the discount rate used to calculate lump-sum compensation payments for personal injuries ("Ogden rate"), triggering further price corrections in 2020. Although the new discount rate was raised relative to the previously applicable factor, it still fell short of the expectations of insurers and reinsurers.

The initiative launched by the Lloyd's insurance market in 2018 to improve loss-making business continued in 2020 and had favourable effects on the state of the market in almost all lines, as manifested in increasingly widespread double-digit rate increases in primary insurance business.

On the reinsurance side, appreciable rate increases were booked for contingency covers and in liability business. The price trend in the international property business written by Lloyd's syndicates was similarly driven by Covid-19. The rise in prices due to worldwide losses incurred from natural perils in prior years was further accentuated by the current pandemic-related losses in the business interruption line, as a consequence of which the percentage increases in rates reached double digits in many instances.

Our portfolio grew in 2020, as we renewed our business according to the profitability of the treaty relationship at improved prices and with tighter conditions. Special mention should be made of the pandemic exclusions that we were able to secure in many areas.

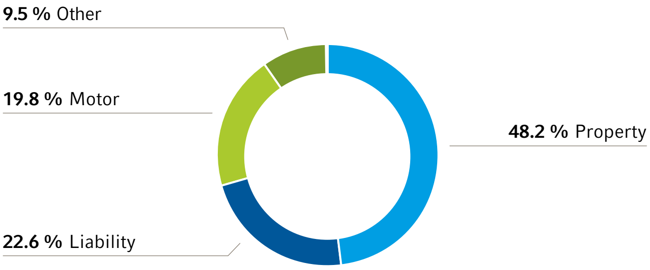
The growth on insurance markets in the **Middle East** slowed in 2020. This was attributable principally to the pressure on oil prices, which reduced government revenues, as well as to the effects of the Covid-19 pandemic. The pandemic itself did not, however, have any material implications for the loss experience. Capacities were reduced in property and casualty reinsurance and the market hardened somewhat. With its unchanged concentration on the Middle East, North Africa and Southeast Asia, our retakaful business supported the strategic growth initiative launched by Hannover Re in Asia.

The **South African** economy, which was already in a weakened state, came under added pressure in the financial year just ended as a consequence of one of the most stringent lockdowns in the world. Unemployment rose to a record high. Even in this climate, however, the insurance industry held up remarkably well. The lockdown led to a dramatic reduction in the volume of traffic for several months, with the result that loss ratios in motor insurance were very positive despite premium refunds. This contrasted with substantial claims for damages coming out of South Africa's key tourism sector. The legal position here was still unclear at year-end despite multiple lower court rulings.

We generate a large part of our property and casualty reinsurance business in South Africa through managing general agents in which we hold shares. These agencies adapted very well to the difficult conditions in 2020 and largely met their budgets. Factoring out Covid-19, the loss ratios were exceptionally pleasing. Compass Insure, the primary insurer belonging to our subsidiary in South Africa, posted a gross loss ratio of 51% including Covid-19 losses.

With a view to reducing complexity and boosting capital efficiency, we set in motion a restructuring of our reinsurance activities in South Africa. This was made possible by a change in insurance legislation. Effective 1 January 2021 Hannover Life Re Africa has been granted a composite licence. From this point in time onwards the property and casualty reinsurance business will be renewed on the new composite licence. Once regulatory approval has been obtained, the business written by the existing P&C reinsurer Hannover Re Africa will be transferred to Hannover Life Re Africa. An application has been filed to change the name of Hannover Life Re Africa to Hannover Re South Africa.

Property & Casualty reinsurance: Gross premium in Europe, Middle East and Africa (including CIS countries) by lines of business in % M 16



The gross premium volume in our reporting category Europe, Middle East and Africa rose sharply by 16.7% to EUR 4,352.2 million (EUR 3,728.4 million). The combined ratio stood at 103.5% (94.4%). The operating profit (EBIT) fell to EUR 142.3 million (EUR 462.1 million).

Worldwide markets

Facultative Reinsurance

In contrast to obligatory reinsurance, individual risks are primarily written in facultative reinsurance. The general environment for both types of reinsurance in the various markets is, however, for the most part comparable and hence there is a corresponding correlation between them.

The tendencies towards market hardening that began during 2019 were sustained in the 2020 financial year. We saw capacity reductions on the primary insurance side and significant improvements in rates and conditions across virtually all lines and regions.

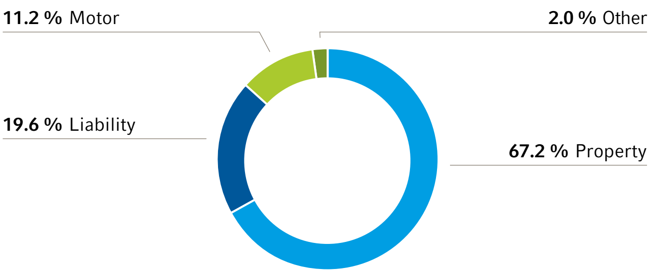
Demand for facultative reinsurance solutions continued to grow in the year under review. Customers attached considerable importance to obtaining coverage primarily from financially robust reinsurers. This development could be observed globally and enabled us to generate correspondingly substantial growth.

Excluding strains from the Covid-19 pandemic, expenditures on both natural catastrophe losses and human-caused losses were lower in 2020 than in previous years. The major explosion at the Port of Beirut as well as losses in the oil and gas market may be mentioned here as sizeable losses. That said, the 2020 loss year can be described as extraordinary. The Covid-19 pandemic and associated strains on a large number of different lines such as business interruption and workers' compensation constitutes a new type of loss event. The necessary reserves have been established based on the insights available to date; nevertheless, the end of the pandemic cannot currently be foreseen and with this in mind the final loss expenditure remains subject to some uncertainty.

Despite this, facultative reinsurance can look back on a highly successful 2020 financial year. The market environment opened up a very large number of attractive business and growth opportunities for our company that we acted on in keeping with our technical underwriting approach and risk appetite. The greater decentralisation of our underwriting activities in recent years has also enabled us to significantly strengthen our customer relationships. Hannover Re is increasingly and actively sought after as a reinsurance partner.

Hannover Re has enshrined sustainability goals as part of its Group strategy and implements appropriate measures. In recent years, for example, we have taken a very conservative approach to coal and oilsands risks and in 2020 we no longer wrote any new business in these areas. In advance of agreeing to accept risks we thoroughly review the legal framework and verify the existence of all necessary permits. Consideration is also given to environmental and reputational risks.

Property & Casualty reinsurance: Gross premium in Facultative Reinsurance by lines of business in % M 17



The gross premium volume in our reporting category Facultative Reinsurance climbed by 8.9% to EUR 896.2 million (EUR 822.9 million). The combined ratio improved to 88.2% (95.5%). The operating profit (EBIT) increased to EUR 183.5 million (EUR 111.4 million).

Structured Reinsurance and Insurance-Linked Securities

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

In **structured reinsurance** we rank as one of the largest providers in the world. In this area we assist our clients with their capital management and offer innovative bespoke reinsurance solutions. These provide solvency relief and thus have a positive effect on the client's rating or protect against the strain of frequency losses. The reinsurance solutions offered also include retrospective covers.

The premium volume remained stable on a high level in the 2020 financial year. Nevertheless, we were again able to grow our customer base and hence increased the number of treaties. In total, more than half of our premium income derived from the United States and roughly a third from Europe.

The purchasing habits of many customers have continued to shift towards holistic reinsurance solutions. This trend showed no signs of easing and resulted in more and more clients seeking complex structured contractual arrangements. Given that this business is generally based on large-volume transactions, premium income in structured reinsurance can fluctuate sharply.

The market for **insurance-linked securities** was roughly stable in 2020 with a capacity of around USD 90 billion. Some slight softening had still been evident in the previous year, especially due to losses incurred in 2017 and 2018. The results in 2019 and 2020 were also not satisfactory and liquidity continued to be curtailed by the need to post collateral for losses still in run-off. The adverse experience of the past years was, however, offset by the improvement in the rate level that had already set in as well as the prospect of further premium gains.

The worldwide volume of newly issued catastrophe bonds increased again after a decline in the previous year. At more than USD 12 billion, it was slightly higher than the level of the previous record year in 2017.

According to our estimates, roughly two-thirds of the ILS market can be attributed to collateralised reinsurance, under which insurers and investors conclude private risk transfer agreements which are secured by collateral held in trust accounts. We support these transactions as a so-called fronting company.

Catastrophe bonds were scarcely impacted by Covid-19 losses. This was not, however, true to the same extent of collateralised reinsurance. With this in mind, catastrophe bonds looked somewhat more attractive from a risk perspective at the end of the year in comparison to collateralised reinsurance – although the business proportions relative to one another did not change significantly.

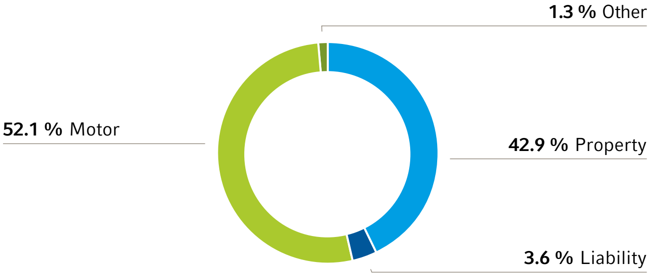
Hannover Re leverages the entire spectrum of opportunities offered by the insurance-linked securities market. On the one hand, we take out reinsurance with ILS investors, while at the same time we transfer our customers' risks to the capital market as a service. This is done in the form of catastrophe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

In 2020 the volume of new exposures that we transferred to the capital market in the form of catastrophe bonds was in the region of USD 1.6 billion split into eight transactions. The largest transactions were catastrophe bonds with a volume of USD 400 million each for the Federal Emergency Management Agency to protect against flooding in the US and for the Texas Windstorm Insurance Association as coverage against risks from named storms and tornados.

Our business volume in collateralised reinsurance contracted somewhat in the year under review. It nevertheless remained by far our largest segment in the ILS sector. In addition, we were again able to substantially expand the transfer of life reinsurance risks to the capital market.

The important role played by the capital market in our purchasing of retrocession protection was unchanged. For example, we have placed a protection cover for Hannover Re known as the "K quota share" – a modelled quota share cession consisting of non-proportional reinsurance treaties in the property, catastrophe, aviation and marine (including offshore) lines – inter alia on the ILS market since as long ago as 1994. In addition to the K quota share, we made use of the ILS market for other protection covers as well and were able overall to purchase the desired risk capacity despite the challenging environment.

Property & Casualty reinsurance: Gross premium in Structured Reinsurance and Insurance-Linked Securities by lines of business in % **M 18**



The gross premium volume in the Structured Reinsurance and ILS reporting category retreated slightly by 1.7% to EUR 3,542.8 million (EUR 3,603.7 million). The combined ratio was 98.5% (98.3%). The operating profit (EBIT) climbed to EUR 124.8 million (EUR 104.0 million).

Aviation and Marine

In the market for **aviation** covers the positive rate movements witnessed over the past two years on the primary side were sustained. In fleet business, however, this did not lead to premium growth in absolute terms because activities in this segment were heavily curtailed by the pandemic. It should nevertheless be borne in mind here that the stable premium was accompanied by a reduced exposure because the number of passengers and flights was sharply lower in the year under review. Activities in the general aviation sector were impacted by Covid-19 far less in comparative terms, although here too we observed significant rate increases – especially on the London Market. Price increases were also recorded for the product liability and space segments.

The trend reversal that had already begin in aviation reinsurance in the previous year was sustained and gained considerable added impetus from the poorer development of a number of large losses. This was particularly evident in the latest renewals of non-proportional treaties, in which we obtained risk-adjusted rate increases running into clear double-digit percentages. In the proportional segment, too, we were able to secure improvements in conditions.

It should, however, be remembered that the market as whole still has to find an adequate level – which is why the disciplined underwriting approach pursued by Hannover Re maintains its restrictive focus on the long term and profitability considerations.

After years of intense competition characterised by an inadequate pricing level, the **marine** market was clearly on an upward trajectory in the year under review after modest improvements in the previous year. With continuing impetus from the "Decile 10" initiative launched by the Lloyd's of London insurance market, further improvements were achieved in both pricing and the underlying treaty conditions. This trend manifested itself to a different extent in the various regional markets and in the subsegments of marine insurance. In the London Market, for example, it was possible to secure more marked improvements than in the rest of the world. This was especially evident in cargo insurance and marine hull, whereas the trend in liability and specie insurance was still on the moderate side.

While insurers and reinsurers were impacted less by Covid-19 losses in marine business than in other lines, the pandemic – combined with considerations relating to the use of capital and capacity concerns on the part of primary and reinsurance players – prompted appreciable market hardening over the course of the year. After an initial abrupt slump in global trade at the start of the coronavirus pandemic, the transport of goods and commercial shipping bounced back within a short space of time. The cruise ship industry, on the other hand, succumbed completely for the rest of the year. Travel is now expected to resume in 2021. While no significant reductions were recorded for primary insurance premiums in the cargo segment, premiums are expected to decline in the hull segment for cruise ships. With large fleets still mostly mothballed, refunds were negotiated for portions of the paid primary insurance premiums.

As in the previous years, offshore energy business experienced another year of minimal losses, as a consequence of which improvements in this segment were only marginal. The rate level was stable in both primary insurance and reinsurance, a noteworthy observation in light of the significant drop in oil production. This segment also picked up more strongly in the second half of the year.

Despite major events such as the coronavirus pandemic, the explosion in the Port of Beirut, several shipping accidents and an above-average hurricane season in the United States, we did not have to set aside reserves for any significant new losses other than one individual loss from a tornado in the US. Over the course of the year we had to post sizeable additional reserves for the P & I liability loss associated with a car carrier that capsized in 2019 off the coast of the US state of Georgia.

Based on our strong position as one of the market's leading reinsurers in the international marine and offshore energy segment, we were able to cement and further expand existing customer relationships. At the same time, we acquired lucrative new business and took a disciplined approach to restructuring or entirely relinquishing inadequate business.

The premium volume for our Aviation and Marine reporting category rose by 12.8% to EUR 651.0 million (EUR 577.0 million). The combined ratio amounted to 62.0% (78.0%). The operating profit (EBIT) increased to EUR 236.3 million (EUR 146.4 million).

Agricultural risks

In the year under review we continued to grow our market position in **agricultural risks**. Particularly in emerging and developing countries, the growing need for agricultural commodities and foodstuffs combined with the increased prevalence of extreme weather events led to stronger demand for insurance and reinsurance solutions. In this area Hannover Re offers its customers both comprehensive traditional reinsurance concepts and parametric covers that optimally complement existing insurance solutions.

We acted on new opportunities in the year under review and generated pleasing growth. In the Asia-Pacific region, which ranks as the fastest-growing economic region in the world and offers considerable business prospects on account of what is still a low insurance density, we substantially boosted our premium volume in agricultural business. Premium income climbed to EUR 314.5 million (EUR 171.1 million), which means that almost half the premium booked in agricultural lines now derives from the Asia-Pacific region. In Latin America the Brazilian market proved to be the strongest driver of growth.

The increasing number of public-private partnerships, not only in emerging and developing countries but also in more advanced economies, presents new opportunities for our company to write profitable agricultural business in markets that have still to mature. In 2020, for example, many parts of Europe experienced their third extremely dry year in succession. This has led to ever greater acceptance of drought insurance products. Given that comprehensive agricultural insurance is too expensive for many farmers, parametric covers have become established as a problem-solving approach. In the year under review, for example, Hannover Re designed a drought coverage solution for farmers in Germany by using multi-year precipitation data from the German Weather Service.

In addition, the increasingly widespread availability of new technologies – such as remote sensing by satellites – facilitates further expansion of the segment with innovative and efficient insurance products. Our team specialising in index-based and parametric covers supports our customers around the world not only with reinsurance but also in the development and implementation of parametric coverage concepts. Along with our technical know-how, we draw on our growing network of insurtechs and partners and we offer solution options that also extend beyond the bounds of traditional agricultural business. For some time now we have been seeing stronger demand for index-based and parametric covers, thereby enabling us to further boost the premium income generated.

In general terms, rates and conditions in agricultural business on both the primary and reinsurance side were commensurate with the risk. Appreciable rate increases were recorded in forest insurance. In Australia prices doubled in the aftermath of the severe bushfires at the turn of the year 2019/2020. In other parts of the world, too, price rises were in the double-digit percentage range.

Altogether, the gross premium volume in the Agricultural Risks reporting category surged by an appreciable 65.5% to EUR 652.5 million (EUR 394.2 million). The combined ratio was 106.3% (108.7%). The operating profit (EBIT) slipped to EUR -16.8 million (EUR -12.1 million).

Credit, Surety and Political Risks

Loss ratios increased only slightly in **credit and surety insurance** as well as in the **political risks** segment despite the global recession. This reflects wide-ranging government support programmes on the fiscal and monetary side as well as state guarantees given in favour of mostly European credit insurance business. In countries where state guarantees were provided in credit insurance, a significant part of the loss expenditure was ceded to the government in question – along with a corresponding share of the underlying premium. As a result, the premium volumes for insurers and reinsurers in credit insurance have temporarily declined. As a further factor, premium growth slowed in all three product lines – credit, surety and political risk – owing to the economic downturn around the world.

The protracted uncertainty in the face of the soft economic environment led to a modest rise in reinsurance demand and in the underlying prices.

Even though no significant increase in the burden of losses was evident in the reporting period, it may be assumed that the current macroeconomic situation will result in a heightened risk of insolvency for some companies, especially in certain industrial sectors. With this in mind, we set aside additional reserves of EUR 248.6 million in the year under review.

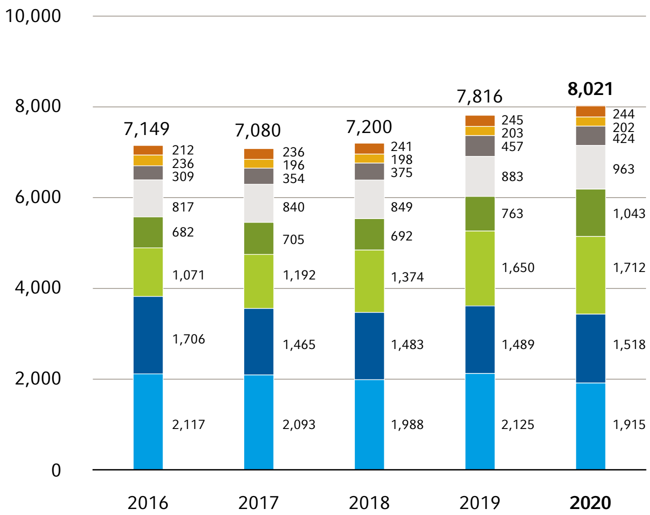
The gross premium for the Credit, Surety and Political Risks reporting category increased in the financial year by 5.2% to EUR 832.0 million (EUR 791.1 million). The combined ratio amounted to 119.8% (93.5%). The operating profit (EBIT) consequently fell to EUR -102.6 million (EUR 105.6 million).

Life & Health reinsurance at a glance

Breakdown of gross premium by markets

M 19

in EUR million

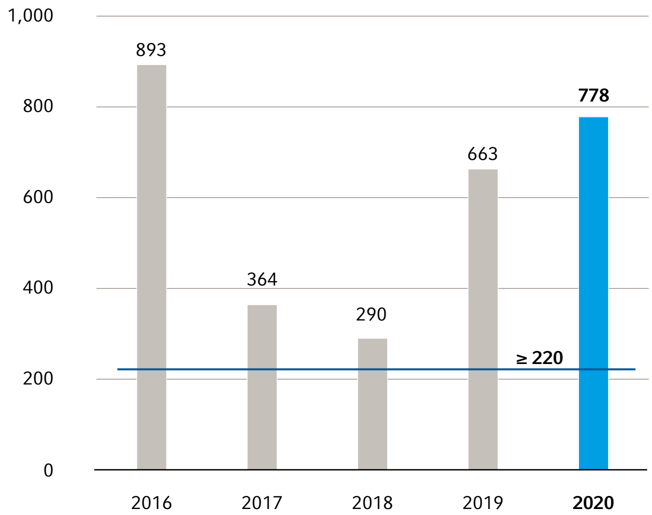


North America · United Kingdom · Asia · Australia / New Zealand · Rest of Europe · Latin America · Germany · Africa

Value of New Business (VNB) growth[1,2]

M 20

in EUR million



Value of New Business (VNB)

— Target

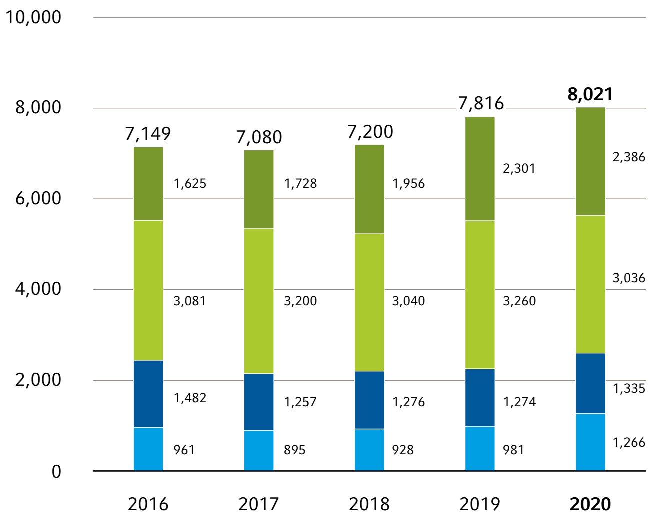
[1] Based on Solvency II principles and pre-tax reporting

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

Breakdown of gross written premium by reporting categories

M 21

in EUR million

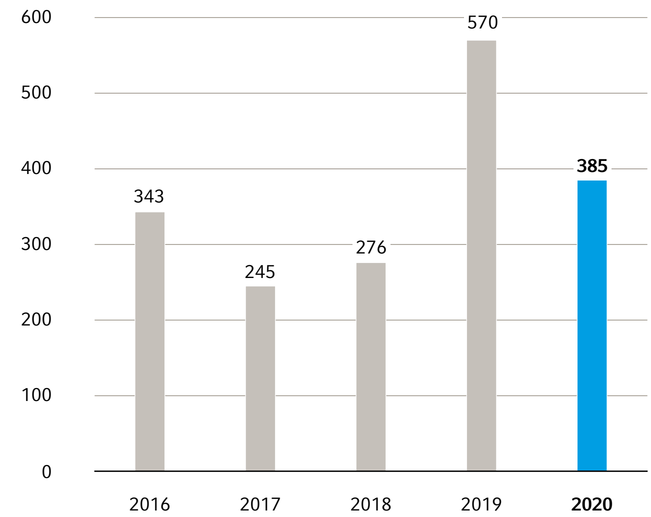


Financial Solutions · Longevity · Mortality · Morbidity

EBIT performance

M 22

in EUR million



Combined management report

Life & Health reinsurance

- Gross premium volume up by 4.7% adjusted for exchange rate effects
- Payments and reserves for claims expected from the Covid-19 pandemic amounting to altogether EUR 261 million.
- Sustained strong worldwide demand for financial solutions
- Result declines by 31.4% to EUR 323 million

Life and health reinsurance contributed a 32% share of our Group gross premium in the year under review and is thus Hannover Re's second-largest business group.

The Covid-19 pandemic was similarly the dominant issue of the 2020 financial year in life and health reinsurance. The direct losses were, however, significantly lower compared to property and casualty reinsurance. Altogether, the expenditures in life and health reinsurance directly related to Covid-19 amounted to EUR 261.1 million in the financial year just ended. Of this, EUR 175.3 million or 67% was attributable to already notified claims and to IBNR reserves for expected claims that have still to be reported. In this context, the bulk of the Covid-19 strains is due to cases of illness and deaths in the United States, our largest single market. Losses were also incurred in regions such as Australia, Europe or Latin America.

In general terms, global life and health reinsurance markets remain intensely competitive and are shaped by a low interest rate environment, which in many regions became even more challenging in the year under review. Particularly in Hannover Re's key markets of Europe and North America, interest rates fell even further over the course of the reporting period. This has negative implications for the investment results generated by insurers and reinsurers. At the same time, though, it opened up additional opportunities for financially robust reinsurers such as Hannover Re – for example in the area of financial solutions.

Key figures for Life & Health reinsurance **M 23**

in EUR million	2020	+/– previous year	2019	2018	2017	2016[1]
Gross written premium	8,021.4	+2.6%	7,816.4	7,200.4	7,079.6	7,149.0
Net premium earned	7,150.3	+3.2%	6,931.9	6,484.8	6,472.8	6,425.0
Investment income	695.3	+1.6%	684.5	491.8	560.6	638.9
Claims and claims expenses	6,438.3	+10.7%	5,817.5	5,341.6	5,666.8	5,480.3
Change in benefit reserve	103.5		(10.8)	(50.8)	0.6	(83.0)
Commissions	1,202.6	-4.2%	1,254.8	1,263.6	1,081.8	1,020.4
Own administrative expenses	254.1	-0.6%	255.7	216.9	210.7	202.0
Other income/expenses	330.7	+14.4%	289.0	172.1	170.6	67.1
Operating result (EBIT)	384.8	-32.5%	569.9	275.9	245.2	343.3
Net income after tax	323.3	-31.4%	471.6	185.9	172.6	252.9
Earnings per share in EUR	2.68	-31.4%	3.91	1.54	1.43	2.10
Retention	89.8%		89.5%	90.7%	91.7%	90.4%
EBIT margin[2]	5.4%		8.2%	4.3%	3.8%	5.3%

[1] Restated pursuant to IAS 8
[2] Operating result (EBIT)/net premium earned

When it comes to solutions for the coverage of longevity risks, stronger demand was observed worldwide in addition to the traditionally important UK market. This is a positive development that we actively support and further encourage with our superb, long-standing expertise. The exacting capital requirements placed on primary insurers and pension funds in connection with such business were a key driver here.

Digital insurance solutions and automation are increasingly playing a major role in all our activities – not only in the area of longevity risks –, especially where our cooperation with start-ups is concerned.

The pandemic-related strains, particularly those incurred in the Mortality and Morbidity Solutions reporting category, had a clearly negative impact on the result in life and health reinsurance. Aside from the losses caused by the pandemic, the development of US business was in line with our expectations.

Gross written premium in the Life & Health reinsurance business group climbed by 2.6% to EUR 8.0 billion (previous year: EUR 7.8 billion); at constant exchange rates the increase would have been 4.7%. The level of retained premium stood at 89.8% (89.5%). Net premium earned increased by 3.2% to EUR 7.2 billion (EUR 6.9 billion), corresponding to growth of 5.3% adjusted for exchange rate effects.

The underwriting result including interest and expenses on funds withheld and contract deposits amounted to EUR -469.9 million (EUR -244.7 million). Key factors in this further deterioration were the pandemic-related payments and loss reserves. The investment income for the Life & Health reinsurance business group improved by 1.6% to EUR 695.3 million (EUR 684.5 million).

The operating result (EBIT) contracted by 32.5% to EUR 384.8 million (EUR 569.9 million). The contribution made by life and health reinsurance to Group net income fell by 31.4% to EUR 323.3 million (EUR 471.6 million).

We provide below a more detailed discussion of developments in the individual reporting categories – Financial Solutions, Longevity Solutions and Mortality and Morbidity Solutions – as well as an overview of the extensive support that we provide as part of our Underwriting Services.

Financial Solutions

In the **Financial Solutions** reporting category, we offer our customers bespoke reinsurance solutions designed to optimise their solvency, liquidity and capital position. The further exacerbation of the low interest rate environment gave an added boost to what was already a generally good level of demand. Our reinsurance solutions in this segment are always tailored to the customer's specific needs and hence highly diverse and individually structured. Given that the customer's primary motivation here is not exclusively to secure coverage for biometric risks, a hallmark of such solutions is that they also seek to deliver financial and regulatory benefits.

The United States has traditionally been an exceptionally important insurance market for our financial solutions business. Our US business in this segment developed highly satisfactorily in the year under review and played a considerable part in the total result.

Primary insurers in Germany were faced with a steady decline in new business premiums. However, the renewed sharp drop in interest rates, among other things, prompted growing interest among primary insurers and pension funds in obtaining support for issues such as funding the additional interest rate reserve (Zinszusatzreserve) or optimising solvency capital resources. Going forward, we expect to see a further pick-up in demand and corresponding growth here.

As in previous years, the development of business in Asia – and above all in China – was very good throughout the entire year.

Gross premium income in the Financial Solutions reporting category climbed by 29.0% to EUR 1,265.5 million (EUR 980.9 million). The operating result (EBIT) improved by 6.1% to EUR 423.0 million (EUR 397.0 million). In this context, business with a reduced risk transfer delivered an EBIT contribution of EUR 329.5 million (EUR 287.5 million), which we recognise in other income / expenses. This development is not reflected in gross premium because no premium is booked owing to the reduced risk transfer.

Longevity Solutions

In the **Longevity Solutions** reporting category, we group together all reinsurance business under which the primary risk covered for our customers is the longevity risk. We develop innovative annuity products tailored to the individual needs of policyholders in various life situations. The bulk of our longevity solutions consists of traditional annuity policies, pensions blocks taken out for new business and enhanced annuities – under which pensioners with a pre-existing condition are guaranteed a higher annuity payment for their remaining shortened life expectancy. The United Kingdom continues to be our largest and most mature market for protection against longevity risks.

In longevity business we serviced brisk demand for deferred annuities solutions in the United Kingdom and wrote corresponding new business in what was a sustained competitive climate. More exacting requirements set by prudential regimes in many countries around the world for the solvency capital that is to be kept available by primary insurers also had a favourable effect on demand for appropriate covers.

The gross premium for the Longevity Solutions reporting category rose by 4.7% to EUR 1,334.6 million (EUR 1,274.2 million). The operating result (EBIT) increased substantially to EUR 78.2 million (EUR 29.0 million).

Mortality and Morbidity Solutions

In the global (re)insurance industry it is standard practice for mortality and morbidity risks to form a common element of one and the same business relationship, and in some cases both risks are even covered under one reinsurance treaty. In our reporting we therefore consolidate the profit contributions of these two reporting categories, but nevertheless provide below a separate overview of significant developments in the financial year just ended.

Mortality Solutions

Mortality solutions are at the heart of traditional life and health reinsurance and account for the lion's share of the premium income in our Life & Health reinsurance business group. The covers provide reinsurance protection for our customers against the risk that their insureds do not live as long as anticipated and hence the actual mortality negatively diverges from the originally expected mortality.

In the United States the Covid-19 pandemic and the high number of resulting deaths negatively affected results. Along with the US, mortality business in Latin America was also especially hard hit by the pandemic. Since we have a comparatively large market share in the region, this also took a corresponding toll on earnings. In Europe the result was in line with expectations despite a number of sizeable Covid-19-related individual losses, such as in France.

The gross premium in the Mortality Solutions reporting category contracted by 6.9% to EUR 3,035.7 million (EUR 3,260.3 million).

Morbidity Solutions

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

Pandemic-related losses were also reported in health business, albeit on an appreciably lesser scale than under mortality covers. The bulk of them related to reserves set aside for the Australian market. Our activities in Northern Europe fared well, although they still account for a comparatively modest share of total business. In Latin America, too, developments were more positive again, despite the Covid-19-related losses incurred in this region as well.

The gross premium for Morbidity business grew by 3.7% in the financial year to EUR 2,385.5 million (EUR 2,301.0 million).

The gross premium for our total mortality and morbidity portfolio fell by 2.5% to EUR 5,421.2 million (EUR 5,561.3 million). The operating result (EBIT) for the Mortality and Morbidity Solutions reporting category totalled EUR 116.4 million (EUR 144.0 million).

Underwriting Services

Under the heading of **Underwriting Services** we report on the activities and services that we provide for our customers above and beyond pure risk transfer. Our automated underwriting systems under the "hr | ReFlex" and "hr | Quirc" brands and the associated process automation for our customers are a major feature in this regard.

In general terms, we noted a great deal of interest on the part of our customers in issues of digitalisation and innovation in the financial year just ended. Furthermore, we are engaged in an intensive exchange with numerous start-ups and primary insurers with an eye to the development of innovative, digital coverage concepts.

Our innovation platform "hr | equarium" continues to evolve highly successfully. On the one hand, this online platform enables our customers to access a wide range of insurance-specific products and solutions. At the same time, it opens up access for providers – frequently insurtechs and other start-ups – to our global client network.

Investments

- Pleasing investment performance despite challenging market environment
- Realised gains offset reduced contributions from alternative investments, fixed-income securities and inflation-linked bonds
- Return on investment of 3.0% beats target level of around 2.7%

Against a backdrop of thoroughly challenging volatility on financial markets around the world, we are highly satisfied with the performance of our investments. Ordinary investment income excluding interest on funds withheld and contract deposits reached a gratifyingly robust EUR 1,243.1 million (previous year: EUR 1,380.8 million) as at 31 December 2020 and was thus within the range of our expectations.

Income from fixed-income securities was impacted above all by sharply reduced inflation expectations, leading to lower amortisation amounts in our portfolio of inflation-linked bonds. As further factors, the overall decline in the interest rate level and our defensive reinvestment policy since March 2020 also made themselves felt.

Income from private equity was somewhat lower than in the comparable period. The impacts of the Covid-19 pandemic could be seen here in certain industries. Nor did the real estate sector escape unscathed, with marginally lower earnings booked in this area too.

The income recognised from measurement at equity surged appreciably to EUR 88.1 million (EUR 26.4 million), primarily on the back of special income associated with measurement of one of our participating interests. Interest on funds withheld and contract deposits increased to EUR 221.8 million (EUR 206.4 million).

Impairments and depreciation totalling EUR 129.4 million (EUR 80.6 million) were taken. Of this, an amount of EUR 32.3 million (EUR 21.6 million) was attributable to private equity, EUR 14.8 million (EUR 2.3 million) to funds from the area of high-yield bonds and EUR 5.6 million (EUR 6.9 million) to a long-term debt. The economic turmoil facing private equity firms and issuers of high-yield bonds in connection with the pandemic was primarily reflected here, although this began to ease towards the end of the reporting period. It was also pleasing to note that these write-downs were prompted primarily by declines in fair value, with scarcely any actual defaults. An impairment loss of EUR 19.0 million (EUR 11.9 million) had to be recognised in our portfolio of real estate and real estate funds. On the whole, the sectors hardest hit by the pandemic did not play a significant role in our investment portfolio. Write-downs of EUR 11.8 million (EUR 0.1 million) were taken on other fixed-income securities. Depreciation on directly held real estate was stable at EUR 36.6 million (EUR 36.7 million).

Investment income **M 24**

in EUR million	2020	+/– previous year	2019	2018	2017	2016
Ordinary investment income[1]	1,243.1	-10.0%	1,380.8	1,321.7	1,289.0	1,162.0
Result from participations in associated companies	88.1	+234.4%	26.4	5.0	16.0	9.1
Realised gains/losses	329.6	+20.4%	273.7	127.7	377.1	206.3
Appreciation	–		–	3.6	0.9	0.3
Depreciation, amortisation, impairments[2]	129.4	+60.4%	80.6	52.7	71.9	76.0
Change in fair value of financial instruments[3]	64.0	-12.2%	72.9	31.2	38.6	26.1
Investment expenses	129.0	+5.3%	122.5	114.3	110.8	109.1
Net investment income from assets under own management	1,466.4	-5.4%	1,550.6	1,322.0	1,539.0	1,218.3
Net investment income from funds withheld and contract deposits	221.8	+7.4%	206.4	208.0	234.9	332.1
Total investment income	**1,688.1**	**-3.9%**	**1,757.1**	**1,530.0**	**1,773.9**	**1,550.4**

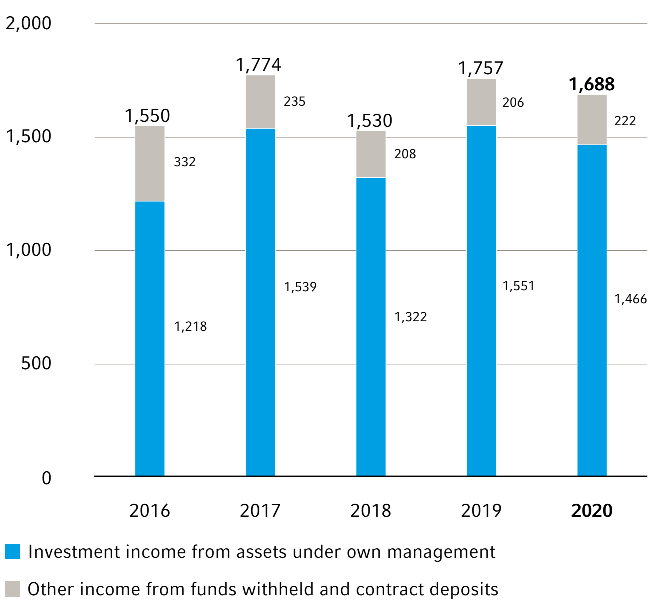
[1] Excluding income and expenses on funds withheld and contract deposits
[2] Including depreciation/impairments on real estate
[3] Portfolio at fair value through profit or loss and trading

Net realised gains on disposals totalled EUR 329.6 million (EUR 273.7 million). The increase can be attributed mainly to regrouping activities and liquidity management as well as to the successful sale of two properties in Eastern Europe and Germany. The high level of hidden reserves due to the further decline in interest rates around the world made itself felt in our portfolio of fixed-income securities, resulting in a tactical benefit for the net realised gains.

We recognise a derivative for the credit risk associated with special life reinsurance treaties (ModCo) under which securities deposits are held by cedants for our account; the performance of this derivative in the year under review gave rise to unrealised losses of EUR 6.0 million recognised in income. These contrasted with a gain of EUR 8.1 million in the previous year. In economic terms we assume a neutral development for this item over time, and hence the volatility that can occur in specific quarters provides no insight into the actual business development. Altogether, the unrealised gains in our assets recognised at fair value through profit or loss amounted to EUR 64.0 million. Unrealised gains of EUR 72.9 million were recognised in the previous year.

The investment income of EUR 1,688.1 million was 3.9% lower than in the comparable period (EUR 1,757.1 million). Income from assets under own management accounted for EUR 1,466.4 million (EUR 1,550.6 million), producing an annualised average return (including effects from ModCo) of 3.0%.

Development of investment income **M 25**
in EUR million



Financial position and net assets

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

Investment policy

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

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

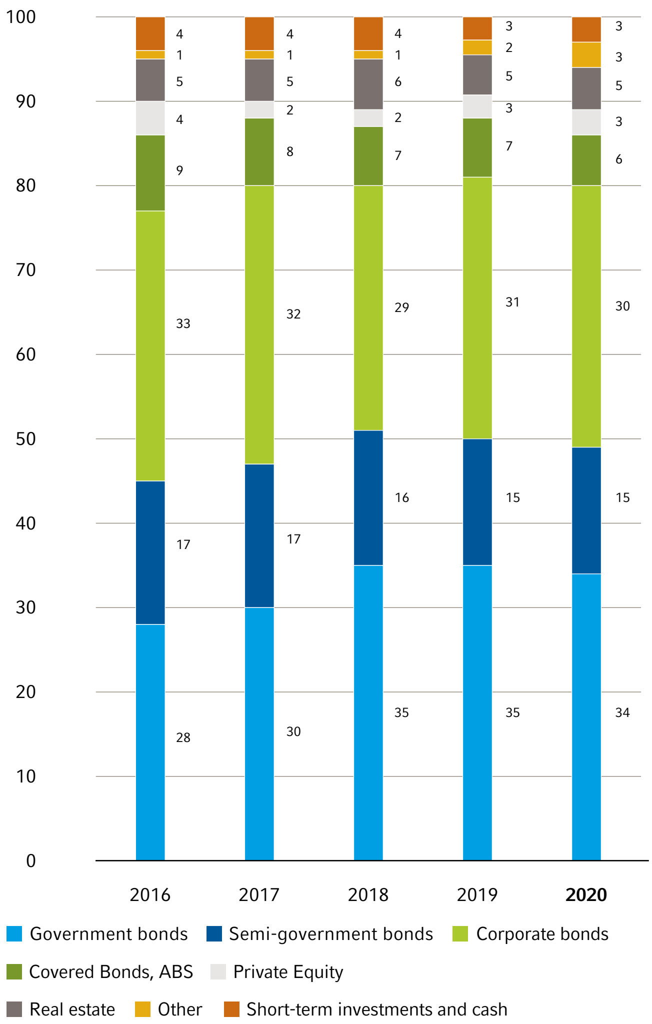
With these goals in mind, we engage in active risk management based on balanced risk/return analyses. To this end we adhere to centrally implemented investment guidelines and incorporate insights gained from dynamic financial analysis. They form the basis for investment ranges which are specified in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

By adjusting the maturity pattern of our fixed-income securities to the expected payment patterns of our liabilities we reduce the economic exposure to the interest rate risk. In the current reporting period this gave rise to a broadly neutral modified duration of our bond portfolio, which stood at 5.8 (previous year: 5.7) as at 31 December 2020. Through active and regular management of the currency spread in our fixed-income portfolio we also aim for extensive matching of currencies on the assets and liabilities sides of the balance sheet, as a consequence of which fluctuations in exchange rates have only a limited effect on our result. As at year-end 2020 we held 31.1% (29.7%) of our investments in euros, 41.0% (44.0%) in US dollars, 7.6% (8.2%) in pound sterling and 7.3% (5.6%) in Australian dollars.

Investment portfolio **M 26**

in EUR million	2020	2019	2018	2017	2016
Funds withheld	9,958.1	11,273.8	10,864.6	10,902.9	11,843.8
Investments under own management	49,221.0	47,629.4	42,197.3	40,057.5	41,793.5
Total	**59,179.1**	**58,903.2**	**53,061.9**	**50,960.4**	**53,637.3**

Breakdown of investments under own management M 27
in %



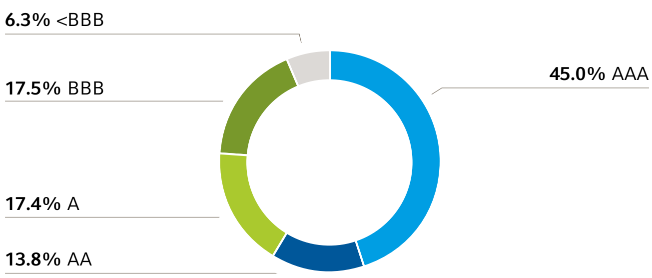
Investments

Our portfolio of assets under own management amounted to EUR 49.2 billion, a higher level than in the previous year (31 December 2019: EUR 47.6 billion). This reflects, in the first place, valuation declines from currency translation – especially from the US dollar. On the other hand, credit spreads – which again widened slightly compared to the end of the previous year – were more than offset by lower interest rates. This can also be seen from the unrealised gains on our fixed-income securities, which rose to EUR 2,564.1 million (EUR 1,589.1 million).

We adjusted the allocation of our investments to the individual classes of securities in that we began – even before the market distortions resulting from the coronavirus pandemic – to scale back somewhat the proportion of bonds attributable to our US SME portfolio and to invest in US municipal bonds. Following the price corrections on equity markets we additionally built up a manageable equity allocation of roughly half a percent. Furthermore, by selling two real estate objects and acquiring two new properties we slightly reduced our real estate allocation overall to 5.0% (5.3%). When it came to reinvesting or making new investments, for some time during the year we focused on top-rated fixed-income securities in each currency area, thereby further boosting the proportion of highly liquid holdings in our portfolio. In all other asset classes we made only minimal changes in the context of regular portfolio maintenance.

The portfolio of fixed-income securities excluding short-term assets rose slightly to EUR 41.7 billion (EUR 41.1 billion). This similarly reflects, on the one hand, lower valuations from currency translation – especially in connection with our holdings in US dollar and pound sterling – and, on the other hand, opposing effects from the overall lower interest rate level, which leads to a rise in fair values and hidden reserves. The net hidden reserves for available-for-sale fixed-income securities, which are included in shareholders' equity, totalled EUR 2,347.4 million (EUR 1,356.4 million). This increase is also a reflection of the interest rate declines seen on government bonds in the course of the reporting period. As to the quality of the bonds measured in terms of rating categories, the proportion of securities rated "A" or better remained on a consistently high level and stood at 76.3% (74.3%) as at year-end.

Rating of fixed-income securities M 28



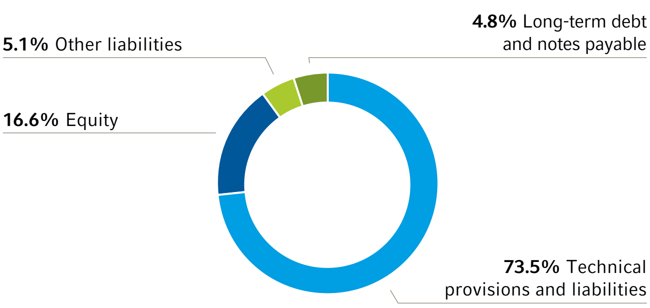
Holdings of alternative investment funds increased slightly overall. As at 31 December 2020 an amount of EUR 1,300.7 million (EUR 1,177.7 million) was invested in private equity funds; a further EUR 635.6 million (EUR 746.0 million) was attributable predominantly to investments in high-yield bonds and in the credit sector. In addition, altogether EUR 582.3 million (EUR 534.7 million) was invested in structured real estate investments. The uncalled capital with respect to the aforementioned alternative investments totalled EUR 1,275.6 million (EUR 1,429.9 million).

At the end of the year under review we held a total amount of EUR 1.6 billion (EUR 1.6 billion) in short-term investments and cash. Funds withheld amounted to EUR 10.0 billion (EUR 11.3 billion).

Analysis of the capital structure

The technical provisions and liabilities are of course by far the most significant item in our balance sheet. Further elements are equity and equity substitutes, which help to substantially strengthen our financial base and optimise our cost of capital. The following chart shows our capital structure as at 31 December 2020, broken down into percentages of the balance sheet total.

Capital structure as at 31 December 2020 M 29



The technical provisions and liabilities shown above, which include funds withheld/contract deposits and reinsurance payable, make up 73.5% (74.7%) of the balance sheet total and are more than covered by our investments, (assets-side) funds withheld/contract deposits, accounts receivable and reinsurance recoverables.

The equity including non-controlling interests at 16.6% (15.9%) of the balance sheet total as well as the long-term debt and – especially – notes payable at altogether 4.8% (4.9%) of the balance sheet total represent our most important sources of funds.

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

Management of policyholders' surplus

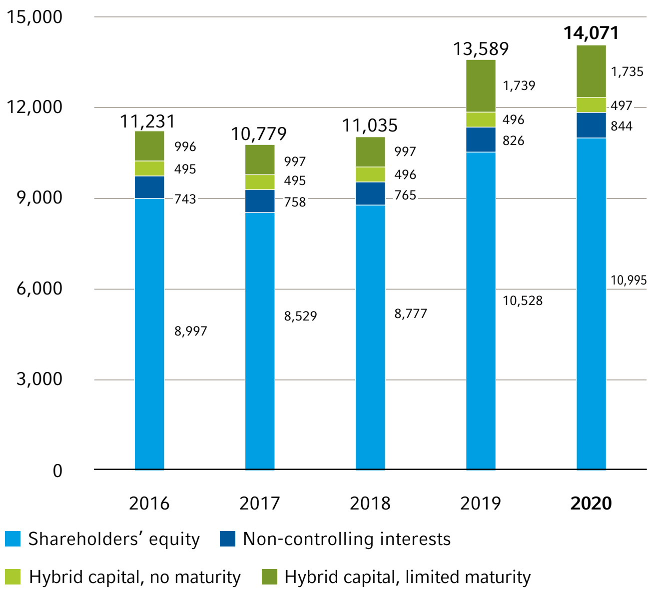
A key strategic objective of Hannover Re is long-term capital preservation. We have issued hybrid capital as an equity substitute in order to keep the cost of capital on a low level. The policyholders' surplus is an important management ratio in the context of Hannover Re's comprehensive capital management. The total policyholders' surplus is defined as follows:

- shareholders' equity excluding non-controlling interests, composed of the common shares, additional paid-in capital, other comprehensive income and retained earnings,
- non-controlling interests and
- hybrid capital used as an equity substitute, which takes the form of subordinated bonds.

The polocyholders' surplus totalled EUR 14,071.0 million (EUR 13,558.9 million) as at the balance sheet date, an increase of 3.5%. Retained earnings rose by EUR 220.0 million to EUR 8,297.1 million (EUR 8,077.1 million) on the back of the good Group net income booked in the year under review. In addition, the foreign currency gains and losses and the net gains on investments recognised in equity were higher by altogether EUR 272.2 million. In the year under review a subordinated bond in a nominal amount of EUR 500.0 million was issued, while another subordinated debt facility from 2010 was repaid.

Hannover Re uses "Intrinsic Value Creation" (IVC) as its central value-based management tool. As part of this methodology, we apply the principles of economic allocation of equity and efficient use of debt as an equity substitute in order to achieve an attractive weighted cost of capital. This concept as well as the objectives and principles in accordance with which we conduct our enterprise management and capital management are described in greater detail in our remarks on value-based management on page 27 et seq. of this report.

Development of policyholders' surplus M 30
in EUR million



In its capital management Hannover Re is guided by the requirements and expectations of the rating agencies with an eye to its targeted rating. Furthermore, while making appropriate allowance for business policy considerations and factors that influence market presence, the allocation of capital to the Group's operational companies is based upon the economic risk content of the business group in question. The Group companies are also subject to national capital and solvency requirements. All Group companies met the applicable local minimum capital requirements in the year under review. Adherence to these capital requirements is continuously monitored by the responsible organisational units on the basis of the latest actual figures as well as the corresponding planned and forecast figures. From the Group perspective we manage Hannover Re's solvency extensively using our internal capital model (cf. "Opportunity and risk report", page 81 et seq.).

Group shareholders' equity

Compared to the position as at 31 December 2019, Group shareholders' equity increased in the year under review by EUR 484.9 million, equivalent to 4.3%, to EUR 11,839.4 million. After adjustment for non-controlling interests, it rose by EUR 467.1 million to EUR 10,995.0 million. The book value per share increased accordingly by 4.4% to EUR 91.17. The changes in the shareholders' equity were shaped chiefly by the following developments:

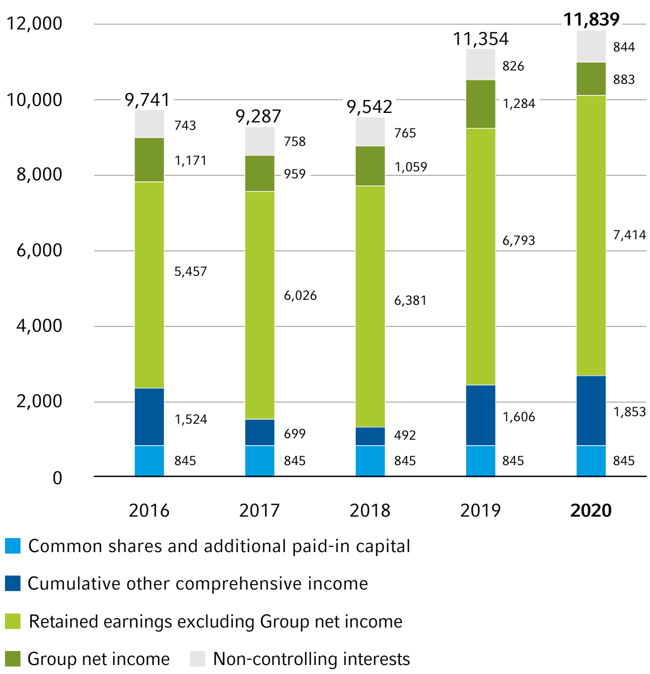
Cumulative foreign currency losses amounting to EUR 330.7 million were recorded as at the balance sheet date as a consequence of exchange rate movements of foreign currencies against the euro. Compared to the cumulative foreign currency gains of EUR 385.1 million in the previous year, this constitutes a decrease of EUR 715.8 million in the foreign currency gains and losses recognised directly in equity. This decline resulted principally from the devaluation of the US dollar and the translation of the shareholders' equity of those subsidiaries whose equity is denominated in USD.

Net unrealised gains on investments stood at EUR 2,275.9 million, an increase of EUR 988.0 million compared to the beginning of the year under review. This reflects the decline in the risk-free interest rate observed in the course of the year under review against a backdrop of credit spreads that were still somewhat wider than in the previous year.

Non-controlling interests in shareholders' equity increased by EUR 17.9 million to EUR 844.4 million as at 31 December 2020. The bulk of this – in an amount of EUR 759.7 million – is attributable to the con-controlling interests in E+S Rückversicherung AG.

The Group net income for 2020 attributable to the shareholders of the Hannover Re Group amounted to EUR 883.1 million (EUR 1,284.2 million). The non-controlling interest in the profit generated in the year under review totalled EUR 35.7 million (EUR 89.2 million).

Development of Group shareholders' equity M 31
in EUR million



Financing and Group debt

In addition to the financing effect of the changes in shareholders' equity described above, debt financing on the capital market is a significant component of Hannover Re's financing. It is essentially composed of bonds issued to ensure lasting protection of our capital base – in part also in observance of rating requirements. The total volume of long-term debt and notes payable stood at EUR 3,348.4 million (EUR 3,372.8 million) as at the balance sheet date.

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

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

Amortised cost of our bonds M 32

in EUR million	Issue date	Coupon in %	2020	2019
Hannover Finance (Luxembourg) S.A., subordinated debt, EUR 500 million; 2010/2040	14.9.2010	5.75	–	499.6
Hannover Finance (Luxembourg) S.A., subordinated debt, EUR 500 million; 2012/2043	20.11.2012	5.00	498.9	498.5
Hannover Rück SE, subordinated debt, EUR 500 million; 2014/undated	15.9.2014	3.375	496.8	496.2
Hannover Rück SE, senior bond, EUR 750 million; 2018/2028	18.4.2018	1.125	744.1	743.3
Hannover Rück SE, subordinated bond, EUR 750 million; 2019/2039	9.10.2019	1.125	741.0	740.0
Hannover Rück SE, subordinated bond, EUR 500 million; 2020/2040	8.7.2020	1.75	494.9	–
Total			**2,975.7**	**2,977.7**

Several Group companies have also taken up long-term debt – principally in the form of mortgage loans – amounting to EUR 372.7 million (EUR 395.0 million).

For further explanatory information please see our remarks in the notes to this report, section 6.12 "Financing liabilities", page 222 et seq., and section 6.13 "Shareholders' equity and treasury shares", page 224 et seq.

Various financial institutions have provided us with letters of credit for the collateralisation of technical liabilities. We report in detail on existing contingent liabilities in the notes, section 8.7 "Contingent liabilities and commitments", page 247 et seq.

Analysis of the consolidated cash flow statement

Liquidity

We generate liquidity from our operational reinsurance business, investing activities and financing measures. Through regular liquidity planning and by managing the fungibility of our investments, we ensure that Hannover Re is able to make the necessary payments at all times. Hannover Re's cash flow is shown in the consolidated cash flow statement on page 158 et seq.

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

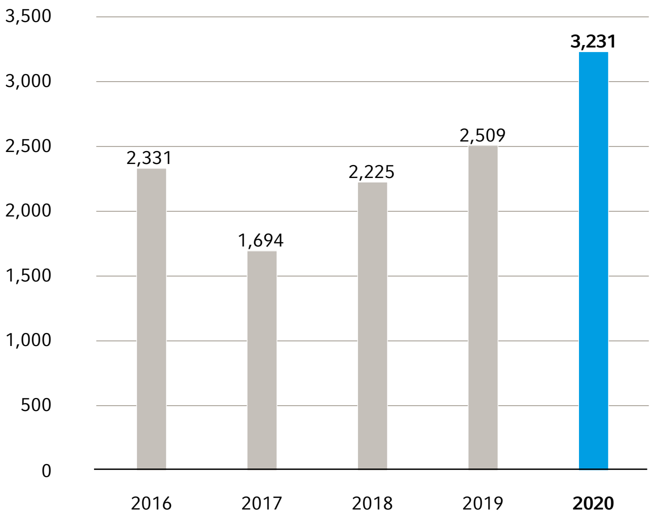
Consolidated cash flow statement M 33

in EUR million	2020	2019
Cash flow from operating activities	3,231.0	2,509.2
Cash flow from investing activities	(2,244.6)	(2,709.4)
Cash flow from financing activities	(726.0)	108.3
Exchange rate differences on cash	(73.2)	31.3
Change in cash and cash equivalents	187.2	(60.6)
Cash and cash equivalents at the beginning of the period	1,090.9	1,151.5
Change in cash and cash equivalents according to cash flow statement	187.2	(60.6)
Cash and cash equivalents at the end of the period	**1,278.1**	**1,090.9**
Thereof cash and cash equivalents from IFRS 5	0.0	0.0
Thereof cash and cash equivalents at the end of the period excluding disposal group	1,278.1	1,090.9

Cash flow from operating activities

The cash flow from operating activities, which also includes inflows from interest received and dividend receipts, amounted to EUR 3,231.0 million in the year under review as opposed to EUR 2,509.2 million in the previous year. The increase of altogether EUR 721.8 million was due to the positive development of operational business.

Cash flow from operating activities M 34
in EUR million



Cash flow from investing activities

The balance of cash inflows and outflows from operating activities and investing activities in an amount of EUR -2,244.6 million (EUR -2,709.4 million) was invested in accordance with the company's investment policy, giving particular consideration to the matching of currencies and maturities on the liabilities side of the technical account. Regarding the development of the investment portfolio, please see also our remarks at the beginning of this section.

Cash flow from financing activities

The cash inflow from financing activities amounted to EUR -726.0 million (EUR 108.3 million) in the year under review. This item includes primarily the dividends paid out by the Group companies in the financial year totalling EUR 708.8 million (EUR 687.3 million).

Overall, the cash and cash equivalents therefore increased year-on-year by EUR 187.2 million to EUR 1,278.1 million.

For further information on our liquidity management please see page 81 et seq. of the risk report.

Financial strength ratings

A.M. Best and Standard & Poor's, the rating agencies of particular relevance to the insurance industry, assess the financial strength of Hannover Re on the basis of an interactive rating process and have awarded it very good ratings. The rating agencies highlight in particular the Hannover Re Group's profitability, its strong competitive position, its capitalisation and its risk management.

Financial strength ratings of the Hannover Re Group **M 35**

	Standard & Poor's	A.M. Best
Rating	AA- (Very Strong)	A+ (Superior)
Outlook	stable	stable

Financial strength ratings of subsidiaries **M 36**

	Standard & Poor's	A.M. Best
E+S Rückversicherung AG	AA-	A+
Hannover Life Reassurance Africa Ltd. [1]	AA-	–
Hannover Life Reassurance Bermuda Ltd.	AA-	A+
Hannover Life Reassurance Company of America	AA-	A+
Hannover Life Reassurance Company of America (Bermuda) Ltd.	AA-	A+
Hannover Life Re of Australasia Ltd.	AA-	–
Hannover Reinsurance Africa Ltd. [1]	AA-	–
Hannover Re (Ireland) Designated Activity Company	AA-	A+
Hannover Re (Bermuda) Ltd.	AA-	A+
Hannover ReTakaful B.S.C. (c)	A+	–
Glencar Insurance Company	–	A+

[1] Hannover Reinsurance Africa Ltd. (HR SA) and Hannover Life Reassurance Africa Ltd. (HLR SA) benefit from parental guarantees issued by Hannover Rück SE (the "Guarantor"). The guarantees cover all of the payment obligations of HR SA and HLR SA in respect of insurance and reinsurance contracts issued by them. The guarantees are unconditional and continuing and shall be binding upon the Guarantor. The owners of the insurance and reinsurance contracts issued by these subsidiaries are express third party beneficiaries of these guarantees. The obligations of the Guarantor under these guarantees rank pari passu with all other unsecured indebtedness of such Guarantor.

Issue ratings of notes payable

As part of the process of rating Hannover Re, the rating agencies also assess the debt issued by the Hannover Re Group.

Issue ratings of notes payable **M 37**

	Standard & Poor's	A.M. Best
Hannover Rück SE subordinated debt, EUR 500 million; 2020/2040	A	--
Hannover Rück SE subordinated debt, EUR 750 million; 2019/2039	A	–
Hannover Rück SE senior bond, EUR 750 million; 2018/2028	AA-	–
Hannover Rück SE subordinated debt, EUR 500 million; 2014/undated	A	a+
Hannover Finance (Luxembourg) S.A. subordinated debt, EUR 500 million; 2012/2043	A	aa-

Information pursuant to § 315a Para. 1 German Commercial Code (HGB)

The common shares (share capital) of Hannover Rück SE amount to EUR 120,597,134.00. They are divided into 120,597,134 registered no-par shares.

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

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

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

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

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

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

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

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

Information on Hannover Rück SE

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

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

The annual financial statement of Hannover Rück SE is drawn up in accordance with German accounting principles (HGB). The consolidated financial statement, on the other hand, conforms to International Financial Reporting Standards (IFRS). This gives rise to various divergences in accounting policies affecting, above all, intangible assets, investments, technical assets and liabilities, financial instruments and deferred taxes.

The annual financial statement of Hannover Rück SE – from which the balance sheet and profit and loss account in particular are reproduced here in condensed form – is submitted to the operator of the electronic Federal Gazette and can be accessed via the webpage of the Companies Register. This annual financial statement can also be accessed on the company's website (www.hannover-re.com) and may be requested from Hannover Rück SE, Karl-Wiechert-Allee 50, 30625 Hannover, Germany.

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

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

Results of operations

The 2020 financial year passed off well for Hannover Rück SE despite the global crisis due to the Covid-19 pandemic. The gross premium in total business increased by 6.3% to EUR 19.2 billion (previous year: EUR 18.1 billion). The level of retained premium retreated slightly to 68.3% (69.7%). Net premium earned grew by 5.7% to EUR 12.9 billion (EUR 12.2 billion).

Condensed profit and loss account of Hannover Rück SE M 38

in EUR thousand	2020	2019
Earned premiums, net of retrocession	12,923,326	12,226,552
Allocated investment return transferred from the non-technical account, net of retrocession	189,357	137,460
Other technical income, net of retrocession	0	0
Claims incurred, net of retrocession	9,923,590	9,080,560
Changes in other technical provisions, net of retrocession	(101,263)	(177,722)
Bonuses and rebates, net of retrocession	17	40
Operating expenses, net of retrocession	3,296,559	3,128,749
Other technical charges, net of retrocession	374	86
Subtotal	**(209,120)**	(23,145)
Change in the equalisation reserve and similar provisions	(694,004)	(210,561)
Net technical result	**(903,124)**	**(233,706)**
Investment income	1,803,280	1,412,657
Investment charges	129,998	86,836
Allocated investment return transferred to the technical account	(196,977)	(143,457)
Other income	186,711	142,359
Other charges	366,123	291,263
Profit or loss on ordinary activities before tax	**393,769**	**799,754**
Taxes on profit and income and other taxes	6,956	125,261
Profit for the financial year	**386,813**	**674,493**
Profit brought forward from previous year	713,716	702,865
Allocations to other retained earnings	529	358
Disposable profit	**1,100,000**	**1,377,000**

The underwriting result (before changes in the equalisation reserve) closed the year under review at EUR -209.1 million (EUR -23.1 million). An amount of EUR 694.0 million (EUR 210.6 million) was allocated to the equalisation reserve and similar provisions in the year under review.

Large losses in excess of our expectations were once again recorded in the 2020 financial year. Along with the Covid-19 pandemic, major losses were incurred from hurricanes and other weather phenomena in the United States, Australia and other regions as well as from the explosion at the Port of Beirut. The total net expenditure on major losses for Hannover Rück SE amounted to EUR 1,186.4 million (EUR 606.3 million).

Ordinary investment income including deposit interest came in significantly above the previous year's level at EUR 1,600.6 million (EUR 1,110.0 million), primarily due to a higher distribution from our investment holding companies that was influenced by a one-time effect. Despite the low level of interest rates, we booked relatively stable ordinary income from fixed-income securities at EUR 485.0 million (EUR 508.2 million). Net gains of EUR 166.2 million (EUR 220.9 million) were realised on disposals. A cautious investment policy in 2020 resulted in less regrouping of fixed-income securities than in the previous year.

Write-downs of EUR 34.3 million (EUR 11.4 million) were taken on investments, for the most part on bearer debt securities held as current assets and in the area of alternative investments. The write-downs contrasted with write-ups of EUR 1.5 million (EUR 50.3 million) that were made on assets written down in previous periods in order to reflect increased fair values.

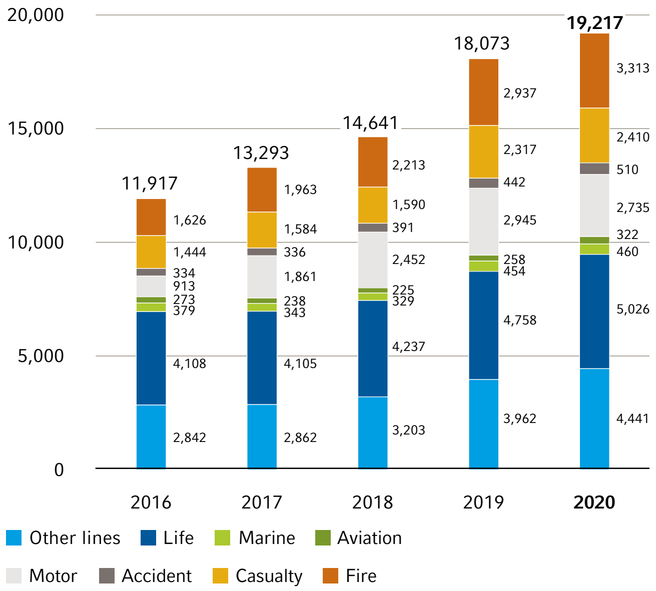
All in all, the net investment result increased to EUR 1,673.3 million (EUR 1,325.8 million).

The profit on ordinary activities contracted to EUR 393.8 million (EUR 799.8 million). The year under review closed with a profit for the year of EUR 386.8 million (EUR 674.5 million).

Development of the individual lines of business

The following section describes the development of the various lines of business. The cooperation and exchange of business between Hannover Rück SE and E+S Rückversicherung AG was reorganised with effect from the beginning of the 2014 financial year and slightly adjusted in the 2019 financial year. Since 2014 a quota share retrocession from Hannover Rück SE to E+S Rückversicherung AG has since been maintained in property and casualty reinsurance.

Hannover Rück SE: Breakdown of gross premium by individual lines of business **M 39**
in EUR million



Fire

Gross premium income for the fire line climbed by 12.8% to EUR 3,312.7 million (EUR 2,937.3 million). The net loss ratio decreased to 63.9% (76.8%). The underwriting result closed at EUR 114.2 million (EUR -141.6 million). After a withdrawal of EUR 120.1 million in the previous year, an amount of EUR 128.7 million was allocated to the equalisation reserve and similar provisions.

Liability

Gross premium in casualty business rose slightly by 4.0% to EUR 2,410.2 million (EUR 2,316.8 million). The loss ratio increased to 71.4% (70.6%). The underwriting result amounted to EUR 4.5 million (EUR -6.6 million). An amount of EUR 311.9 million (EUR 191.2 million) was allocated to the equalisation reserve and similar provisions.

Accident

Gross premium income for the accident line increased by 15.3% to EUR 509.7 million (EUR 442.0 million). The net loss ratio decreased to 42.2% (54.5%). The underwriting result came in at EUR 48.1 million (EUR 43.8 million). An allocation of EUR 22.8 million (EUR 9.1 million) was made to the equalisation reserve and similar provisions.

Motor

Gross premium for the motor line fell by 7.1% to EUR 2,734.7 million (EUR 2,945.2 million). The loss ratio retreated from 73.5% to 66.5%. The underwriting result closed at EUR 31.3 million (EUR -45.3 million). An amount of EUR 209.1 million (EUR 111.0 million) was allocated to the equalisation reserve and similar provisions.

Aviation

Gross premium income climbed by 25.1% to EUR 322.4 million (EUR 257.7 million). The loss ratio nudged slightly higher to 46.3% (45.8%). The underwriting result closed at EUR 65.4 million (EUR 47.8 million). An allocation of EUR 38.0 million (EUR 37.6 million) was made to the equalisation reserve and similar provisions.

Marine

The gross premium volume for the marine line grew by 1.4% to EUR 459.9 million (EUR 453.5 million). The net loss ratio increased to 55.9% (31.0%). The underwriting result stood at EUR 31.9 million (EUR 103.7 million). After a withdrawal of EUR 36.4 million in the previous year, an amount of EUR 25.5 million was allocated to the equalisation reserve and similar provisions in the year under review.

Life

The gross premium in the life line totalled EUR 5,026.2 million (EUR 4,757.9 million). Life and health reinsurance business has a clear international focus. We write our business on all continents and in many instances we are directly available as a local point of contact thanks to our extensive network. In addition to traditional mortality-oriented life reinsurance, we write financial solutions business as well as health and longevity risks on a worldwide basis. The financial year just ended was crucially shaped by the Covid-19 pandemic. This is clearly reflected in the result, which was reduced by an increased burden of losses – thereby overshadowing a number of positive developments in our strategic business segments.

The underwriting result in life business amounted to altogether EUR -42.1 million (EUR 94.6 million).

Other lines

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

Gross premium income in the other lines grew by 12.1% to EUR 4,441.3 million (EUR 3,962.4 million). The net loss ratio increased from 73.7% to 85.6%, primarily due to Covid-19-related losses. The underwriting result closed at EUR -462.4 million (EUR -119.5 million). After an allocation of EUR 18.1 million in the previous year, a withdrawal of EUR 42.0 million was made from the equalisation reserve and similar provisions.

Assets and financial position

Balance sheet structure of Hannover Rück SE M 40

in EUR thousand	2020	2019
Assets		
Intangible assets	61,439	61,751
Investments	38,944,054	40,597,263
Receivables	4,996,983	4,207,415
Other assets	672,932	414,329
Prepayments and accrued income	188,787	196,573
Total assets	**44,864,195**	**45,477,331**
Liabilities		
Subscribed capital	120,597	120,597
Capital reserve	880,608	880,608
Retained earnings	630,511	630,511
Disposable profit	1,100,000	1,377,000
Capital and reserves	**2,731,716**	**3,008,716**
Subordinated liabilities	2,250,000	2,250,000
Technical provisions	33,704,668	33,999,219
Provisions for other risks and charges	346,509	345,582
Deposits received from retrocessionaires	3,332,731	3,203,822
Other liabilities	2,498,571	2,669,992
Total liabilities	**44,864,195**	**45,477,331**

Our portfolio of assets under own management remained stable at EUR 31.4 billion (EUR 31.8 billion). The balance of unrealised gains on fixed-income securities and bond funds increased to EUR 1,578.6 million (EUR 1,001.2 million). This was a reflection of marked valuation increases as a consequence of lower interest rates, which more than offset slightly higher risk premiums on corporate bonds.

Deposits with ceding companies, which are shown under the investments, declined to EUR 7.6 billion (EUR 8.8 billion).

Our capital and reserves – excluding the disposable profit – stood at EUR 1,631.7 million (EUR 1,631.7 million). The total capital, reserves and technical provisions – comprised of the capital and reserves excluding disposable profit, the subordinated liabilities, the equalisation reserve and similar provisions as well as the net technical provisions – contracted during the year under review to EUR 37,586.4 million (EUR 37,880.9 million). The balance sheet total of Hannover Rück SE fell to EUR 44.9 billion (EUR 45.5 billion).

A dividend of EUR 4.00 plus a special dividend of EUR 1.50 per share, equivalent to EUR 663.3 million (EUR 633.1 million), was paid out in the year under review for the 2019 financial year.

It will be proposed to the Annual General Meeting on 5 May 2021 that a dividend of EUR 4.50 per share should be paid for the 2020 financial year. This corresponds to a total distribution of EUR 542.7 million. The dividend proposal does not form part of this consolidated financial statement.

Risks and opportunities

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

Other information

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

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

Outlook

In view of the interrelations between the parent company and the Group companies and the former's large share of business within the Group, we would refer here to our remarks contained in the section entitled "Outlook for 2021" on page 147 et seq., which also reflect the expectations for Hannover Rück SE. We expect the profit reported for the 2021 financial year under the Commercial Code (HGB) to improve significantly on the previous year.

Combined non-financial information statement

The combined non-financial information statement is a section of the report that the legislator has expressly exempted from the audit of the financial statements (§ 317 (2) Sentence 6 and Sentence 4 German Commercial Code (HGB); unaudited information). The combined non-financial information statement presented here has, however, been reviewed with limited assurance by the auditing firm of PricewaterhouseCoopers in accordance with the audit standard ISAE 3000 (Revised) (see here the Independent Auditor's Report on page 260 et seq.).

Introduction

The present combined non-financial information statement was drawn up in accordance with §§ 315c in conjunction with 289c to 289e German Commercial Code (HGB). The identification of material contents reflected the materiality definitions of the Global Reporting Initiative (GRI) and the German Commercial Code (HGB). The description of concepts is guided by the structure of the GRI Standards, Standard GRI 103-1 to GRI 103-3 (Management Approach).

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

Hannover Re has defined exclusively financial management ratios and key performance indicators. For this reason, no non-financial performance indicators pursuant to § 289c (3) No. 5 German Commercial Code (HGB) are available that are relevant to the management of the Hannover Re Group's business.

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

A detailed description of Hannover Re's sustainability efforts, which go above and beyond the legal requirements of the combined non-financial information statement, is provided in a separate sustainability report compiled annually in accordance with the GRI Standards.

For a description of the business model the reader is referred to the section "Business model" under "Foundations of the Group".

Strategic orientation

The Group strategy of Hannover Re was revised In the 2020 reporting year. It is valid for the 2021–2023 strategy cycle.

In our "Striving for sustainable outperformance" strong governance, risk management, integrated compliance and corporate social responsibility constitute the foundations for our growth as a reliable global reinsurance partner. Three performance drivers – preferred business partner, innovation catalyst, earnings growth – are based on proven strengths and address the global trends affecting the insurance and reinsurance industry. Three performance enablers – empowered people, a lean operating model and effective capital management – have proven essential for outperforming the industry average over the last decade. We have launched four strategic initiatives – Customer Excellence, the Innovation and Digital Strategy, the Asia-Pacific Growth Initiative and Talent Management – that we consider especially crucial and we intend to work on them intensively throughout the strategy cycle. We have defined the following financial targets for the strategy cycle 2021–2023.

Target Matrix – Strategy cycle 2021–2023 M 41

Business group	Key data	Strategic targets
Group	Return on equity[1]	900 bps above risk-free
	Solvency ratio[2]	≥ 200%
Property & Casualty reinsurance	Gross premium growth[3]	≥ 5%
	EBIT growth[4]	≥ 5%
	Combined ratio	≤ 96%
	xRoCA[5]	≥ 2%
Life & Health reinsurance	Gross premium growth[3]	≥ 3%
	EBIT growth[4]	≥ 5%
	Value of New Business (VNB)[6]	≥ EUR 250 million
	xRoCA[5]	≥ 2%

[1] After tax; risk-free: five-year average return of ten-year German government bonds
[2] According to our internal capital model and Solvency II requirements
[3] Average annual growth at constant exchange rates
[4] Average annual growth; based on normalised EBIT 2020
[5] Excess return (one-year economic profit in excess of the cost of capital) on allocated economic capital
[6] Based on Solvency II principles; pre-tax reporting

Social responsibility forms part of the Group strategy. Related topics are fleshed out in greater detail in a sustainability strategy. The sustainability strategy 2021–2023, which was also finalised in the year under review, is subordinate to the Group strategy. It encompasses four action fields – Transparency, Employees, Core Business and Commitment – in which goals of a non-financial nature are also pursued. They include, among other things, reducing the CO_2 load in the asset portfolio by 10%, expanding insurance solutions to close the protection gap, increasing the facultative premium volume in the area of renewables by 10%, further integration of ESG criteria into our underwriting activities as well as cutting back and offsetting our greenhouse gas emissions at the international locations. The "Employees" action field dovetails with the Talent Management initiative and pursues goals associated with our attractiveness as an employer, the expansion of further training opportunities and talent reviews, the wider availability of programmes to promote health and wellness as well as diversity and equal opportunities.

Materiality analysis and material topics

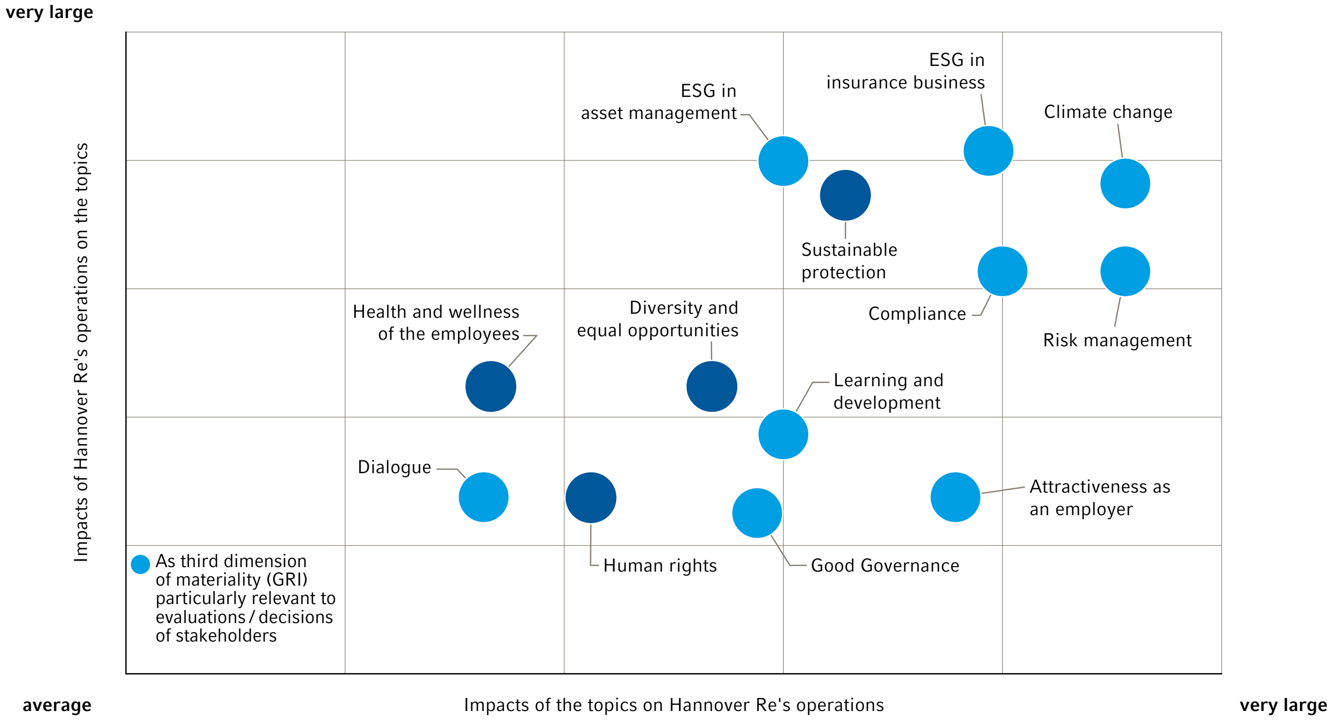
Hannover Re regularly conducts materiality analyses in order to identify material ESG (environmental, social and governance) issues.

In the spring of 2020 the materiality analysis carried out in 2018 was revisited through a survey of internal and external experts. The basis consisted of a list of possible topics derived from the previous materiality analysis, dialogues with stakeholders and non-governmental organisations, media reports and the GRI Framework. All experts were encouraged to indicate other topics. The analysis looked at two dimensions: positive/negative impacts of Hannover Re's operations on the respective topic (inside-out perspective) and positive/negative impacts of the respective topic on Hannover Re's operations (outside-in perspective). Each topic was scored on a scale of 1 to 5 in this regard.

Extensive interviews were conducted with the external experts (stakeholder group: asset managers, ESG analysts, representatives of non-governmental organisations, representatives of the trade press as well as representatives of foundations and associations). All topics that received an average score of at least 3.75 were marked as material. Four workshops were held with the internal experts (stakeholder group: employees) from various market and service units to score the topics on the list. In this case, too, the materiality threshold was set at 3.75. Some topics were clustered at the workshops.

The topics were transferred to a materiality matrix as averaged values from the internal and external scores. In this context, those topics that fell below the threshold after averaging also continued to be material. We consciously decided to take a very wide approach in order to adequately reflect both dimensions and perspectives. As a third dimension, the topics shown in light blue reflect the supplementary perspective of the GRI (stakeholder evaluations). The materiality analysis was validated by the Executive Board at its meeting on 6 July 2020.

Materiality matrix **M 42**



Another crucial topic in the year under review was the Covid-19 pandemic, the direct and indirect repercussions of which also extensively affected Hannover Re and its employees – just as they did the rest of the world. For details of the impacts on the business development the reader is referred to the section of the same name. Please see the section entitled "Risk report" regarding the impacts on the risk management systems. We describe the impacts on our workforce under the non-financial aspect "Employee matters".

The material topics can be allocated to the non-financial aspects as follows:

Allocation of the non-financial aspects to the material topics **M 43**

Non-financial aspect	Material topic	
Environmental matters	Climate change Sustainable protection ESG in insurance business ESG in asset management	Risk management
Employee matters	Attractiveness as an employer Learning and development Health and wellness of employees Diversity and equal opportunities Additional topic: Covid-19	
Social matters	Dialogue Sustainable protection ESG in asset management	
Respect for human rights	Human rights ESG in insurance business ESG in asset management	
Fighting corruption and bribery	Compliance Good governance	

Risk management system

In the course of its operations as a reinsurance company Hannover Re knowingly enters into many different risks. It is equipped with an adequate and effective risk management system for ongoing monitoring of these and other risks. Please see the section "Risk report" for further information.

In the context of its risk management system Hannover Re also considers risks that arise in connection with environmental concerns, social issues or corporate governance – so-called sustainability or ESG risks that are not knowingly entered into but have to be minimised since they are by their very nature unavoidable. They may be associated with negative implications for the net assets, financial position and results of operations or the company's reputation. Sustainability risks do not constitute a risk category of their own, but are instead reflected in existing risk categories. With regard to non-financial aspects, no additional risks were identified that are highly likely and have severely negative impacts on operations. Nor were any severely negative impacts of our operations on non-financial aspects identified. As part of our sustainability management we constantly strive to reduce even less severe negative impacts.

Furthermore, Hannover Re's internal working group for "Emerging Risks & Scientific Affairs" is currently exploring some 20 megatrends. Megatrends are defined as developments with a trend cycle of at least 30 years. They are not presently associated with direct impacts on operations, but may potentially evolve in this direction. The monitored megatrends of ESG relevance include, among others, the decline in biodiversity, global warming and scarcity of resources. Megatrends are considered in connection with emerging risks and resulting opportunities. Thus, for example, the megatrend towards a decline in biodiversity can be viewed in conjunction with emerging risks associated with scarcity of resources, air pollution, genetically modified organisms or food security and availability – but also goes hand-in-hand with a need for innovative (insurance) solutions and services.

Hannover Re publishes position papers on various emerging risks that are publicly accessible on its website. In the year under review, among other things, the papers on pandemics, medical advances and microplastics, were updated. A position paper on psychoactive substances was released internally.

In addition, we are a member of the Chief Risk Officer (CRO) Forum and a constant participant in the CRO Forum's Emerging Risk Initiative. In the year under review a position paper was published on the theme "Imagine all the People – Demographic and social change from an insurance perspective". The Emerging Risk Initiative also continuously tracks and analyses various emerging risks, publishes information on megatrends and associated risks and conducts corresponding impact analyses. The megatrends considered include ageing and health, consumer habits and digitalisation, economic stability, environment and climate change, shifting geopolitical landscapes, technological advances, urbanisation and social changes. The publications are publicly accessible on the CRO Forum website. An exploration of the subject "Carbon footprinting methodology for underwriting portfolios" is also available there.

Environmental matters

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

Impacts on operations

Climate change goes hand-in-hand with a range of impacts on Hannover Re's operations, e.g. due to an increase in the frequency and/or severity of losses (physical risks) or changing framework conditions (transitory risks) including, for example, stranded assets. The risks posed by climate change may affect all risk categories of the risk register and are extensively monitored through the risk management system. ESG risks are also addressed as part of the management of reputational risks. For information on the corresponding concepts and implemented stress test mechanisms the reader is referred to the section "Risk report". When it comes to evaluating impacts and risks, one advantage is that business in property and casualty reinsurance is normally renewed annually. This means that it is possible to adjust the premiums or risk appetite each year according to the conducted risk assessment and hence manage the exposure on a risk-oriented basis. For information on the industry-specific environment and the results of operations in property and casualty reinsurance, please see the section "Report on economic position".

In connection with the requirements arising out of the EU action plan on funding sustainable growth, preparations are being made for implementation of the Taxonomy Regulation (EU 2020/852). A draft is to be submitted to the Risk Committee in the first quarter of 2021 in order to subsequently begin with implementation following EIOPA consultation.

Impacts of our operations

Insurance business

Fossil fuels are considered to be one of the major drivers of climate change. With a view to countering this, Hannover Re encourages the expansion of renewable energy sources in property and casualty reinsurance that range from wind energy (both on-shore and offshore) through photovoltaic energy and hydroelectric power to geothermal energy.

With a view to minimising adverse impacts, the underwriting guidelines are regularly revised in light of the latest developments. In the year under review the Property & Casualty Executive Committee approved and put into effect a phased plan for a gradual withdrawal from thermal coal. The goal is to no longer cover any risks connected with the mining of and power generation from thermal coal by the year 2038 in the entire portfolio of property and casualty reinsurance business.

Reinsurance covers for individual risks are written in facultative reinsurance, i.e. the treaties can be allocated to specific projects or policyholders. In this segment, reinsurance has no longer been provided for planned new coal-fired plants or thermal coal mines since April 2019. Moreover, from February 2020 onwards the facultative department will exclude any new business connected with thermal coal or the associated infrastructure. Thermal coal infrastructure encompasses mines, coal-fired power plants and facilities as well as port and rail operations allocable exclusively to the coal industry. In the case of mixed groups, companies are excluded that generate more than 30% of their revenues from activities in thermal coal. In addition, since 2020 the facultative department has no longer accepted any new individual risks for companies that hold 20% or more of their oil reserves in oil sands and it excludes oil sands extraction and processing operations. Oil sands extraction and processing encompasses the extraction of bituminous sand (both in surface mining and in the form of in-situ extraction) from bitumen, refinement into synthetic crude oil, further processing of this synthetic crude into petroleum products and the associated transportation by pipeline or rail.

Complementary to this, the facultative department developed an ESG manual in the year under review that touches on other environmental concerns. Transactions are to be declined if they may be accompanied by damage to protected areas classified as IUCN category 1a/b, wetlands protected under the Ramsar Convention or world cultural heritage sites. Furthermore, no individual risks for deepwater drilling in the Arctic Ocean are accepted. The facultative underwriters at all international locations received training in ESG topics and the ESG manual via videoconferences in the year under review. The ESG manual comes into effect in 2021.

In obligatory reinsurance large-volume portfolios with sometimes heterogenous contents are accepted that make it fundamentally impossible to examine individual risks. As part of the phased withdrawal plan for thermal coal, work has been ongoing since 2020 to identify primary insurance clients that may have exposures. Talks have been underway with these clients since autumn 2020. An information paper has been compiled as a support tool, providing customers with background information and setting out Hannover Re's position.

Investments

ESG criteria are similarly applied on the asset management side. These have been defined in writing in an internal Responsible Investment Policy, application of which is ensured by an ESG officer on the investment team. In the year under review Hannover Re signed up to the UN Principles for Responsible Investment (UN PRI).

Within the portfolio of assets under own management, fixed-income securities (government and semi-government bonds, corporate bonds and covered bonds (with the exception of collateralised debt obligations – CDOs)) and listed equities have been subject to half-yearly negative screening since 2012. Only a few niche funds or asset classes, such as real estate, private equity or structured investments, cannot be analysed using this system.

In the area of fossil fuels, specific exclusion criteria are in place for issuers that generate 25% or more of their revenues from thermal coal mining / power generation or oil sands extraction. An appropriate check is made in advance of any new investments. The existing portfolio is also screened half-yearly. Issuers that violate these or other ESG criteria are actively scaled back. Key findings of the screening process with corresponding investment decisions are reported directly to the Chief Financial Officer by the investment team and approved by the Investment Committee.

Not only that, the implementation of the best-in-class investment approach that was completed in 2019 makes it possible to measure the sustainability quality of the existing portfolio. Using CO_2 portfolio analyses and research findings obtained from external providers, the carbon intensity of the investments is evaluated and actively reduced. The goal is to lower the CO_2 load of the investment portfolio by at least 10% by the year 2023.

Opportunities

Changing general framework conditions, increasing values and hence a greater need for protection, combined with the transition to a net zero greenhouse gas economy – inter alia in connection with the EU action plan on funding sustainable growth and the European Green Deal –, will bring new business opportunities. Such opportunities will open up, for example, through an expansion of parametric covers, growth in natural catastrophe business and further solutions for mitigation of / adaption to climate-related risks or increased premiums in the renewable energy sector.

With an eye to green tech solutions, the working group for "Emerging Risks & Scientific Affairs" discusses additional issues that may go hand-in-hand with the need for new (re)insurance solutions. These include, among others, modified methods of waste disposal or recycling, cradle-to-cradle solutions, changing mobility habits, new propulsion concepts such as those in the automobile sector, new services in passenger transportation, rechargeable batteries and storage media for renewable energies.

Environmental matters: Selected goals **M 44**

Goal	Target indicator by 2023	Status
Advancing a global energy transition through the reinsurance of renewable energy sources	Increase of 60% in the facultative premium volume for renewable energies by (base year 2019)	Goal approved, first review in 2021
Reducing the CO_2 load in connection with coal-fired power plants or mines for thermal coal in obligatory insurance portfolios	Phased withdrawal according to step-by-step plan – completion of the evaluation phase and beginning of the implementation phase; complete withdrawal by 2038	Goal approved, first review in 2021
Reducing the CO_2 load in the asset portfolio	Reduction of 10% (base year 2019)	Goal approved, first review in 2021

Employee matters

Qualified and motivated people are at the heart of a company's business activities. Growing importance is attached to sustainability-related aspects in all phases of their employment. Most notably, the demographic shift in industrial countries is leading to intensified competition for well-qualified junior staff. It is evident that members of Generations X, Y and Z are especially likely to consider not only monetary aspects when it comes to choosing their employer. Other aspects move front and centre, such as adherence to principles of responsible corporate governance, measures to realise sustainable development in the core business, a company's reputation, culture and work atmosphere, compatibility of work and family life, the availability of development and career opportunities and other additional benefits – summed up as the "total reward". On top of this, the Covid-19 pandemic presented companies around the world with special challenges. At the same time, existing trends such as teleworking and virtual meetings gained added impetus.

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

Impacts on our operations and impacts of our operations

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

A Talent Management initiative sponsored by the Chief Executive Officer and another member of the Executive Board was launched in the year under review. The goal is to attract talented individuals and retain them at the company, to optimally deploy, foster and develop them at all locations and to create a work environment that makes Hannover Re the employer of choice. In addition, the initiative aims for optimisation of personnel support processes and systems as well as greater interlinking of worldwide human resources activities.

For information on operational risks that can arise in connection with the activities of the workforce, the reader is referred to the section "Risk report". This includes business interruption risks and the risk of cyber attacks connected with Covid-19 as well as countermeasures.

For information about the requirements placed on the specialist qualifications and personal reliability (fit & proper criteria) of persons in key positions, we would refer to the Solvency and Financial Condition Report of Hannover Rück SE 2019 from page 32 onwards.

Hannover Re employed 3,218 members of staff (previous year: 3,083) Group-wide at the reference date of 31 December 2020.

Development opportunities

Hannover Re operates in a knowledge-intensive industry with a high level of specialisation. Continuous and appropriate (further) training of employees serves to assure the high quality standard of services and a positive perception of the company. At the same time, the programme of further training enables employees to continue their personal growth and it promotes life-long learning. In support of our approach to talent management, our goal is to align ongoing training activities more closely with the values and core competencies and to extend reporting to additional locations. The Covid-19 pandemic did not significantly restrict the available training opportunities because they were converted to virtual solutions at short notice.

Health and wellness

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

With a view to protecting the health of the workforce, the applicable employment protection legislation as well as requirements relating to ergonomic workplace design are systematically observed and reviewed worldwide. Instruction in health and safety at the workplace is provided regularly. In addition, wellness among staff is actively encouraged through health promotion measures; these are to be rolled out worldwide.

The issue of Covid-19 is inextricably linked to the topic of employee health. Hannover Re's interdisciplinary crisis management team swung into action once the first cases were reported in Europe and has since initiated a range of measures in close consultation with the Executive Board. These are communicated on a Group-wide basis. In order to avoid infections and help slow the spread of the virus, the technical capabilities and necessary capacities were put in place within a very short space of time to enable the global workforce to work from home. At the Hannover location, Hannover Re voluntarily topped up in full missing hours for employees with children under 12 or special needs children to the individual working time, even if work was not possible or only partially possible as a consequence of the crisis situation. As a further step, even greater flexibility was introduced for daily working hours so as to optimally support the members of staff.

Diversity and equal opportunities

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

Hannover Re and its Executive Board are committed to equal opportunities in relation to diversity criteria and on all hierarchical levels. A current focus of the measures is on supporting women in leadership positions. Of the 152 senior executives around the world, 28 are women; this is equivalent to a proportion of 18.4%. The goal of increasing diversity on all levels of management was carried over to the sustainability strategy 2021–2023.

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

Opportunities

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

Employee matters: Selected goals M 45

Goal	Target indicator by 2023	Status
Recruiting, identifying, developing and retaining performance-driven employees according to requirements	Conceptual design and further refinement of powerful branding and recruitment systems by 2023	Goal approved, first review in 2021
Supporting the lifelong learning of employees around the world	Alignment of our (ongoing) training activities with the values and core competencies of Hannover Re and expanded reporting through the worldwide programme of continuing training by 2023	Goal approved, first review in 2021
Promoting the health and performance of employees around the world	Expansion of programmes to support health and wellness by at least 10% by 2023	Goal approved, first review in 2021
Increasing diversity on all managerial levels, especially in relation to women	Gender-neutral new appointments / replacements (50/50) for all vacant leadership positions on all managerial levels worldwide	Goal approved, first review in 2021
Enhancing equal opportunities through measures to support the compatibility of career and family	Worldwide programme of mobile working by 2023	Goal approved, first review in 2021

Social matters

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

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

Impacts on our operations

Our review did not reveal any direct and/or severe risks. A latent reputational risk exists in connection with the material topic of "Dialogue" as a result of potentially unclear external communication. The material topic of "Sustainable protection" brings together various activities that support the transformation to a sustainable world (e.g. expansion of sustainable insurance services). The associated underwriting risks are to be considered in the risk assessment; reference is made to the section "Risk report". Risks above and beyond this are not anticipated. We would similarly refer to the section "Risk report" regarding impacts connected with Covid-19.

Impacts of our operations

Dialogue

The trust of stakeholders is a vital prerequisite for entrepreneurial success. With this in mind, we cultivate an active ongoing dialogue and report regularly on ESG-related topics. This is done, inter alia, through the present combined non-financial information statement as well as an annual sustainability report, into which we shall henceforth integrate the United Nations Global Compact (UNGC) Progress Report.

Insurance business

In our insurance business we encourage the expansion of products in response to climate change, such as weather and energy efficiency insurances, and we also contribute to societal development in structurally deprived regions by delivering insurance solutions in areas such as microinsurance and agricultural risks. In this way, we enable people with scant financial means to protect themselves against fundamental risks such as natural disasters, crop failures or illness. Furthermore, we are taking an active part in the development of index-based disaster finance concepts that guarantee rapid financial assistance for countries in Africa, Asia and South America in the event of natural disasters.

In life and health reinsurance we assist primary insurance partners around the world with our expertise and power of innovation in the development, launch and delivery of reinsurance solutions. These include life and annuity insurance products, solutions for critical illness, disability and long-term care as well as in some instances insurance products containing wellness and/or lifestyle components. Many of these solutions address special needs of end consumers or target groups that have hitherto not been adequately met by existing standardised products on account of specific requirements or challenges.

Investments

On the asset management side we are increasingly adding sustainable investments to our portfolio that support the transformation to a resource-saving economy. They include, among others, infrastructure assets such as renewable energies and clean transport as well as impact investment funds. Our goal is to increase the volume by at least 10% by the end of 2023 relative to the end of 2020. A budget for investments in impact investment funds was set up back in 2019. The primary objective here is to achieve appreciable improvements through the broadest possible coverage of the United Nations Social Development Goals (SDGs), inter alia in the fields of food security and nutrition, education, health and well-being, ending poverty, climate action etc. We held nine impact funds in our portfolio as at 31 December 2020. In addition, we invest in renewables both through funds and direct infrastructure investments as well as in sustainable forest and agriculture funds.

Opportunities

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

Social matters: Selected goals **M 46**

Goal	Target indicator by 2023	Status
Further expanding insurance protection for emerging and developing countries in relation to extreme weather events and natural disasters	Expansion of NatCat aggregates in emerging and developing countries to reduce the protection gap (base year 2019)	Goal approved, first review in 2021
Expanding insurance protection for previously inadequately insured population groups in the Life & Health sector	Growth in the premium volume in developing and emerging countries (base year 2019)	Goal approved, first review in 2021

Respect for human rights

As long as 20 years ago, human rights were one of the four subject areas defined in the United Nations Global Compact in which companies commit to behave in a responsible manner. The requirements placed on companies in relation to human rights were fleshed out in greater detail in 2011 through the endorsement of the UN Guiding Principles on Business and Human Rights by the UN Human Rights Council. Companies are urged to implement adequate safeguards in order to avoid human rights risks within their entrepreneurial scope of influence.

Impacts on our operations

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

The UN Guiding Principles on Business and Human Rights and the National Action Plan of the German Federal Government also have a bearing on Hannover Re. In the year under review we began to develop processes to determine actual and potentially detrimental effects on human rights and measures for monitoring effectiveness. We plan to complete this in the following year and publish a policy statement.

As a signatory to the United Nations Global Compact (UNGC), we shall release an annual progress report on the Ten Principles. In addition, the UK Modern Slavery Act 2015 requires us to publish an appropriate statement on our website.

Impacts of our operations

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

Employees

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

Suppliers

Hannover Re does not have a traditional upstream or downstream supply chain of raw and auxiliary materials or produced goods as is the case with, for example, manufacturing companies. Nevertheless, we too source a broad range of goods and services. Hannover Re has adopted its own Code of Conduct for suppliers. This encompasses compliance with legal and ethical provisions, respect for human rights including observance of the core labour standards of the International Labour Organization (ILO) and adherence to all applicable requirements in the areas of health, safety and environmental protection.

Insurance business

With regard to our activities in insurance business, we would refer the reader to the remarks made in connection with the aspect "Environmental matters". The facultative department's ESG manual provides for a screening process in order to identify and decline transactions that entail an inherent risk of severe breaches of fundamental human rights.

Investments

With regard to our activities in asset management, we would refer the reader to the remarks made in connection with the aspect "Environmental matters" and the negative screening process described there. This is based on the Ten Principles of the United Nations Global Compact (UNGC). Our investment guidelines also exclude issuers involved in the development and proliferation of internationally banned weapons.

Opportunities

We do not see any particular opportunities in connection with this non-financial aspect.

Respect for human rights: Selected goals M 47

Goal	Target indicator by 2023	Status
Living up to duties of care in matters of human rights	Definition of measures in conformity with the UN Guiding Principles on Business and Human Rights	Goal approved, first review in 2021

Fighting corruption and bribery

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

The fight against corruption and bribery forms part of our compliance management. It encompasses not only compliance with statutory and regulatory requirements (legal compliance) and fulfilment of external standards such as corporate governance principles but also internal guidelines.

Impacts on our operations

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

Impacts of our operations

Governance and compliance

Any form of unlawful or corrupt behaviour harms the company to a considerable extent and impedes free and fair competition. Companies in the financial sector have an important role to play when it comes to prevention and execution. Hannover Re has an extensive Governance and Compliance Management System and adopts the "three lines of defence" approach. For details of the implemented structures please see the sections "Enterprise management" and "Risk report".

Code of Conduct

Hannover Re has adopted a company-wide Code of Conduct that is publicly accessible on its website. The Code of Conduct makes it clear that active and passive corruption will not be tolerated. Additionally, it explicitly references the prohibition of money laundering and other criminal activities and contains specific instructions on appropriate behaviour for the avoidance and disclosure of conflicts of interest, for the granting and acceptance of benefits, gifts and invitations, for the arrangement of donations and sponsorships as well as with respect to sideline activities and involvement in other companies and business transactions. As a listed company, we make our employees aware at the start of their employment of the need to observe rules on insider trading and, as warranted, to respect blocking periods for share trading.

Awareness raising

Hannover Re uses various training activities in order to sensitise employees to compliance-related issues. On joining the Group, all new members of staff take compliance training as a general principle. A specific compliance page is provided in the intranet. In the year under review Hannover Re launched a 12-month compliance campaign to raise awareness among the workforce. The campaign is supported by video messages from the Executive Board and communicated through various internal channels.

Compliance Management System

Compliance issues are addressed in a Compliance Management System. It is geared to international standards and ensures that the core tasks of a compliance function are performed.

- Advising the Executive Board and the employees on compliance with laws
- Reviewing and assessing changes in the legal / regulatory environment and determining measures
- Identifying and evaluating specific compliance risks (current and emerging risks)
- Making available appropriate systems and structures

The compliance function forms part of Hannover Re's second line of defence. It is incumbent upon the Executive Board to take responsibility for and ensure adequate and effective compliance structures. Execution falls to the Chief Compliance Officer (CCO), who is independent and not bound by instructions and reports in a direct line to the Executive Board on material compliance issues and developments. The report is also submitted to the Finance and Audit Committee. The CCO is supported in his work by the Compliance department, specially designated officers and a worldwide network of local compliance officers. Monitoring procedures are conducted for the management of compliance risks. Checks can also be performed on an ad hoc basis in case of suspicion. The underlying compliance risk analysis is updated annually.

The CCO works closely with Risk Management to ensure a consistent approach to operational risks, which include compliance risks. Several compliance committees also exist, comprised of members from the operational business groups as well as from the areas of Group Legal, Finance, Accounting and Investments. Among other things, the compliance committees examine reinsurance treaties with a special eye to compliance with supervisory requirements and accounting standards and they take fundamental decisions on dealing with sanctions.

Regular verification of Group-wide adherence to the Compliance Management System is performed by Group Auditing in its function as the third line of defence.

Opportunities

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

Fighting corruption and bribery: Selected goals M 48

Goal	Target indicator by 2023	Status
Ensuring that the organisation is compliant	Average compliance score corresponding at a minimum to the targeted maturity level	Ongoing, annual review

Opportunity and risk report

Risk report

- Hannover Re continues to have good capital resources in excess of the defined strategic thresholds. The capital position is reviewed on an ongoing basis and especially in light of changes in the risk profile and external events such as the Covid-19 pandemic and its impacts.
- Our risk management system constantly monitors newly added and changing risks and is able to respond flexibly to changes in internal and external factors.

Strategy implementation

Our Group strategy 2018–2020 encompasses ten guiding principles that safeguard the realisation of our vision "Creating value through reinsurance" across the various divisions.

Our risk strategy is derived from the corporate strategy. The following principles of the corporate strategy constitute the key strategic points of departure for our Group-wide risk management:

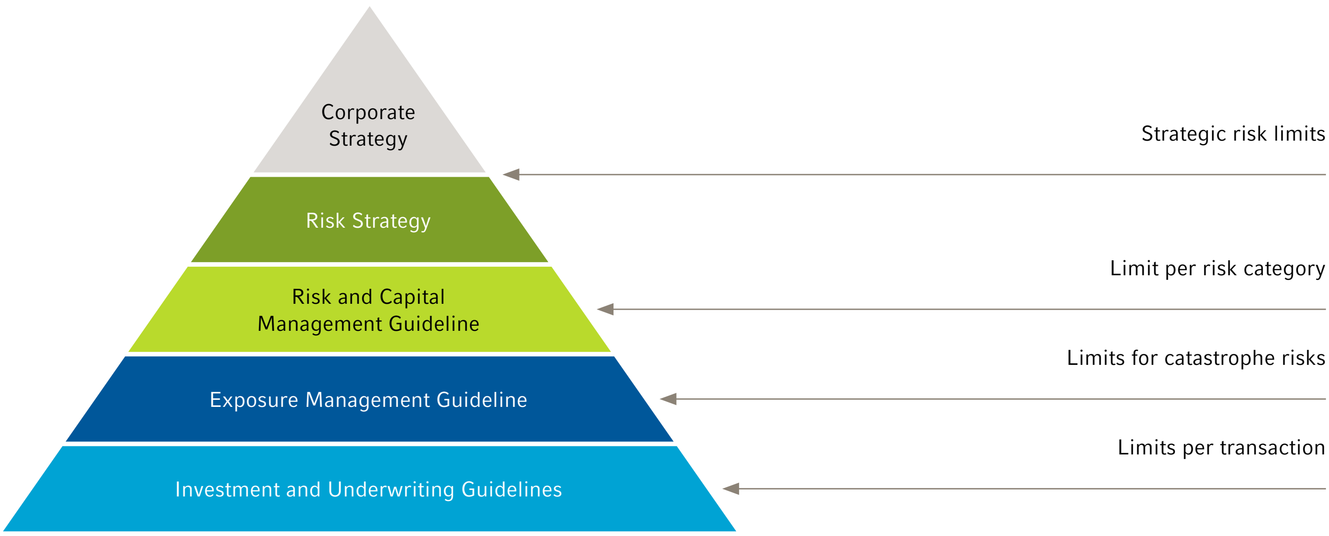
- We manage risks actively.
- We maintain an adequate level of capitalisation.
- We are committed to sustainability, integrity and compliance.

In the year under review the Group strategy of Hannover Re was revised for the strategy cycle 2021–2023. Our successful business model and the former ten strategic principles have found their way into the strategy map with its vision "Striving for sustainable outperformance". Our strategy is based on the interplay between performance drivers, performance enablers and solid fundamentals. Robust governance and risk management, integrated compliance and corporate social responsibility establish the foundation for our growth as a trusted global reinsurance partner.

The risk strategy is the core element in our handling of opportunities and risks. It specifies more closely the goals of risk management and documents our understanding of risk. We have defined eight overriding principles within the risk strategy:

1. We monitor adherence to the risk appetite set by the Executive Board.
2. We integrate risk management into value-based management.
3. We promote an open risk culture and the transparency of our risk management system.
4. We fulfil regulatory requirements.

Risk management through multiple levels of limits **M 49**



5. We fulfil the requirements of rating agencies.
6. We act in light of materiality and proportionality considerations.
7. We make balanced use of both quantitative and qualitative methods.
8. We ensure the independence of the risk management function.

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

We manage our total enterprise risk such that we can expect to generate positive IFRS Group net income with a probability of at least 90% p.a. Our solvency ratio must amount to at least 180%, although 200% is already considered to be a threshold; countermeasures would be triggered if the solvency ratio were to fall below this threshold. Currently, the solvency ratio (unaudited by the independent auditor) stands at 235%, i.e. above the threshold levels. These indicators are monitored using our internal capital model and the Executive Board is informed quarterly about adherence to these key parameters as part of regular risk reporting. The necessary equity resources are determined according to the requirements of our economic capital model, regulatory parameters, the expectations of rating agencies with respect to our target rating and the expectations of our clients.

Major external factors influencing risk management

This section describes external factors that were particularly relevant in 2020 and could continue to influence risk management in subsequent years.

Covid-19 pandemic: Hannover Re classified the Covid-19 pandemic as a global crisis for the purposes of business continuity management in early 2020 and initiated the measures defined in the guidelines on Business Continuity Management. These steps include, among other things, the setting up of a crisis management team. In the course of the year the Crisis Management Team took various decisions to maintain regular business operations, including in response to official measures. They encompass an extensive reduction in travel, a broad changeover to teleworking and the use of videoconferences. The measures taken were successful and we have not so far identified any material impacts of the Covid-19 pandemic on our operations.

The pandemic brought a surge in volatility on financial markets, which in some respects proved to be temporary. Our asset/liability management including the use of the volatility adjustment protects Hannover Re's financial strength against such changes in volatility. Despite the strains associated with the Covid-19 pandemic and the extraordinary volatility on the capital market, we were thus able to secure a robust capital base, with solvency ratios comfortably above our limit of 180% and threshold of 200%. This was achieved even against the backdrop of the incurred and anticipated insured losses, as described on pages 39 et seq. of this report.

Given that the pandemic is still ongoing, any forecasts remain subject to considerable uncertainty. We continue to evaluate our financial strength and profitability on a regular basis using stress tests and sensitivity analyses and will take measures as needed to reduce risks or strengthen our equity resources.

Regulatory developments: The European Commission had originally requested the European Insurance and Occupational Pensions Authority (EIOPA) to present its technical recommendations for the review of Solvency II by 30 June 2020. Owing to the Covid-19 pandemic this date was pushed back to the end of December 2020 so as to additionally factor any insights gained from the present crisis into a potential adjustment of Solvency II. In this context EIOPA conducted two impact assessments at different reference dates with respect to the envisaged recommendations and has now passed on its proposals to the European Commission. The stated objective is to make specific adjustments, e.g. to the risk margin or the yield curves used for measurement. Implementation will not take place before 2022.

Parallel to the regulatory developments in Europe, we are seeing adjustments worldwide to the regulation of (re)insurance undertakings. The Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame), which was adopted in 2019 by the International Association of Insurance Supervisors (IAIS), establishes supervisory standards and provides guidance focusing on the effective group-wide supervision of Internationally Active Insurance Groups (IAIGs). The Insurance Capital Standard (ICS) would be the first global, risk-based capital standard for IAIGs. It has been undergoing testing in a monitoring phase since 2020. Hannover Re has participated through the Group's ultimate parent company, HDI V.a.G. In view of ongoing international negotiations around the ICS, considerable uncertainty remains in relation to the scope and date of possible implementation.

Significant implications continue to be evident in connection with the action plan for financing sustainable growth unveiled by the European Commission in 2018. The EU action plan is intended to increasingly reorient capital flows towards sustainable investments, mitigate the impacts of climate change as well as social and environmental concerns on the financial system and foster transparency and long-termism. The focus is initially on the environment. Climate change is similarly at the heart of the European Green Deal presented in 2020, which aims to make Europe the first climate-neutral continent by 2050. The two measures complement one another. In 2020 consultations were also completed on the revised EU sustainable finance strategy, which is intended to outline the future road map for implementation of all measures. Back in 2018 the European Commission had put forward three legislative proposals – along with a number of measures – in order to set the action plan in motion: the creation of a consistent classification system for sustainable economic activities, the expansion of sustainability-related disclosures in the financial services sector (disclosure regulation: EU 2019/2088, currently development of regulatory technical standards) as well as the establishment of benchmarks for low-carbon investments. In addition, the EU published several delegated acts and further measures such as the development of an EU Green Bond Standard, the launch of an EU Ecolabel for sustainable financial products as well as an overhaul of the requirements for non-financial reporting and their expansion to include non-binding guidelines geared to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The measures outlined were again accompanied by numerous consultations and recommendations in the year under review. The disclosure regulation will apply from March 2021 onwards; reporting on the first two aspects – namely the taxonomy and climate change adaptation and mitigation – is to be provided for the first time in 2022 for the 2021 financial year.

The European Commission's proposed Digital Operational Resilience Act (DORA) defines consistent detailed requirements for financial undertakings in the areas of information and communication technology (ICT) risk management, ICT-related incident reporting, digital operational resilience tests and management of ICT third-party risks. Many requirements of the proposed DORA legislation are covered by EIOPA's ICT guidelines, which European insurers had to implement by July 2021. The harmonisation and consistency of the two initiatives will therefore be crucial.

Risks from the processing of electronic data: Recent years have seen the increasing emergence of risks relating to electronic data and systems. Hannover Re, in common with other companies, is at risk of outside attacks on its own IT systems and has put in place extensive safeguards. Furthermore, Hannover Re offers reinsurance coverage for risks connected with electronic systems and data. The dynamic pace of developments in the context of digitalisation presents a particular challenge for the assessment of such risks. The mapping of cyber risks in the internal capital model was already improved in 2019, with the result that more detailed risk management is now possible and our cyber portfolio is included with regard to the so-called "silent cyber" exposure, insofar as the relevant portfolios have already been analysed. In general, some of the treaty wordings used in the 2020 / 2021 renewals with respect to silent cyber were revised.

Natural catastrophe risks and climate change: It is likely that the increased storm activity, heatwaves and droughts, severe precipitation events and floods of recent years can be attributed in part to progressive global warming. Hannover Re cooperates with partners to very closely monitor the implications of global warming for extreme weather events so as to be able to factor the insights gained into the models and the management of risks.

In 2020 Hannover Re was again impacted by natural catastrophe events such as hurricane "Laura" and other events in various parts of the world (above all the United States, Asia, Australia). Particularly noteworthy in the year under review were the large-scale forest fires and bushfires in Australia, California (on multiple occasions) and Siberia. In internal studies Hannover Re has explored the effect of climate changes on fire risks, primarily in regions with material insured portfolios (United States, Australia), and reached the conclusion that the potential exposure is continuing to grow.

Capital market environment: The protracted low level of interest rates is a major external factor influencing the return that can be generated on our investments. Interest rate declines – which in some instances were very marked – again affected both euro-denominated bonds as well as the US dollar and sterling markets over the course of the year. Negative yields are being seen on euro area government bonds extending well beyond the 10-year maturity point. The economic impacts of the Covid-19 pandemic, first and foremost, as well as the uncertain signals that have been coming from policy makers for quite some time and indications of softening fundamentals led to very considerable volatility overall on the markets, especially in the first half of the year. This was also reflected in choppy prices for gold and oil. The surprisingly disorderly process surrounding the United Kingdom's withdrawal from the European Union – despite what was already a lengthy period of acclimatisation – also failed to offer any support over the course of the year. The implications of the negotiated solution that was nevertheless reached at the last minute remain to be seen. The US economy proved somewhat more robust than its European counterpart in the face of the protracted coronavirus crisis, while Asia saw a rather rapid return to the previous growth track. This can be attributed not least to the heavy intervention by the Federal Reserve, which responded in March with further substantial cuts on the heels of the expansionary interest rate policy already embarked on in the previous year. The European Central Bank launched an extensive asset purchase programme for government and corporate bonds as a means of support during the crisis. Overall, then, the policies pursued by central banks in our main currency areas were essentially consistent – even with significant fiscal interventions –, albeit with differing measures that varied in scope. We view these worldwide interventions by governments and central banks with their enormous money supply as a not inconsiderable challenge because in some ways they divorce the financial world from the natural, reciprocal control mechanisms of the financial markets and it is unclear to what extent the current or future valuation levels are supported by fundamentals. Emerging hopes as Covid-19 vaccinations roll out and the catch-up effects likely to set in at some point in time may trigger erratic developments on the inflation front and bring about very high, but potentially unstable valuation levels on credit and equity markets.

Risk premiums on corporate bonds initially increased very sharply in response to the global outbreak of the Covid-19 pandemic, only to recover appreciably by year-end. Similarly, volatility has once again moved back into much calmer waters.

We continue to have exposure to the private equity market. Fair value changes here tend to be less influenced by general market conditions and more by company-specific evaluations. The risks are therefore primarily associated with the business model and profitability and to a lesser extent with the interest rate component in a consideration of cash flow forecasts. In the period under review, for example, we again see the need to take higher write-downs on isolated assets in response to the Covid-19 pandemic not as a reflection of a generally elevated risk in the market, but rather in the context of the risk profile specific to this asset class and set of company characteristics.

The significance of real estate risks remains substantial for us owing to our consistent participation in this sector. We spread these risks through broadly diversified investments in high-quality markets around the world, with each investment decision being preceded by extensive analyses of the relevant property, manager and market.

As far as our investments are concerned, we anticipate continuing elevated volatility on global capital markets in the immediate future, although we also see this as an opportunity and believe that we are appropriately prepared with our current investment posture. For further information please see the "Investments" section of the management report on page 55 et seq.

Brexit: The European Union and the United Kingdom negotiated a Trade and Cooperation Agreement (partnership agreement) for their future relations. The agreement covers, among other things, arrangements for cross-border financial services that ensure continued market access. The EU and UK will subsequently further discuss the equivalence of the regulatory regime and have decided to draw up a framework governing regulatory cooperation.

Argenta Holdings Limited is a wholly owned subsidiary of Hannover Re that operates on a stand-alone basis in the United Kingdom as a member of Lloyd's. The Life & Health branch in the United Kingdom is now being transformed into a so-called third-country branch. We also write reinsurance business in the United Kingdom through Group companies in Hannover, Bermuda and Ireland.

In view of the agreement that has been reached, we currently consider the implications of Brexit for the Hannover Re Group to be manageable.

Risk capital

In the interests of our shareholders and clients we strive to ensure that our risks remain commensurate with our equity resources. The capital indicators and ratios provided in this section contain information that has not been audited by the independent auditor.

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

Own funds and required risk capital[1] **M 50**

in EUR million	31.12.2020[2]	31.12.2019[3]
Available economic capital	15,210.9	14,982.5
Eligible own funds	14,557.5	14,336.7
Solvency capital requirement/ Required risk capital at the confidence level of 99.5%	6,190.4	5,719.1
Excess capital (Solvency II)	8,367.1	8,617.6
Capital adequacy ratio (Solvency II)	235.2%	250.7%

1 This information has not been audited by the independent auditor.
2 The figures were calculated on the basis of the Solvency II reporting as at 31 December 2020.
3 Minor differences for 31 December 2019 compared to the Annual Report 2019. The figures are based on the final Solvency II year-end reporting as presented in the Solvency and Financial Condition Report.

The eligible own funds for regulatory purposes are lower than the available economic capital because the non-controlling interests under Solvency II are in part treated as non-eligible. The available economic capital and the eligible own funds reflect the static volatility adjustment, whereas the required risk capital reflects the dynamic volatility adjustment. These risk indicators refer to the Hannover Re Group.

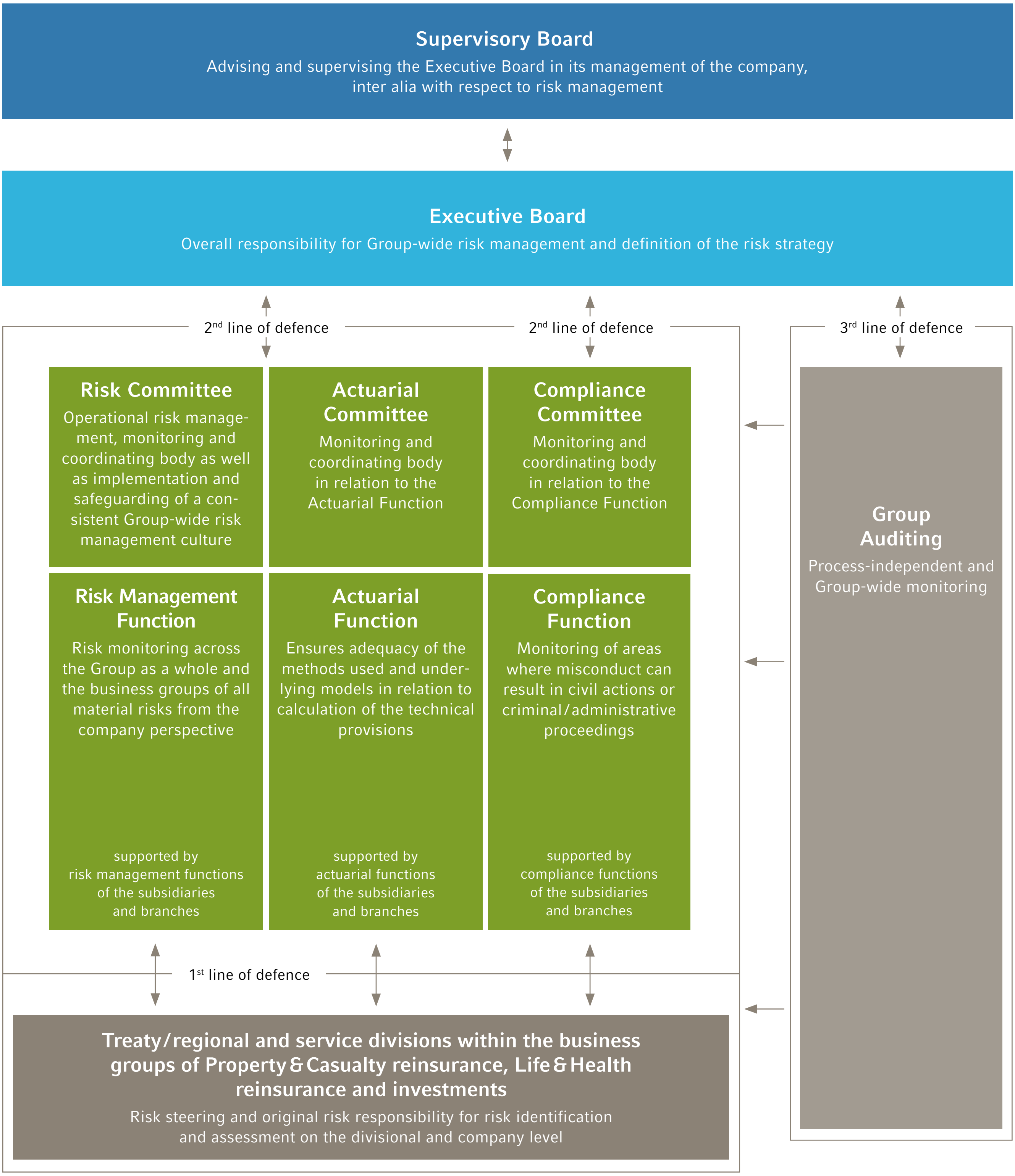
In addition, Hannover Rück SE is subject to regulatory capital requirements, which in accordance with Solvency II reporting were clearly fulfilled as at 31 December 2020 with a solvency ratio (unaudited by the independent auditor) of 239.9%. The solvency ratio of Hannover Rück SE is normally higher than the solvency ratio of the Hannover Re Group because there are no restrictions with regard to the use of own funds attributable to non-controlling interests.

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

Against the backdrop of the planned growth of our business in property and casualty reinsurance and selected areas of life and health reinsurance, we continuously track the impacts on capital adequacy and our rating. In order to ensure our capital adequacy and our rating we initiate measures promptly and also consider the issuance of further hybrid capital subject to an appropriate capital market environment.

Organisation and processes of risk management

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


Supervisory Board
Advising and supervising the Executive Board in its management of the company, inter alia with respect to risk management
Executive Board
Overall responsibility for Group-wide risk management and definition of the risk strategy
2nd line of defence
2nd line of defence
3rd line of defence
Risk Committee
Operational risk management, monitoring and coordinating body as well as implementation and safeguarding of a consistent Group-wide risk management culture
Actuarial Committee
Monitoring and coordinating body in relation to the Actuarial Function
Compliance Committee
Monitoring and coordinating body in relation to the Compliance Function
Risk Management Function
Risk monitoring across the Group as a whole and the business groups of all material risks from the company perspective
supported by risk management functions of the subsidiaries and branches
Actuarial Function
Ensures adequacy of the methods used and underlying models in relation to calculation of the technical provisions
supported by actuarial functions of the subsidiaries and branches
Compliance Function
Monitoring of areas where misconduct can result in civil actions or criminal / administrative proceedings
supported by compliance functions of the subsidiaries and branches
Group Auditing
Process-independent and Group-wide monitoring
1st line of defence
Treaty / regional and service divisions within the business groups of Property & Casualty reinsurance, Life & Health reinsurance and investments
Risk steering and original risk responsibility for risk identification and assessment on the divisional and company level

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

Key elements of our risk management system

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

This guideline describes, among other things, the major tasks, rights and responsibilities, the organisational framework conditions and the risk control process. The rules, which are derived from the corporate strategy and the risk strategy, additionally take account of the regulatory requirements for risk management as well as international standards and developments relating to appropriate enterprise management.

Risk-bearing capacity concept

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

Risk identification

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

Risk analysis and assessment

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

Risk steering

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

Risk monitoring

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

Risk communication and risk culture

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

Risk reporting

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

Process-integrated/-independent monitoring and quality assurance

Irrespective of internally assigned competencies, the Executive Board is responsible for the orderly organisation of the company's business. This also encompasses monitoring of the internal risk steering and control system. Process-independent monitoring and quality assurance of risk management is carried out by the internal audit function and external instances (regulators, independent auditors and rating agencies). Most notably, the independent auditors review the trigger mechanism and the internal monitoring system in relation to the accounting. The risk management system is rounded off with process-integrated procedures and rules, such as those of the internal control system.

Internal control system

We organise our business activities in such a way that they are always in conformity with all legal requirements. The internal control system (ICS) is an important subsystem that serves, among other things, to secure and protect existing assets, prevent and reveal errors and irregularities and comply with laws and regulations. The core elements of Hannover Re's ICS are documented in a guideline that establishes a common understanding of the differentiated execution of the necessary controls. In the final analysis, it is designed to systematically steer and monitor the implementation of our corporate strategy. The guideline defines concepts, stipulates responsibilities and provides a guide for the description of controls. In addition, it forms the basis for the accomplishment of internal objectives and the fulfilment of external requirements imposed on Hannover Re. The ICS consists of systematically structured organisational and technical measures and controls within the enterprise. These include, among other things, the principle of dual control, separation of functions, documentation of the controls within processes as well as technical plausibility checks and access privileges in the IT systems.

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

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

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

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

At a time when the workforce is teleworking from home on account of Covid-19, it is particularly important to perform the controls that would otherwise have been performed in person using electronic means.

Risk landscape of Hannover Re

In the context of its business operations the Hannover Re Group enters into a broad variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act on the associated opportunities. The parameters and decisions of the Executive Board with respect to the risk appetite of the Hannover Re Group, which are based on the calculations of risk-bearing capacity, are fundamental to the acceptance of risks. Through our business operations on all continents and the diversification between our Property & Casualty and Life & Health reinsurance business groups we are able to effectively allocate our capital in light of opportunity and risk considerations. In this context crucial importance attaches to our risk management in order to ensure that, among other things, risks to the reinsurance portfolio remain calculable and even exceptional major losses do not have an unduly adverse impact on the result.

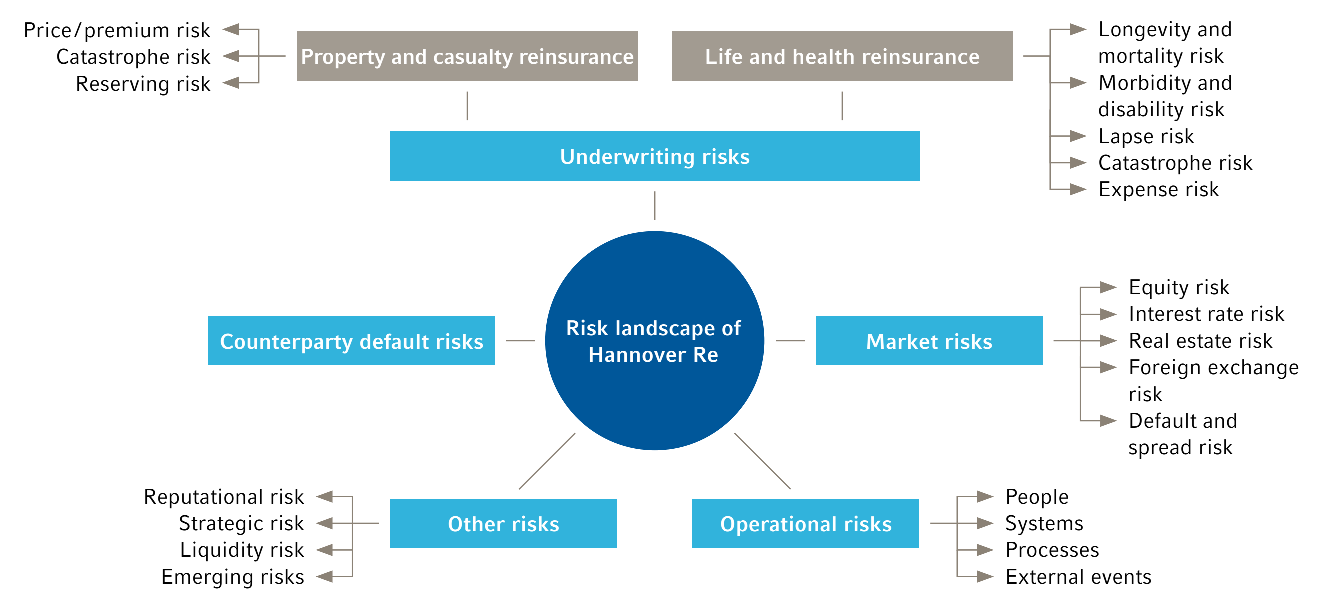
The risk landscape of Hannover Re encompasses:

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

Sustainability risks
Sustainability risks are risks that can arise in connection with environmental issues and social concerns or in the context of corporate governance and may be associated with negative implications for the company's net assets, financial position or results of operations or its reputation. Sustainability risks are also referred to as ESG (environmental, social, governance) risks.

As a general principle, ESG risks can affect all areas of our risk landscape. Examples include the intensification of physical risks in property and casualty insurance portfolios, real estate assets impacted by climate change or the decline in value of certain investments in conjunction with the changeover to lower-carbon modes of production (transitory risk). ESG risks are also closely associated with reputational risks. Consequently, sustainability risks do not constitute a risk category of their own but rather are reflected in existing risk categories.

Risk landscape of Hannover Re M 52



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

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

Internal risk assessment

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

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

The available economic capital increased to EUR 15,210.9 million as at 31 December 2020, compared to EUR 14,982.5 million as at 31 December 2019. The primary factors here were the positive contribution made by new business in life and health reinsurance, a favourable run-off of the existing portfolio in property and casualty reinsurance and the investment income.

Economic developments such as movements in exchange rates, especially the devaluation of the US dollar, and the increase in credit spreads led to reducing effects on the capital. Furthermore, declines in the economic capital resulted from the large loss expenditure in property and casualty reinsurance, principally in connection with Covid-19, as well as from a higher risk margin – especially for life and health reinsurance – due to the decline in interest rates and the growth of the business.

Reconciliation (economic capital/shareholders' equity) [1] **M 53**

in EUR million	31.12.2020 [2]	31.12.2019 [3]
Shareholders' equity including minorities	11,839.4	11,354.5
Adjustments for assets under own management	366.0	584.1
Adjustments for technical provisions [4]	2,614.5	2,953.4
Adjustments due to tax effects and other	(1,385.8)	(1,545.3)
Economic equity	**13,434.1**	**13,346.7**
Hybrid capital	2,363.5	2,343.1
Foreseeable dividends	(586.7)	(707.3)
Available economic capital	**15,210.9**	**14,982.5**

1 This information has not been audited by the independent auditor.
2 The figures were based on the Solvency II reporting as at 31 December 2020.
3 Minor differences for 31 December 2019 compared to the Annual Report 2019. Figures based on final Solvency II year-end reporting as presented in the Solvency and Financial Condition Report.
4 Adjustments for technical provisions in life & health and property & casualty reinsurance including risk margin.

The required risk capital (unaudited by the independent auditor) of the Hannover Re Group at the confidence level of 99.5% increased to EUR 6,190.4 million as at 31 December 2020, compared to EUR 5,719.1 million as at 31 December 2019. This was driven principally by the larger business volumes, which have led to an increase in underwriting risks and market risks. The lower level of interest rates also contributes to a higher risk.

The increase in the market risk is a reflection first and foremost of the higher volume in the private equity sector, although also of a slightly higher equity allocation. Further factors here are the increased spread volatility seen in the previous year, as well as the larger volumes of fixed-income securities on account of falling interest rates.

The underwriting risks in property and casualty reinsurance increased primarily as a consequence of higher premium and reserve levels. The enlarged volumes are driven by the business growth, the large loss expenditure (especially in connection with Covid-19) and accompanying higher reserves as well as the lower interest rate level.

The underwriting risks in life and health reinsurance increased primarily as a consequence of the business expansion in the area of longevity and morbidity risks as well as lower interest rates. The rise in counterparty default risks can be attributed principally to a higher volume of receivables due from ceding companies.

The changes in the operational risk are attributable above all to updated expert assessments regarding the impact of individual scenarios.

The loss-mitigating effect from taxes and the diversification effect remain largely stable.

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

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

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

M 54

in EUR million	31.12.2020	31.12.2019
Underwriting risk property and casualty reinsurance	4,591.4	4,432.2
Underwriting risk life and health reinsurance	3,144.9	2,735.6
Market risk	4,395.7	4,163.0
Counterparty default risk	449.0	423.3
Operational risk	548.4	532.6
Diversification	(4,624.3)	(4,369.5)
Tax effects	(2,314.7)	(2,198.1)
Required risk capital of the Hannover Re Group	**6,190.4**	**5,719.1**

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

The risk capital at the confidence level of 99.5% reflects the loss from the respective risk that with a probability of 0.5% will not be exceeded. The risk capital required for specific risks is shown in each case before tax.

Climate change

Climate change, defined as naturally occurring or human-caused climatic changes, and the associated effects are considered a key megatrend of our time. Recognition of a correlation between CO_2 emissions and the warming of the earth's atmosphere / increased moisture in the atmosphere is now supported by scientific evidence. This already poses a significant macroeconomic risk today and has wide-ranging implications for the (re)insurance industry in common with many other sectors.

As a meta-risk, the consequences of climate change can – like other ESG risks – affect various categories of our risk register. At the same time, the implications of climate change represent the most significant ESG risk for our company in relation to financial sustainability and are therefore closely analysed, monitored and controlled. The focus of our climate change risk analysis is currently on changes in the frequency and severity of natural catastrophes (physical risks) and on transitory risks, especially in connection with investments.

Physical risks affect us as a risk carrier primarily in property and casualty reinsurance, but also in life and health reinsurance, inasmuch as climatic changes and weather events cause higher and more frequent losses and subsequent costs in property and casualty reinsurance and elevated mortalities among the insured groups of persons. Yet the scenarios that can result from these impacts are subject to uncertainties, e.g. in relation to regional specificities or the anticipated frequency of natural catastrophes or local extreme weather events. In order to optimally assess the consequences, we have developed deterministic climate change scenarios to enable us to evaluate the possible implications of climate change for all our business activities and initiate appropriate measures for steering the business. We perform our sensitivity analyses using a range of parameter sensitivities. Various natural catastrophe scenarios are modelled, e.g. in connection with floods, regional droughts, tropical cyclones or other extreme weather conditions. Furthermore, we subject the portfolio of investments in real estate to corresponding valuations with an eye to their loss exposure. Our interdisciplinary team for natural hazards modelling takes account of the insights gained in pricing for reinsurance solutions and in risk management. In addition, we conduct internal studies and explore the issue in international working groups so as to assess the risks posed by climate change to the best of our ability.

Transitory risks can arise in the context of the transformation to a lower-carbon world in which the value of investments in some way connected with CO_2 emissions may change gradually or even abruptly due to an envisaged zero-emissions global economy. In order to combat climate change the international community reached agreement in 2015 on ambitious goals to protect the climate at the UN Climate Change Conference in Paris. Signed by 195 countries, the Paris Agreement seeks to limit the rise in the global average temperature to well below 2 degrees, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. The path to achieving the Paris climate goal depends on a fundamental shift in the economic system and in human habits. Transitory risks may therefore materialise with far-reaching repercussions. While Solvency II, as a risk-based, forward-looking and market-consistent framework, is well equipped to deal with sustainability risks and the associated factors, a change in the climate will bring substantial challenges when it comes to the valuation of assets and liabilities and also with respect to underwriting activities, investment decisions and risk management. In this regard, our business practices in terms of (re)insurance and capital investment are planned and conducted differently according to traditional and new business objects.

Given the highly diverse nature of the topic and its growing importance going forward, we cooperate closely with internal experts from the fields of climatology, meteorology, geography and hydrology as part of the underwriting and risk assessment process.

Underwriting risks in property and casualty reinsurance

Risk management in property and casualty reinsurance has defined various overall guidelines for efficient risk steering. These include, among other things, the use of retrocessions to reduce volatility and conserve capital. It is also crucially important to consistently maximise the available risk capacities on the basis of the risk management parameters of the Hannover Re Group and to steer the acceptance of risks systematically through the existing central and local underwriting guidelines. Our conservative reserving level is a key factor in our risk management. We make a fundamental distinction between risks that result from business operations of past years (reserve risk) and those stemming from activities in the current or future years (price/premium risk). In the latter case, special importance attaches to the catastrophe risk.

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

Required risk capital[1] for underwriting risks in property and casualty reinsurance **M 55**

in EUR million	31.12.2020	31.12.2019
Premium risk (including catastrophe risk)	3,344.6	3,365.9
Reserve risk	2,595.0	2,496.3
Diversification	(1,348.2)	(1,430.0)
Underwriting risk property and casualty	**4,591.4**	**4,432.2**

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

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

Required risk capital[1] for five natural hazards scenarios **M 56**

in EUR million	2020	2019
Hurricane US	2,027.0	1,993.5
Earthquake US West Coast	1,389.1	1,482.9
Winter storm Europe	792.5	762.4
Earthquake Japan	873.5	817.8
Earthquake Chile	945.4	908.0

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

The reserve risk, i.e. the risk of under-reserving losses already incurred and the resulting strain on the underwriting result, is a high priority in our risk management. We attach importance to maintaining a conservative reserving level. In order to counter the risk of under-reserving we calculate our loss reserves based on our own actuarial estimations and establish, where necessary, additional reserves supplementary to those posted by our cedants as well as the segment reserve for losses that have already occurred but have not yet been reported to us. Liability claims have a major influence on the segment reserve. The segment reserve is calculated on a differentiated basis according to risk categories and regions. The segment reserve established by the Hannover Re Group amounted to EUR 8,095.6 million (EUR 7,609.8 million) in the year under review.

The statistical run-off triangles are another monitoring tool used by our company. They show the changes in the reserve over time as a consequence of paid claims and in the recalculation of the reserves to be established as at each balance sheet date. Their adequacy is monitored using actuarial methods.

Our own actuarial calculations regarding the adequacy of the reserves are also subject to annual quality assurance reviews conducted by an external firm of actuaries. For further remarks on the reserve risk please see our comments in section 6.7 "Technical provisions" on page 211 et seq.

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

Survival ratio in years and reserves for asbestos-related claims and pollution damage M 57

	2020			2019		
in EUR million	Individual loss reserves	IBNR reserves	Survival ratio in years	Individual loss reserves	IBNR reserves	Survival ratio in years
Asbestos-related claims/ pollution damage	13.5	75.0	32.2	14.1	110.7	30.1

In order to partially hedge inflation risks Hannover Re holds securities in its portfolio with inflation-linked coupons and redemption amounts. An inflation risk exists particularly inasmuch as the liabilities (e.g. loss reserves) could develop differently than assumed at the time when the reserve was constituted because of inflation. The specified bonds help to provide partial protection for these parts of the loss reserves against inflation risks.

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

Stress tests for natural catastrophes after retrocessions M 58

Aggregate annual loss in EUR million	2020	2019
	Effect on forecast net income	
Hurricane US		
100-year loss	-1,107	-1,155
250-year loss	-1,594	-1,595
Earthquake US West Coast		
100-year loss	-554	-603
250-year loss	-1,184	-1,258
Winter storm Europe		
100-year loss	-377	-376
250-year loss	-631	-602
Earthquake Japan		
100-year loss	-347	-341
250-year loss	-747	-733
Earthquake Chile		
100-year loss	-223	-212
250-year loss	-777	-778

Within the scope of risk monitoring, the Executive Board defines the risk appetite for natural perils once a year on the basis of the risk strategy by specifying the portion of the economic equity that is available to cover risks from natural perils. This is a key basis for our underwriting approach in this segment.

As part of our holistic approach to risk management across business groups, we take into account numerous relevant scenarios and extreme scenarios, determine their effect on portfolio and performance data, evaluate them in relation to the planned figures and identify alternative courses of action.

For the purposes of risk limitation, maximum amounts are also stipulated for various extreme loss scenarios and return periods; the limits set take into account the profitability of the business in question. Risk management ensures adherence to these maximum amounts. The Executive Board, Risk Committee and P&C Executive Committee are kept regularly updated on the degree of capacity utilisation. The limits and thresholds for the 200-year aggregate loss as well as the utilisation thereof are set out in the following table:

Limit and threshold for the 200-year aggregate annual loss as well as utilisation thereof M 59

in EUR million	Limit 2020	Threshold 2020	Actual utilisation (July 2020)
All natural catastrophe risks[1]			
200-year aggregate annual loss	2,299	2,069	1,702

[1] Loss relative to the underwriting result

Net expenditure on major losses in the year under review amounted to EUR 1,594.9 million (EUR 956.1 million). Our company incurred the following catastrophe losses and major claims in the 2020 financial year:

Catastrophe losses and major claims[1] in 2020 **M 60**

in EUR million	Date	gross	net
Covid-19-related losses		1,252.5	950.1
Hail/Storm, USA	4–12 August	166.0	111.0
4 Man-made losses		163.3	160.6
Hurricane "Laura", USA	23–29 August	153.2	87.5
Tornados, USA	2–5 March	56.7	42.9
Hail, Australia	28 October–1 November	52.7	25.9
Hail/Storm, Canada	13–14 June	38.1	22.4
Floods, China	22 May–22 July	30.1	28.7
California wildfire, USA	16 August–4 October	29.5	23.0
Bushfire, Australia	1–31 January	27.9	26.1
Storm "Sabine", Europe	9–11 February	22.5	16.5
Storm/Flood, Australia	4–13 February	22.4	14.5
Hail/Storm, Australia	19–20 April	20.1	14.2
Hail/Storm, Australia	19–20 January	18.8	13.8
Earthquake, Puerto Rico	6–7 January	18.6	15.0
Washington/Oregon wildfire, USA	17 August–27 September	14.8	9.7
Hurricane "Eta", Nicaragua	3–4 November	13.8	13.8
Floods, Japan	3–6 July	13.2	11.3
Hail, Australia	15–21 January	13.2	8.1
Total		**2,127.4**	**1,594.9**

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

The price/premium risk lies in the possibility of a random claims realisation that diverges from the claims expectancy on which the premium calculation was based. Regular and independent reviews of the models used for treaty quotation as well as central and local underwriting guidelines are vital management components. We have put in place a multi-step quotation process to ensure the quality of our portfolios:

Ensuring the quality of our portfolios **M 61**

Step 1

Calculation of the loss expectancy
- Historical loss and exposure analysis
- Changes in the quality of underlying risks
- Changes in the quantity of underlying risks
- Discounting of future cash flows

Step 2

Cost estimation
- Commissions
- Broker fees
- Internal administration

Step 3

Calculation of the cost of capital
- Level of capital allocation determined by volatility of the business covered and contribution to diversification
- Expected return on equity
- Capital structure

In addition, Hannover Re's regional and treaty departments prepare regular reports on the progress of their respective renewals. The reporting in this regard makes reference inter alia to significant changes in conditions, risks (such as inadequate premiums) as well as to emerging market opportunities and the strategy pursued in order to accomplish targets. The development of the combined ratio in property and casualty reinsurance in 2020 and prior years is shown in the table below:

Combined and catastrophe loss ratio **M 62**

in %	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Combined ratio (property and casualty reinsurance)	101.6	98.2	96.5	99.8	93.7	94.4	94.7	94.9	95.8	104.3
Thereof catastrophe losses [1]	11.2	7.5	7.9	12.3	7.8	7.1	6.1	8.4	7.0	16.5

[1] Net share of the Hannover Re Group for natural catastrophes and other major claims in excess of EUR 10 million gross as a percentage of net premium earned (until 31 December 2011: in excess of EUR 5 million gross)

For further information on the run-off of the loss reserves please see our explanatory remarks in the section "Run-off of the net loss reserve in the property and casualty reinsurance segment" on page 212 et seq.

Underwriting risks in life and health reinsurance

All risks directly connected with the life of an insured person are referred to as biometric risks. They include in particular the miscalculation of mortality, life expectancy, morbidity and occupational disability. Biometric risks are the material risks for our company in the area of life and health reinsurance. Our goal is to strike a balance between biometric risks. Furthermore, we are exposed to lapse risks because the cash flows resulting from our reinsurance treaties are in part dependent on lapse rates among policyholders. Counterparty default risks are also material since we partly prefinance our cedants' new business acquisition costs. Furthermore, we are exposed to catastrophe risks, especially events involving a high number of fatalities in our insured portfolio such as the Covid-19 pandemic in 2020.

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

Required risk capital [1] for underwriting risks in life and health reinsurance **M 63**

in EUR million	31.12.2020	31.12.2019
Mortality risk [2]	2,176.3	2,307.1
Longevity risk	2,302.5	1,660.9
Morbidity and disability risk	1,488.3	1,107.7
Lapse risk	396.8	385.4
Expense risk	222.8	191.5
Diversification	(3,441.8)	(2,917.0)
Underwriting risk life and health	**3,144.9**	**2,735.6**

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

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

Sensitivities of the underwriting risks (impact corridors in % of the available economic capital) M 64

	2020	2019
Mortality +5% (excluding annuity business)	-10 to -7	-10 to -7
Morbidity +5%	-4 to -2	-4 to -2
Mortality -5% (annuity business only)	-5 to -2	-4 to -2
Lapse rate +10%	-2 to 0	-2 to 0
Costs +10%	-1 to 0	-1 to 0

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

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

In our decentralised organisation we manage risks where they arise using a consistent Group-wide approach in order to obtain an overall view of the risks in life and health reinsurance. Our global underwriting guidelines provide underwriters with an appropriate framework for this purpose.

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

As part of our inforce management measures we had initiated rate adjustments for the portfolio concerned in 2018. For the majority of the underlying business, these rate adjustments have been successfully implemented or the cedant has recaptured the business. We are currently engaged in arbitration procedures with a small number of individual cedants in respect of the implemented rate increases. One arbitration procedure with a cedant was successfully concluded in the past year. Based on the information currently available to us, we take a favourable view of our legal position for the remaining proceedings.

The actual risk experience for the portfolio in question was influenced by the Covid-19 pandemic in 2020. Adjusted for Covid-19-related impacts, the underlying performance was better than expected. We are monitoring the further development of the underlying mortality, especially as the Covid-19 pandemic unfolds, on an ongoing basis.

Based on the information available to us today, we continue to assume a positive VIF for our US mortality business as a whole. Should additional information lead to the determination that this is no longer the case, this would result in a one-off charge to the IFRS result.

We are monitoring developments in the Australian disability portfolio on an ongoing basis.

The impacts of Covid-19 on the rest of our morbidity portfolio have been limited to date. We are continuously tracking the potential implications of the Covid-19 pandemic for our worldwide life and health reinsurance business. Special protection covers have been taken out to limit the mortality risk.

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

Market risks

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

Required risk capital[1] for market risks M 65

in EUR million	31.12.2020	31.12.2019
Default and spread risk	2,902.0	2,799.6
Interest rate risk	767.7	963.3
Foreign exchange risk	1,024.1	1,389.2
Equity risk [2]	1,618.9	1,159.4
Real estate risk	646.5	660.1
Diversification	(2,563.5)	(2,808.6)
Market risk	**4,395.7**	**4,163.0**

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

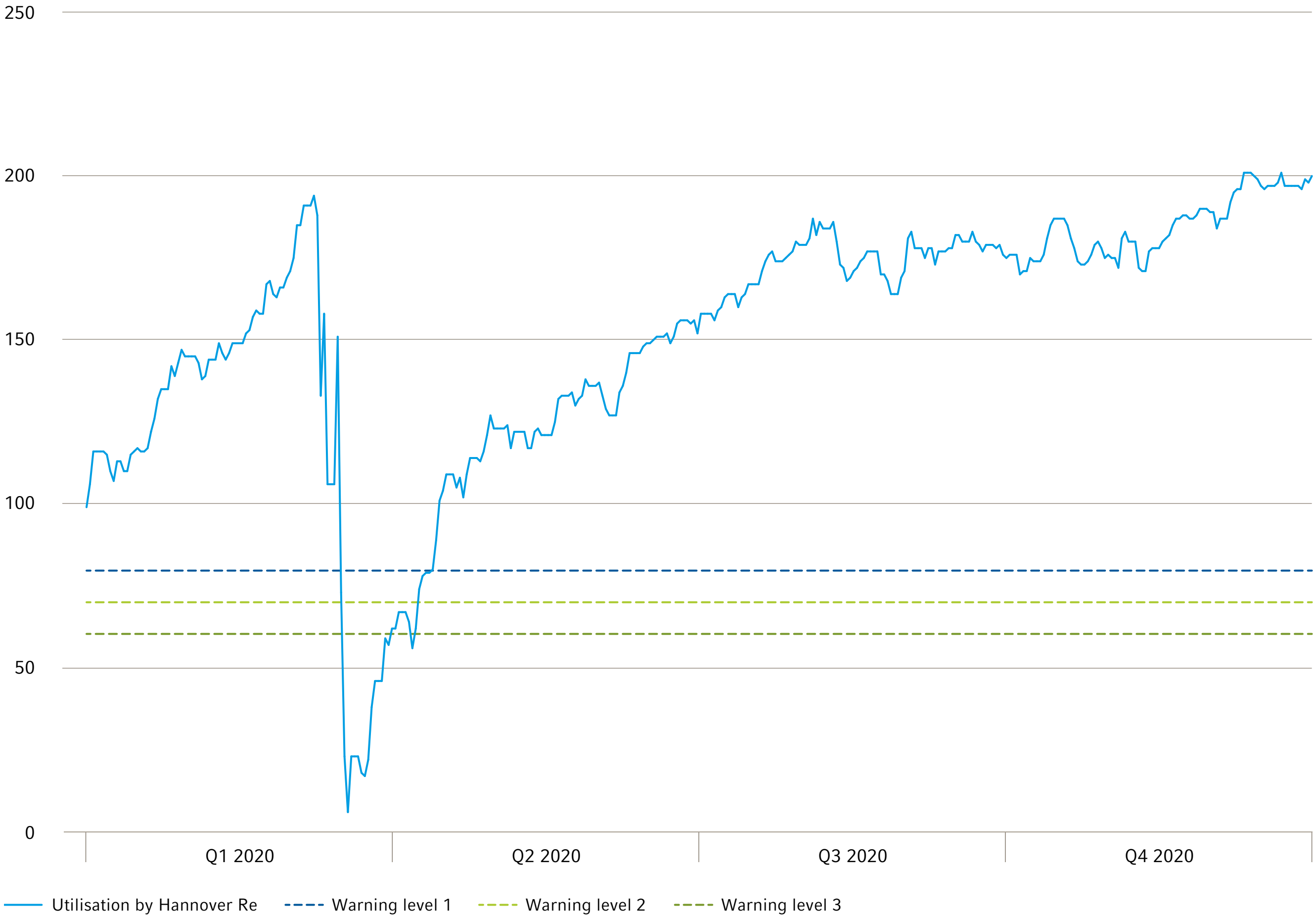
With a view to preserving the value of our assets under own management, we constantly monitor adherence to a trigger mechanism based on a clearly defined traffic light system that is applied across all portfolios. This system defines clear thresholds and escalation channels for the cumulative fluctuations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

Interest rate markets were highly volatile over the course of the year under review. The already very low level of the previous year was once again pushed significantly lower in all our main currency areas. While the US dollar area recorded particularly appreciable interest rate declines, pound sterling and euro interest rates also saw sharp decreases. Risk premiums on corporate bonds recorded very marked increases and the highest levels of volatility measured to date in virtually all rating categories in the first half of the year, but had very largely normalised again by year-end. Overall, a very substantial increase in the hidden reserves for fixed-income securities was booked over the year as a whole.

The predefined discussion and analysis mechanisms upon triggering of the escalation levels of the early-warning system were activated in the spring of 2020. The Investment Committee as well as various other bodies each reached the assessment that a more defensive investment strategy should be adopted for our portfolio in response to the corresponding market movements and impacts on capitalisation. For this reason, we implemented more defensive postures in our asset allocation as a temporary move during the reporting period on account of our early-warning system.

Utilisation of the trigger system M 66

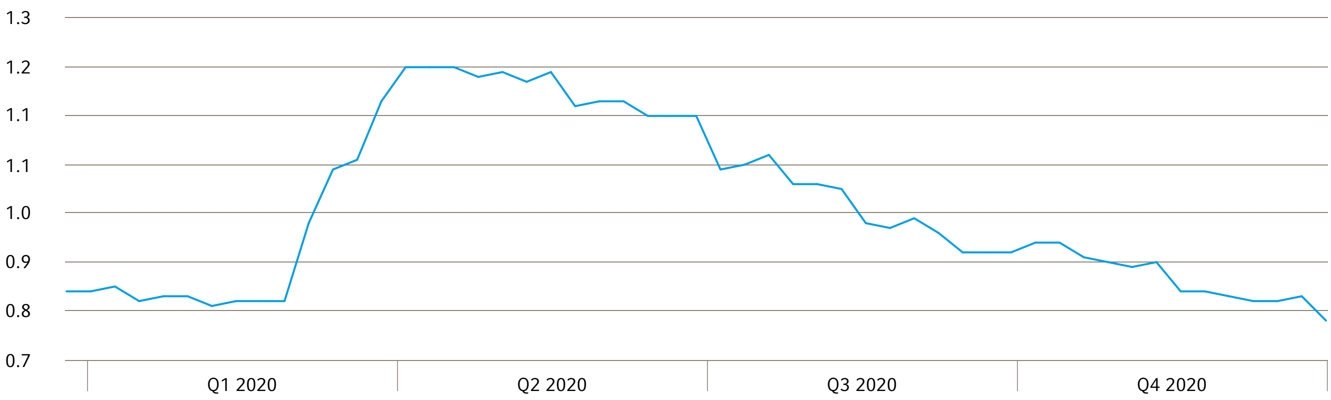
in %



The short-term loss probability measured as the Value at Risk (VaR) is another vital tool used for operational monitoring and management of the market price risks associated with our securities positions. It is calculated on the basis of historical data, e. g. the volatility of the securities positions under own management and the correlation between these risks. As part of these calculations the decline in the fair value of our securities portfolio is simulated with a certain probability and within a certain period. The VaR of the Hannover Re Group determined in accordance with these principles specifies the decrease in the fair value of our securities portfolio under own management that with a probability of 95% will not be exceeded within ten trading days. A standard market model is used to calculate the VaR indicators for the Hannover Re Group. It is based on historical time series of relevant market parameters (equity prices, yield curves, spread curves and exchange rates). Against the backdrop of a very turbulent capital market and interest rate environment, volatilities – especially of fixed-income assets – again reached a high level at times in the year under review. Based on continued broad risk diversification and the orientation of our investment portfolio, our VaR was nevertheless clearly below the VaR upper limit defined in our investment guidelines. It amounted to 0.8% (previous year: 0.8%) as at the end of the reporting period.

Value at Risk[1] for the investment portfolio of the Hannover Re Group M 67

in %



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

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

Scenarios for changes in the fair value of material asset classes M 68

in EUR million	Scenario	Portfolio change on a fair value basis	Change in equity before tax
Equity securities and private equity	Share prices -10%	-167.9	-167.9
	Share prices -20%	-335.8	-335.8
	Share prices +10%	+167.9	+167.9
	Share prices +20%	+335.8	+335.8
Fixed-income securities	Yield increase +50 basis points	-1,247.2	-1,182.9
	Yield increase +100 basis points	-2,420.9	-2,295.3
	Yield decrease -50 basis points	+1,323.7	+1,256.4
	Yield decrease -100 basis points	+2,730.9	+2,592.9
Real estate	Real estate market values -10%	-251.1	-119.9
	Real estate market values +10%	+251.1	+56.2

Further significant risk management tools – along with the various stress tests used to estimate the loss potential under extreme market conditions – include sensitivity and duration analyses and our asset/liability management (ALM). The internal capital model provides us with quantitative support for the investment strategy as well as a broad diversity of VaR calculations. In addition, tactical duration ranges are in place, within which the portfolio can be positioned opportunistically according to market expectations. The parameters for these ranges are directly linked to our calculated risk-bearing capacity. It should be borne in mind that the issued subordinated bonds and resulting induced interest rate exposure are actively factored into our ALM. Further information on the risk concentrations of our investments can be obtained from the tables on the rating structure of fixed-income securities as well as on the currencies in which investments are held. Please see our comments in section 6.1 of the notes entitled "Investments under own management" on page 190 et seq.

Equity risks derive from the possibility of unfavourable changes in the value of equities, equity derivatives or equity index derivatives in our portfolio. Their relevance to our investments was, however, very slight; aside from our minimal portfolio of equities and equity funds in the context of strategic participations we acted on the price corrections at the beginning of the year under review to make share purchases, but our equity allocation still stands at just 0.5%. Our exposure to the private equity market remains unchanged. Changes in fair value here tend to be prompted less by general market conditions and more by entity-specific assessments. The risks are associated principally with the business model and profitability and less so with the interest rate component in the consideration of cash flow forecasts. Please see our comments in section 6.1 of the notes entitled "Investments under own management" on page 190 et seq.

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

Foreign exchange risks are especially relevant if there is a currency imbalance between the technical liabilities and the assets. Through extensive matching of currency distributions on the assets and liabilities side, we reduce this risk on the basis of the individual balance sheets within the Group. The short-term Value at Risk therefore does not include quantification of the foreign exchange risks. We regularly compare the liabilities per currency with the covering assets and optimise the currency coverage by regrouping assets. In so doing, we make allowance for collateral conditions such as different accounting requirements. Remaining currency surpluses are systematically quantified and monitored within the scope of economic modelling. A detailed presentation of the currency spread of our investments is provided in section 6.1 of the notes entitled "Investments under own management" on page 190 et seq.

Real estate risks result from the possibility of unfavourable changes in the value of real estate held either directly or through fund units. They may be caused by a deterioration in particular qualities of a property or by a general downslide in market values. Real estate risks continued to grow in importance for our portfolio owing to our ongoing involvement in this sector. We spread these risks through broadly diversified investments in high-quality markets worldwide; each investment is preceded by detailed analyses of the property, manager and market concerned.

The pandemic also has implications for real estate markets. Against a backdrop of travel restrictions and business closures, the hardest hit areas have been the restaurant, hotel and retail industries, and to some extent also the office sector. In our real estate portfolio we are seeing concrete impacts on directly held properties, above all in the retail sector and especially in relation to lessees in the restaurant industry. Rent reductions and defaults here in the financial year just ended led to shortfalls in regular income of EUR 3.9 million. Overall, though, an increase in the vacancy rate was not observed in this connection. Hannover Re is not directly invested in the hotel sector. Exposures are solely through diversified funds and account for less than 2% of the total real estate portfolio.

The realities and dynamics of real estate markets are indirectly subject to another influencing factor as a consequence of the pandemic. If the economic softness (temporarily) reduces demand for space, this could result in flat or even declining rental price trends or indeed a rising vacancy rate. In combination with modified expectations as regards contract conditions and the likelihood of lease extensions or new leases, these changes in parameters will be reflected in adjusted fair values of the properties. Pandemic-related developments have therefore been factored into the real estate valuations. This applies to both the directly held portfolio and – with the usual slight time delay – the portfolio of real estate funds.

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

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

Derivatives connected with the technical account play a minor role in Hannover Re's portfolio.

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

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

Rating structure of our fixed-income securities[1] **M 69**

Rating classes	Government bonds		Securities issued by semi-governmental entities[2]		Corporate bonds		Covered bonds/asset-backed securities	
	in %	in EUR million	in %	in EUR million	in %	in EUR million	in %	in EUR million
AAA	73.2	12,472.2	59.7	4,417.8	0.6	89.0	59.6	1,776.0
AA	10.2	1,742.1	23.7	1,757.3	12.0	1,709.2	18.4	546.5
A	10.6	1,809.2	6.7	496.0	32.1	4,573.4	13.1	389.2
BBB	3.9	667.9	1.3	99.1	44.2	6,290.7	7.5	222.8
< BBB	2.1	353.9	8.6	638.0	11.1	1,582.1	1.4	42.7
Total	**100.0**	**17,045.3**	**100.0**	**7,408.1**	**100.0**	**14,244.5**	**100.00**	**2,977.3**

1 Securities held through investment funds are recognised pro rata with their corresponding individual ratings.
2 Including government-guaranteed corporate bonds

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

On a fair value basis EUR 4,814.1 million of the corporate bonds held by our company were issued by entities in the financial sector. Of this amount, EUR 3,919.0 million was attributable to banks. The vast majority of these bank bonds (70.1%) are rated "A" or better. Our investment portfolio under own management does not contain any written or issued credit default swaps.

Counterparty default risks

The counterparty default risk consists primarily of the risk of complete or partial failure of the counterparty and the associated default on payment. The following table shows the required risk capital for counterparty defaults with a confidence level of 99.5%.

Required risk capital[1] **for the counterparty default risk** **M 70**

in EUR million	31.12.2020	31.12.2019
Counterparty default risk	449.0	423.3

1 Required risk capital with a confidence level of 99.5%

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

Gross written premium retained **M 71**

in %	2020	2019	2018	2017	2016
Hannover Re Group	90.1	90.0	90.7	90.5	89.3
Property and casualty reinsurance	90.3	90.3	90.7	89.7	88.5
Life and health reinsurance	89.8	89.5	90.7	91.7	90.4

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

65.5% of our recoverables from reinsurance business are secured by deposits or letters of credit. For the majority of our retrocessionaires we also function as reinsurer, meaning that in most cases recoverables can potentially be set off against our own liabilities.

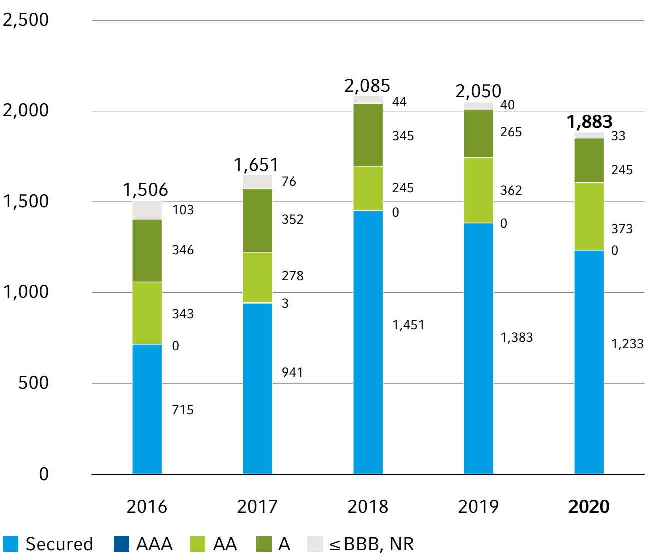
In terms of the Hannover Re Group's major companies, EUR 341.1 million (6.1%) of our accounts receivable from reinsurance business totalling EUR 5,605.8 million were older than 90 days as at the balance sheet date.

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

Retrocession gives rise to claims that we hold against our retrocessionaires. These reinsurance recoverables – i.e. the reinsurance recoverables on unpaid claims – amounted to EUR 1,883.3 million (EUR 2,050.1 million) as at the balance sheet date.

The following chart shows the development of our reinsurance recoverables – split by rating quality – due from our retrocessionaires.

Reinsurance recoverables as at the balance sheet date **M 72**
in EUR million



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

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

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

As the parent company, Hannover Re provides a guarantee to clients for the small number of low-risk structured transactions. In this context, it guarantees the payment of liabilities by Hannover Re under these specific transactions in the event that the subsidiary is unable to meet its assumed obligations. Since each of these guarantees is associated with a specific transaction and formulated in such a way that each potential payment can only arise once per corporate entity of Hannover Re (i.e. either at the subsidiary itself as part of the transaction or at Hannover Re as a consequence of the guarantee), the existence of a guarantee on the part of Hannover Re has no effect on the underwriting risk from Hannover Re's property & casualty or life & health reinsurance business.

Operational risks

Operational risks refer to the risk of losses occurring because of the inadequacy or failure of internal processes or as a result of events triggered by employee-related, system-induced or external factors. Within the overall framework of operational risks, we pay particularly close attention to business process and data quality risks, compliance risks, outsourcing risks, fraud risks, personnel risks, information security risks and business interruption risks.

Management of operational risks

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

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

Required risk capital[1] for operational risks **M 73**

in EUR million	31.12.2020	31.12.2019
Operational risk	548.4	532.6

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

Unlike market, counterparty default and underwriting risks, operational risks are categorised as non-financial risks. We discuss below the subcategories of operational risks. Risks connected with ESG issues can occur in particular in the subcategories of compliance, outsourcing, personnel, information security and business interruption.

Business process and data quality risks

Business process risks are associated with the risk of deficient or flawed internal processes, which can arise inter alia as a consequence of an inadequate process organisation. We have defined criteria for managing the risk that result in a high process quality. Data quality is similarly a very critical success factor, especially in risk management, because for example the validity of the internal model is largely based on the data provided.

Compliance risks

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

In conformity with a risk-based approach, sanctions screening software is used on the relevant parts of the Hannover Re Group's portfolio as well as on loss advices to filter out individuals who are subject to sanctions. Suitable steps are taken if such individuals are identified. Business partners are also screened in this way. Responsibilities within the compliance organisation are regulated and documented Group-wide and interfaces with risk management have been put in place. The set of tools is rounded off with regular compliance training programmes.

We report on our compliance management system as part of our combined non-financial information statement on page 70 et seq. For further information on compliance-related topics, including for example lawsuits, contingent liabilities and commitments, please see section 8.6 "Lawsuits" on page 247 and section 8.7 "Contingent liabilities and commitments" on page 247 et seq.

Outsourcing risks

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

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

Personnel risks

The proper functioning and competitiveness of the Hannover Re Group can be attributed in large measure to the expertise and dedication of our staff. In order to minimise personnel risks, we pay special attention to the skills, experience and motivation of our employees and foster these qualities through outstanding personnel development and leadership activities. These measures are supported by ongoing talent management and regular employee surveys.

Hannover Re has at its disposal key risk indicators for the early detection and monitoring of material risks. Along with a determination of the weighted level of maturity according to the methodology used for the Self-Assessment for Operational Risks (SAOR), this also encompasses continuous succession planning, ensuring the timely (re)staffing of vacant positions and monitoring turnover rates based on industry benchmarks.

Fraud risks

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

Information security risks

Information security risks arise, inter alia, out of the risk of inadequate integrity, confidentiality or availability of information as well as impacts from or on other assets such as systems, processes, buildings/premises or persons. By way of example, losses and damage resulting from the unauthorised passing on of confidential information, the malicious overloading of important IT systems or from computer viruses are material to the Hannover Re Group. Given the broad spectrum of such risks, a diverse range of steering and monitoring measures and organisational standards, including for example the requirement to conclude confidentiality agreements with service providers, have been put in place. In addition, our employees are made more conscious of such security risks through practically oriented tools provided online in the intranet, by way of training opportunities and through targeted information to raise awareness.

Cyber attacks and loss of sensitive data

Cyber attacks and the loss of sensitive information can be associated with considerable financial losses and also reputational risks. In our highly networked world it has therefore become increasingly important in recent years to protect information and defend against cyber attacks. This has become all the more true given extensive teleworking from home and the resulting elevated risks during the Covid-19 pandemic.

With a view to protecting against these risks, Hannover Re has implemented an Information Security Management System (ISMS) that is closely aligned with international standards – principally ISO 27001 – and harmonised with other management systems such as data protection or IT risk management. The core elements is the "Information Security Policy", which is valid for all locations worldwide. Together with specific guidelines and standards, it regulates all technical and organisational measures including awareness-raising in relation to the confidentiality, integrity and availability of information assets. It goes without saying that all forms of mobile working are also covered. Consideration is given to all types of digital and physical information assets. Appropriate allowance has been made in the IT processes.

The Executive Board bears overall responsibility for information security. The Information Risk & Security Committee (IRSC) evaluates and monitors the relevant risks and manages any conflicts of interest in relation to information and IT security. The Chief Information Security Officer (CISO), as the main process owner, is responsible for the planning, implementation and ongoing development of the ISMS as well as for coordinating the corresponding tasks within the Hannover Re Group. He is supported by local contacts and additionally bears responsibility Group-wide for the execution of appropriate controls. The CISO cooperates closely with Information Risk Management (IRM) and the central Compliance function. Both the CISO and the other two functions referred to above form part of the second line of defence. Furthermore, every single member of staff is responsible for adhering to the relevant guidelines and instructions. To this end, regular awareness-raising and training is provided for all employees. Group Auditing, in its role as the third line of defence, performs regular checks on Group-wide compliance.

When it comes to a transfer of knowledge in relation to our own (operational) risks in connection with cyber risks, we participate in various cooperative projects undertaken by our industry and engage in a regular dialogue with, among others, the Bundesverband der IT-Anwender e. V. in the context of the Cyber Security Competence Center.

Cyber risks in underwriting practice

Hannover Re offers reinsurance protection for cyber risks. The risks stemming from the cyber portfolio are monitored and managed using the internal model. The management approach also encompasses cyber risks from insurance contracts that do not primarily cover this risk (silent cyber risk). This enables us to adequately assess and manage risks while at the same time facilitating valuable insurance protection and leveraging corresponding business opportunities for our company. As a further step, in certain lines and contracts clarifications were made in the treaty wordings in relation to silent cyber on the occasion of the 2020/2021 renewals.

The issues of information security and cyber security as well as the associated risks in underwriting practice are addressed by our working group on emerging risks, which supports monitoring across the various departments.

Business interruption risks

The primary goal of our Business Continuity Management (BCM) is, firstly, to minimise the probability of occurrence of business interruption risks through preventive measures and, secondly, to mitigate the impacts through reactive measures as part of crisis management, e.g. by actioning prepared contingency plans. This includes, among other things, the possibility of falling back on alternative data centres and working on a mobile basis from any desired workstation. Guided by internationally accepted standards, we have defined the key framework conditions and set up location-specific crisis teams and a Crisis Management Board with Group-wide responsibility; in the event of an emergency, they are able to serve as temporary steering committees. In view of the worldwide repercussions of the current Covid-19 pandemic, the aforementioned Crisis Management Board is currently coordinating the Covid-19 measures implemented across the Group with the involvement of the Chief Executive Officer.

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

- non-availability/shortages of personnel
- loss of the workplace environment
- failure of local/central IT
- failure of external infrastructures/service providers
- security incidents (life and limb of employees at risk)

The system is complemented by regular exercises and tests. By way of example, mention may be made here of crisis team simulations, teleworking reviews, system recovery tests and alert exercises. A leaflet is also available covering how to behave in the event of a business interruption; this condenses in compact form the key information that all employees need to know, such as the information channels to use in a crisis situation.

Other risks

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

Management of other risks

Other risks are handled qualitatively. No specific risk capital is calculated, but rather it is allocated on a flat basis. Risk management monitors and reduces the other risks through mitigation measures such as company-wide working groups and guidelines. Regular quarterly risk reporting to the Risk Committee and the Executive Board takes place with regard to the other risks. Risks are also evaluated as part of the reporting.

Within the risk management processes we also take into account the impacts of aspects of environmental management, employee matters, social concerns, respect for human rights and the combating of corruption and bribery on operational and reputational risks, as required by the CSR Directive Implementation Act in accordance with § 289b and c German Commercial Code (HGB) and § 315c German Commercial Code (HGB).

Reputational risks include non-financial risks. Risks connected with ESG topics can arise, in particular, in the subcategories of emerging, strategic and reputational risks.

Emerging risks

Emerging risks are risks that are in the process of forming or may shortly become relevant due to current developments. Emerging risks evolve gradually from weak signals to unmistakable tendencies. They can directly impact our treaty portfolio in both property & casualty and life & health reinsurance and influence our investments. A further hallmark is that their risk content cannot as yet be reliably assessed, especially with respect to our treaty portfolio. Global warming, for example, not only has implications for natural perils but also affects human health (e.g. pandemic risk), the world economy, the agricultural sector (food availability and food security) and much more besides. Further examples of emerging risks include cyber risks, pandemics, scarcity of resources and supply chain risks.

Early detection and subsequent evaluation of risks are crucially important when it comes to emerging risks. For this reason, we deploy a separate interdepartmental and multi-line working group and we ensure its linkage to risk management. Operational implementation is handled by an expert working group assembled specially for this task. The analyses performed by this working group are used Group-wide in order to pinpoint any necessary measures (e.g. the implementation of contractual exclusions or the development of new reinsurance products). Altogether, we are constantly monitoring 40 emerging risks. The working group also draws up internal position papers and risk briefings, which issue recommendations for risk handling in reinsurance practice. Issues relevant to our business going forward that have been analysed so far include, among many others, urbanisation and a diverse range of health risks as a side-effect of climate change, abuse of medications, environmental pollution, nanotechnology, the supply of raw materials and obesity.

Strategic risks

Strategic risks derive from a possible imbalance between the corporate strategy of the Hannover Re Group and the constantly changing general business environment. Such an imbalance might be caused, for example, by incorrect strategic policy decisions, a failure to consistently implement the defined strategies and business plans or an incorrect allocation of resources. We therefore regularly review our corporate strategy in a multi-step procedure and adjust our processes and the resulting guidelines as and when required. We have defined performance criteria and indicators for operational implementation of the strategic principles and objectives; these are authoritative when it comes to determining fulfilment of the various targets. With the "Strategy Cockpit" the Executive Board and responsible managers have at their disposal a strategy tool that assists them with the planning, elaboration and management of strategic objectives and measures and safeguards their overall perspective on the company and its strategic risks. The process for the management of strategic risks continues to be assessed annually as part of the monitoring of business process risks.

Reputational risks

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

Reputational and ESG risks are often closely correlated. Risk Management and Corporate Communications work together closely to identify ESG and reputational risks. This applies both to the assessment of ESG risks and to the monitoring of media reports, the analysis of NGO activities and the dialogue cultivated with relevant stakeholder groups.

Liquidity risks

The **liquidity risk** refers to the risk of being unable to meet our financial obligations when they become due. The liquidity risk consists of the refinancing risk (necessary cash could not be obtained or could only be obtained at increased costs) and the market liquidity risk (financial market transactions could only be completed at a poorer price than expected due to a lack of market liquidity). Core elements of the liquidity management of our investments are, in the first place, management of the maturity structure of our investments on the basis of the planned payment profiles arising out of our technical liabilities and, secondly, regular liquidity planning as well as the asset structure of the investments. Above and beyond the foreseeable payments, unexpected and exceptionally large payments may pose a threat to liquidity. In reinsurance business, however, significant events (major losses) are normally paid out after a lead time that can be reliably planned. As part of our liquidity management we have nevertheless defined asset holdings that have proven to be highly liquid – even in times of financial stress such as the 2008 financial crisis. Our holdings of unrestricted German, UK and US government bonds as well as cash during the year under review were larger than possible disbursements for assumed extreme events, which means that our liquidity is assured even in the unlikely case of financial crises coinciding with an extreme event that needs to be paid out quickly. The liquid asset reserve stood at EUR 5.5 billion as at the balance sheet date. In addition, we manage the liquidity of the portfolio by checking on each trading day the liquidity of the instruments contained therein. These measures serve to effectively reduce the liquidity risk.

Opportunity report

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

Key elements in Hannover Re's opportunity management include its various market-specific innovations in the Life & Health and Property & Casualty reinsurance business groups (see the Forecast on page 141 et seq.).

Trends affecting these business groups are systematically identified and analysed with the support of external sources and partners and the needs of our clients are anticipated along the entire insurance-related value-added chain. New business opportunities that promise access to innovative technologies and enhance our appeal in the eyes of customers are specifically pinpointed. With this in mind, Hannover Re cultivates business-related partnerships with accelerators, incubators, company builders, start-ups and research institutes in order to boost our competitiveness in the insurtech sector and the area of digital solutions. Various competence centres have been set up in the Hannover Re Group to evaluate the strategic and technical significance of innovative new digital technologies and the goals pursued by these innovation units have been put on a strategic footing. The interplay between these units is based on a dedicated approach that enhances the activities with specific expertise and efficiency. In concrete terms, new accelerator units have been established in the areas network, business (in each case in the P&C and L&H business group), technology and parametrics. The tasks performed by these organisational units include, among others, global scaling of regional products and solutions as well as providing systematic support for insurtechs as they build their digital business models with the clearly defined goal of generating new premium potential for the Group.

Closing the protection gap

The economic costs of natural disasters have risen sharply as catastrophes have grown in number and severity. The heightened risk is primarily due to economic development and population growth, a greater concentration of assets in exposed regions and increasingly also to climate change. The gap between uninsured and insured losses is particularly large in emerging and developing countries. Against this backdrop, Hannover Re is stepping up its involvement through cooperation with both the public sector and private enterprise so as to further close the insurance gap for protection against natural disasters – especially those that are climate-related – in developing and emerging countries. By way of example, this is achieved in selected exposed countries in the context of the trilateral agreement between the Insurance Development Forum, the Federal Ministry for Economic Cooperation and Development and the United Nations Development Programme, by providing capacity for the Natural Disaster Fund as well as for regional risk pools against natural perils and through a number of other programmes with a bearing on reinsurance.

Corporate culture and entrepreneurship are increasingly coming into focus as further elements of the innovation landscape. Hannover Re has developed a structured innovation process for the in-house generation of ideas in order to actively support and foster the internal spirit of entrepreneurship. This process is embedded in the "Hannover Re Intrapreneurship Programme" (HIPE), which offered – and going forward will continue to offer – all employees worldwide a platform for contributing innovative ideas geared to increasing efficiency, inter alia in the fields of automation, risk assessment and accumulation control as well as product development. In the course of a 14-week incubator programme selected ideas were developed by employees in an external innovation ecosystem. Project participants were partially released from their line function for the duration of the incubator programme in order to elaborate on their ideas as quickly as possible in a highly focused environment. Upon completion of the conceptual development phase five teams presented their ideas to the full Executive Board. After in-depth exploration, the Board members decided to allocate a budget to three concepts for an implementation phase that facilitates the further refinement of the concepts into solidly grounded prototypes. Depending upon how their implementation and commercial success are evaluated, it is likely that the project will be repeated. This promotes the ongoing consolidation of an agile working environment and dynamic enterprise culture within the established processes.

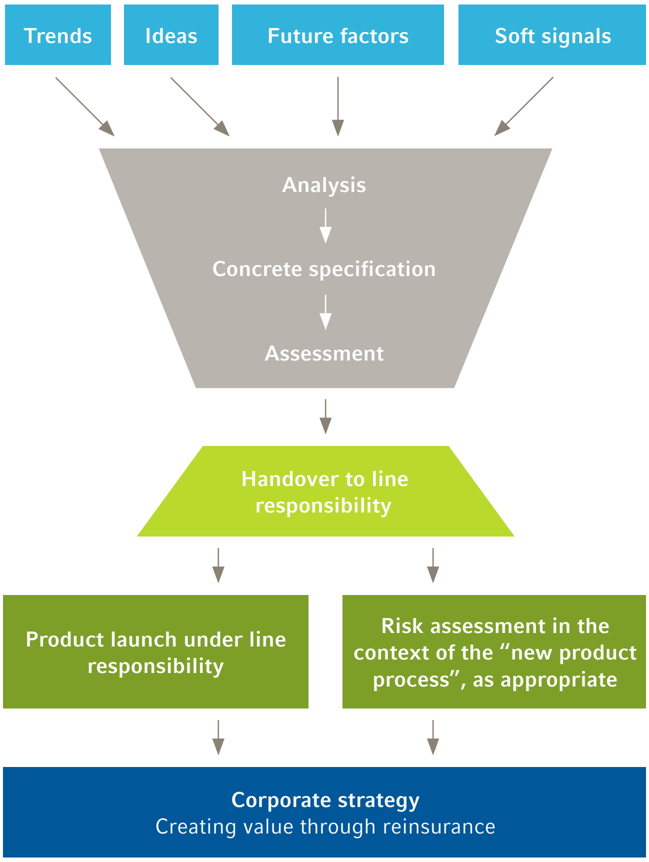
The dynamic networking of the members of staff active in the field of innovation at Hannover Re gives rise to close links with other projects, working groups and bodies, such as with the working group on "Emerging Risks und Scientific Affairs" in regard to emerging risks and opportunities (see page 107 et seq. "Other risks"). This working group carries out qualitative assessments of emerging risks. As a result, however, not only are the potential risks explored but also any available business opportunities. Analyses are compiled here exploring how Hannover Re can counter megatrends such as climate change, digitalisation or shifting demographics with novel (re)insurance products or capital investments. In the year under review, for example, issues such as "Class action lawsuits", "Psychoactive substances", "Wearables", "Genetic tests" and "Social inflation" were analysed by the working group.

Cyber insurance

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

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

Opportunity management process M 74



Overall assessment by the Executive Board

Based on our currently available insights arrived from a holistic analysis of the opportunities and risks, the Executive Board of Hannover Re cannot discern any risks that could jeopardise the continued existence of the Hannover Re Group in the short or medium term or have a material and lasting effect on its assets, financial position or net income. We are convinced that:

- our established system of risk management affords us a transparent overview of the current risk situation at all times
- our overall risk profile is appropriate, and
- our opportunity management plays an important part in Hannover Re's profitable growth.

As an internationally operating reinsurance group, we move in a highly complex environment. Nevertheless, thanks to our business activities in all lines of reinsurance we are able to achieve optimal risk spreading through geographical and risk-specific diversification while at the same time maintaining a balanced opportunity/risk profile. We consider the risks described in the above sections to be manageable, particularly because our steering and monitoring measures are effectively and closely interlinked. Despite these diverse mechanisms, individual and especially accumulation risks can decisively affect our assets, financial position and net income. In accordance with our understanding of risk, however, we consider not only risks but also at the same time opportunities. We therefore only enter into those risks that go hand-in-hand with opportunities. Our steering and monitoring tools as well as our organisational and operational structure ensure that we identify risks at an early stage and are able to act on our opportunities. Our central monitoring tool is the system of risk management that we have installed Group-wide, which brings together both qualitative and quantitative information. Most notably, the interplay between domestic and foreign risk management functions affords us a holistic and Group-wide overview.

Our own evaluation of the manageability of existing risks is confirmed by various financial indicators and external assessments. Specific monitoring indicators, corresponding notification thresholds and potential escalation steps are defined on a mandatory basis in our central system of limits and thresholds for the material risks of the Hannover Re Group. As a result, the system provides us with a precise overview of potentially undesirable developments in the defined risk tolerances and enables us to react in a timely manner. One testament to our financial stability, for example, is the growth of our shareholders' equity: the total policyholders' surplus (hybrid capital, non-controlling interests and shareholders' equity) stands at 192% of the corresponding figure from 2011. In this context, our necessary equity resources are determined by the requirements of our economic capital model, solvency regulations, the assumptions of rating agencies with respect to our target rating and the expectations of our clients and shareholders. This increase gives us a sufficient capital cushion to be able both to absorb risks and act on business opportunities that may arise. Similarly, our very good financial strength ratings (see page 63) also testify to our financial stability. The quality of our Enterprise Risk Management (ERM), for example, is assessed by Standard & Poor's as a key factor in the rating process. Special consideration is given to our established risk management culture, which promotes the development of appropriate risk monitoring systems and supports strategic risk management. The rating encompasses in particular the areas of risk culture, risk controls, emerging risk management, risk models and strategic risk management. This external appraisal confirms the quality of our holistic approach to risk management.

We would also refer to the explanatory remarks on the financial strength ratings of our subsidiaries in the "Financial position" section of the management report on page 63. In addition, the risk trigger mechanism and internal monitoring system are reviewed annually by the independent auditor in relation to the financial reporting. The Group-wide risk management system is also a regular part of the audits conducted by the internal audit function.

Enterprise management

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

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

Hannover Re's objective continues to be to consolidate its position as one of the leading, most profitable reinsurance groups operating worldwide. In aspiring towards this goal, it is particularly important to observe and fulfil the principles of good and sustainable corporate governance. In so doing, we not only comply with the German Corporate Governance Code (DCGK, hereinafter also referred to as the Code), but have also developed our own model for responsible enterprise management which we consistently pursue and adjust to the latest requirements in accordance with our best practice standards.

The Executive Board and Supervisory Board of Hannover Rück SE expressly support the suggestions and recommendations of the German Corporate Governance Code that are practicable for the reinsurance industry and recognise their central importance in guiding our activities. The principles of responsible and good enterprise management therefore constitute the core of our internal Corporate Governance principles (www.hannover-re.com/50889/corporate-governance-principles.pdf). We cultivate integrity at all times in our dealings with business partners, staff, shareholders and other stakeholder groups and we support the principles of value-based and transparent enterprise management and supervision defined in the German Corporate Governance Code. The Supervisory Board, Executive Board and employees of Hannover Re identify with these principles, which thus form part of our corporate self-image. The Executive Board ensures that the principles are observed Group-wide.

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

Corporate Governance

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

The positive attitude of Hannover Rück SE towards the Code is not contradicted by the fact that in the year under review we did not comply with certain Code recommendations, since a well justified deviation from the recommendations of the Code may – as in the present cases – be very much in the interests of good corporate governance tailored to a particular company, i.e. by reflecting enterprise- and industry-specific features. With its publication in the Federal Gazette on 20 March 2020, the new Code in the version of 16 December 2019 constitutes the basis for Declarations of Conformity that are to be provided. In the present declaration, however, the divergences for the period between the last Declaration of Conformity of Hannover Rück SE (5 November 2019) and the publication of the new Code (20 March 2020) are also disclosed retrospectively. This year's declaration is therefore in two parts.

Based on what is still a high degree of fulfilment of the recommendations and suggestions of the Code, Hannover Rück SE continues to place well overall among the companies listed on the DAX and MDAX – as is borne out again this year by the findings of the analysis conducted by the German Association for Financial Analysis and Asset Management (DVFA).

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

Under § 161 Stock Corporation Act (AktG) it is incumbent on the Management Board and Supervisory Board of German listed companies to provide an annual declaration of conformity with the recommendations of the "German Corporate Governance Code Government Commission" published by the Federal Ministry of Justice and Consumer Protection or to explain which recommendations of the Code were / are not applied and why this is the case. In view of the fact that the Code has been updated since the most recently provided Declaration of Conformity of 5 November 2019, the following Declaration is divided into two sections.

I. German Corporate Governance Code in the version dated 7 February 2017

The Executive Board and Supervisory Board declare pursuant to § 161 Stock Corporation Act (AktG) that in the period since the most recently provided Declaration of Conformity dated 5 November 2019 until the announcement of the recommendations of the "German Corporate Governance Code Government Commission" in the version dated 16 December 2019 on 20 March 2020 Hannover Rück SE was in compliance with the recommendations of the Code in the version dated 7 February 2017 with the exception of the following stated divergences.

a. Code Section 4.2.3 Para. 2 Caps on the amount of variable remuneration elements in Management Board contracts

The variable remuneration of the members of the Executive Board was granted under the previous remuneration system in part in the form of Hannover Re share awards. The maximum number of share awards granted at the time of allocation depended upon the total amount of variable remuneration, which was subject to an upper limit (cap), i.e. the allocation of share awards was limited by the cap. The share awards had a vesting period of four years. During this period the members of the Executive Board therefore participated in positive and negative developments at the company, as reflected in the share price. The equivalent value of the share awards is paid out to the members of the Executive Board after the end of the vesting period. The amount paid out is determined according to the share price of the Hannover Re share applicable at the payment date plus an amount equivalent to the total dividends per share distributed during the vesting period. The share awards consequently follow the economic fortunes of the Hannover Re share.

The amount of variable remuneration deriving from the granting of share awards was thus capped at the time when the share awards were allocated, but it is not capped again at the time of payment. Bearing in mind the harmonisation of the interests of shareholders and of the members of the Executive Board of Hannover Rück SE that is sought through the share awards, the company did not consider further limitation of the amount of variable remuneration resulting from the granting of share awards at the time of payment to be expedient. From the company's perspective, the use of Hannover Re share awards as a method of payment constitutes – in economic terms – a compulsory investment in Hannover Re shares with a four-year holding period.

For formal purposes and as a highly precautionary measure, Hannover Rück SE is therefore declaring a divergence from Code Section 4.2.3 Para. 2 in the aforementioned period.

b. Code Section 4.2.3 Para. 4 Caps on severance payments in Management Board contracts

Premature termination of a service contract without serious cause may only take the form of cancellation by mutual consent. Even if the Supervisory Board insists upon setting a severance cap when concluding or renewing an Executive Board contract, this does not preclude the possibility of negotiations also extending to the severance cap in the event of a member leaving the Executive Board. In addition, the scope for negotiation over a member leaving the Executive Board would be restricted if a severance cap were agreed, which could be particularly disadvantageous in cases where there is ambiguity surrounding the existence of serious cause for termination. In the opinion of Hannover Rück SE, it is therefore in the interest of the company to diverge from the recommendation contained in Section 4.2.3 Para. 4 in the aforementioned period.

c. Code Section 5.3.2 Para. 3 Sentence 2 Independence of the Chair of the Audit Committee

The current Chair of the Finance and Audit Committee of Hannover Rück SE at the same time also served as the Chair of the Board of Management of the controlling shareholder until the end of the Annual General Meeting of Talanx AG on 8 May 2018 and hence cannot, in the company's legal assessment, be considered independent.

In the period from 1994 to 2002 he served as the company's Chief Financial Officer. During this time he acquired superb knowledge of the company and he is equipped with extensive professional expertise in the topics that fall within the scope of responsibility of the Finance and Audit Committee. With this in mind, he is optimally suited to chairing the Audit Committee.

This assessment is also not cast into question by the fact that the Committee Chair cannot be considered independent within the meaning of the German Corporate Governance Code for the period from 1 January 2018 to 8 May 2018. Furthermore, since his service as Chief Financial Officer of Hannover Rück SE dates back to a period that is already more than fifteen years ago, it is also the case that the reviews and checks performed by the Finance and Audit Committee no longer relate to any timeframe within which he himself was still a member of the Executive Board or decisions initiated by him as a member of the Executive Board were still being realised.

In the opinion of Hannover Rück SE, it is therefore in the interest of the company to diverge from the recommendation contained in Section 5.3.2 Para. 3 in the aforementioned period.

II. German Corporate Governance Code in the version dated 16 December 2019

The Executive Board and Supervisory Board further declare pursuant to § 161 Stock Corporation Act (AktG) that Hannover Rück SE has been and will be in compliance with the recommendations of the German Corporate Governance Code in the version dated 16 December 2019 since the announcement of the recommendations of the "German Corporate Governance Code Government Commission" in the version dated 16 December 2019 on 20 March 2020 with the exception of the following stated divergences.

a. Code Recommendation C.10 in conjunction with Recommendation C.7 Independence of the Chair of the Audit Committee from the company and the Management Board

Pursuant to Recommendation C.10 of the Code 2019, the Chair of the Audit Committee shall be independent of the company and the Management Board. Pursuant to Recommendation C.7 of the Code 2019, when assessing the independence of the Supervisory Board's members from the company and the Management Board, the shareholder representatives shall particularly take into consideration whether the respective Supervisory Board member has belonged to the Supervisory Board for more than 12 years. Mr. Haas, the Chair of the Finance and Audit Committee, was first elected to the Supervisory Board of Hannover Rück SE on 24 May 2002 and has therefore already belonged to it for more than 12 years.

In the period from 1994 to 2002 Mr. Haas served as the company's Chief Financial Officer. During this time, he acquired superb knowledge of the company and he is equipped with extensive professional expertise in the topics that fall within the scope of responsibility of the Finance and Audit Committee. His additional long-standing experience on the company's Supervisory Board – in part also as Chair – similarly marks him out for fulfilling with the utmost diligence both the preparatory tasks of the Committee and the tasks that were assigned to the Committee by law or by the full Supervisory Board at its own responsibility. In electing him as Chair of the Committee, the Supervisory Board took into account Mr. Haas' wealth of experience and considered this to be valuable with an eye to the new election of the body as a whole as well as the appointment of a new Chief Executive Officer in 2019 against the backdrop of maintaining continuity. Mr. Haas is optimally suited to chairing the Audit Committee, and in the opinion of Hannover Rück SE it is therefore in the interest of the company to diverge from Recommendation C.10 in conjunction with C.7.

b. Code Recommendations G.1, G.10, G.11 Remuneration of the Management Board

After the announcement of the new Code on 20 March 2020, the Supervisory Board approved a new system for the remuneration of the Executive Board with effect from 1 January 2021 that is in conformity with the recommendations of the new Code in the version dated 16 December 2019. This remuneration system was implemented jointly with the members of the Executive Board in the Board contracts with effect from 1 January 2021. For the period until 31 December 2020 it is the case that, in accordance with the Code in the version dated 16 December 2019, the recommendations contained therein regarding Management Board remuneration in Section G. do not have to be taken into consideration in current Board contracts.

In order to ensure a consistent system of remuneration for the Executive Board as a collegial body, the remuneration arrangements for Clemens Jungsthöfel – who was newly appointed as a member of the Executive Board with effect from 1 September 2020 – were structured according to the system in place for the other members of the Executive Board. For the period until 31 December 2020 the remuneration arrangements for Mr. Jungsthöfel therefore correspond to the existing Executive Board remuneration system of the company and hence are not oriented to the Code in the version dated 16 December 2019. For the period until 31 December 2020 it is pointed out, as a highly precautionary measure, that this is associated with a divergence from Recommendations G.1 (maximum limit in terms of amount of the Hannover Re share awards at the time of payment), G.10 (predominantly share-based variable remuneration) as well as G.11 (retention/reclamation of variable remuneration) of the Code in the version dated 16 December 2019 in relation to the Board contract for the member of the Executive Board newly appointed with effect from 1 September 2020. With effect from 1 January 2021 the remuneration system for all members of the Executive Board is in conformity with the recommendations of the Code in the version dated 16 December 2019.

Aside from the divergences specified under Number II. of this Declaration of Conformity, the company will also continue in future to comply with all recommendations of the Code in the version dated 16 December 2019.

Hannover, 3 November 2020

The Executive Board, The Supervisory Board

Further enterprise management principles of Hannover Re

In addition to the Corporate Governance principles, Hannover Rück SE has adopted its own Code of Conduct (www.hannover-re.com/50943/code-of-conduct.pdf) that is applied Group-wide as a set of minimum standards. Complementing our corporate strategy and the Corporate Governance principles, it establishes rules governing integrity in the behaviour of all employees of Hannover Re and is intended to help members of staff cope with the ethical and legal challenges that they face as part of day-to-day work. The rules defined in the Code of Conduct reflect the high standards that guide our actions worldwide. It is our belief that integrity in dealings with our stakeholders constitutes the foundation of a successful enterprise. In both our strategic planning and our day-to-day business activities, we therefore aspire to consistently apply the highest ethical and legal standards; for our actions and the way in which every single one of us presents and conducts himself or herself are crucial in shaping the image of Hannover Re.

Sustainability of enterprise management

Social responsibility is a cornerstone of the solid foundation underpinning our Group strategy 2021–2023. We aspire to be a good employer for our staff, an attractive investment for our investors and a reliable partner for our clients and, overall, to make a valuable contribution to society. Furthermore, through sustainable actions we seek to minimise risks connected with ESG (environmental, social, governance) issues. In our sustainability strategy 2021–2023 we have defined specific goals and target indicators for the four action fields of transparency, employees, core business and commitment.

Our employees are a crucial factor in our company's success. We therefore adopt a holistic approach to talent management and pay special attention to the skills, experience and motivation of our employees. We cultivate a strong culture of accountability in which individuals in all operational units on all levels take responsibility for fulfilment of their goals. The high levels of retention and dedication in our workforce demonstrate that we have evolved into an employer of choice. Within the scope of our operations as a reinsurer, we support sustainable development in several areas. By way of example, protecting people and their property and providing tools for individual risk minimisation and mitigation is a core mission of the insurance industry. Furthermore, we enable the insurance of capital investments, such as those made in infrastructure, without which progress would not be possible. In this context, we help our primary insurance partners to offer their customers tailored solutions wherever possible.

When it comes to climate change, we similarly want to play a part. Having operated our Hannover location with a net zero carbon footprint since as long ago as 2016, we have set ourselves the goal from 2021 onwards of increasingly tracking the emissions at our other locations, avoiding them as far as possible and offsetting them when this cannot be done. In our investments we are making every effort to reduce the CO_2 load of our asset portfolio by 10% by the year 2023, while at the same time expanding our best-in-class approach and thereby structuring our investment portfolio more sustainably. In our insurance business we are pursuing a range of measures so as to give greater consideration to ESG issues than was previously the case. This encompasses the already initiated withdrawal from insurance of thermal coal and the expansion of our facultative premium volume by up to 60% by 2023.

We report on our sustainability activities in the context of our Sustainability Report compiled each year in accordance with the Global Reporting Initiative (GRI) Standards. Pursuant to the CSR Directive Implementation Act of 11 April 2017, Hannover Rück SE also publishes annually a combined non-financial information statement, which can be found on page 70 et seq. of this year's Group Annual Report.

Detailed information on the topic of sustainability is provided on our website (www.hannover-re.com/60729/sustainability).

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

Five members of the Supervisory Board of Hannover Rück SE were women in the year under review. In addition, it remains the case that one woman sits on the Supervisory Board's Finance and Audit Committee and one is a member of its Nomination Committee. The proportion of women serving on the Supervisory Board was therefore 56% in 2020. The proportion is thus in excess of the 30% target currently defined pursuant to §§ 76 Para. 4, 111 Para. 5 Stock Corporation Act (AktG) for the period from 1 July 2017 to 30 June 2022. On the level of the Executive Board, the goal continues to be to appoint another women as a member of the company's Executive Board by the year 2024.

The target for the two levels of senior management below the Executive Board is 18%, again to be reached by 30 June 2022.

Working practice of the Executive Board and Supervisory Board

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

The Chairman of the Supervisory Board stays in regular contact with the Chairman of the Executive Board in order to discuss with him significant business occurrences. The composition of the Executive Board (including areas of responsibility) as well as of the Supervisory Board and its committees (including period of membership) is set out on pages 18 et seq. and 269 respectively of the present Annual Report.

The Rules of Procedure of the Executive Board are intended to ensure that a consistent business policy is elaborated and implemented for the company in accordance with its strategic objectives. Within the framework of a consistent business policy, the principle of "delegation of responsibility" enjoys special status. In the interests of shareholders, importance is expressly attached to an organisation that facilitates cost-effective, quick and unbureaucratic decision processes. Open and trusting cooperation geared to the interest of the whole is the foundation of success. In this context, the members of the Executive Board bear joint responsibility for the overall management of business. Irrespective of their overall responsibility, each member of the Executive Board leads their own area of competence at their individual responsibility within the bounds of the resolutions adopted by the Executive Board. Only persons under the age of 65 may be appointed to the Executive Board. The term of appointment shall be determined such that it expires no later than the end of the month in which the member of the Executive Board turns 65.

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

The Supervisory Board decides in individual cases whether external advice should also be sought as a decision-making aid. This is included in a regularly conducted self-assessment with a view to assuring the general efficiency of its working approach on a lasting basis.

Working practice of the committees of the Supervisory Board

In order to efficiently perform its tasks the Supervisory Board has formed a number of committees: the Finance and Audit Committee, the Standing Committee and the Nomination Committee. The Supervisory Board committees are each comprised of three members (further details of the names of the members and background information on the individual committee members can be found on page 269 of the report) and prepare matters within their scope of competence for discussion and adoption of a resolution by the full Supervisory Board. Moreover, the committees are also assigned their own authority to adopt resolutions. The number of meetings of the committees in the period under review as well as the attendance of the committee members are discussed in greater detail in the Report of the Supervisory Board on page 263 et seq.

The Finance and Audit Committee was made up of Mr. Herbert Haas (Chairman), Mr. Torsten Leue and Dr. Ursula Lipowsky as an independent financial expert in the reporting period. The committee monitors the accounting process and the effectiveness of the internal control system, the risk management system and the internal auditing system. It also handles issues relating to compliance and the information system for the Supervisory Board and discusses the Quarterly Statements as well as the Half-yearly Financial Report prior to their publication. It prepares the Supervisory Board's examination of the annual financial statement, management report and proposal for the appropriation of profit as well as of the consolidated financial statement and Group management report. In this context, the Finance and Audit Committee receives detailed information on the auditor's view of the net assets, financial position and results of operations as well as explanations of the effects of any modified recognition and measurement principles on the net assets, financial position and results of operations together with available alternatives. In addition, the committee prepares the Supervisory Board's decision on the commissioning of the independent auditor for the financial statements. It considers matters associated with the necessary independence of the auditor, the awarding of the audit mandate to the independent auditor, the determination of the audit concentrations, the fee agreement and the quality of auditing. The agendas and minutes of the meetings of the Finance and Audit Committee are also made available to the members of the Supervisory Board who do not sit on the committee.

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

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

For further details of the activities of the Supervisory Board committees, please see the explanations provided in the Report of the Supervisory Board on page 263 et seq.

Compliance

Hannover Re considers a properly functioning compliance structure to be an essential tool for ensuring compliance with external rules and regulations as well as requirements imposed internally by the company. Our compliance structure continues to be precisely tailored to the specific features of our Property & Casualty and Life & Health reinsurance business groups. The consistent decentralised implementation of our six compliance modules reflects our self-image as a company and hence also our culture and it facilitates optimal handling by the responsible actors within the organisation.

The results of our compliance activities are documented in the compliance report. The compliance report for the 2020 calendar year will be submitted to the Finance and Audit Committee of the Supervisory Board and the full Supervisory Board in March 2021. The report sets out the structure of the compliance function as well as of compliance risk identification and assessment and it describes the diverse range of activities conducted by Hannover Re in this regard. Along with the implementation of training measures and monitoring procedures, these activities include tracking the realisation of proposed potential improvements by the responsible units and responding to tips. In addition to topics frequently identified as being of particular relevance to compliance, such as regulatory compliance, international sanctions and data protection, the report also covers matters such as directors' dealings, ad hoc and other disclosure requirements, the insider register and the handling of consulting agreements. The separate data privacy report for the 2020 calendar year is included in the compliance report as an annex.

After in-depth examination of all subject areas, work results and notifications within the period under review, the report concludes that only a few circumstances have been identified which point to breaches of relevant compliance standards. After detailed exploration of these incidents, the necessary safeguards were put in place to ensure that in the future Hannover Re is in conformity with the internal and external requirements governing its business activities.

Risk monitoring and steering

The risk management system applicable throughout the entire Hannover Re Group is based on the risk strategy, which in turn is derived from the corporate strategy. A core component is the systematic and comprehensive recording of all conceivable risks that from the current standpoint could potentially jeopardise the company's profitability and continued existence. Further details in this regard may be obtained from the risk report contained in the present Annual Report on pages 81 et seq.

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

I. Implementation of the diversity concept in the 2020 financial year

Diversity on the Supervisory Board and Executive Board continued to be a major focus in the 2020 financial year. Since the end of the Annual General Meeting on 8 May 2019 altogether five women have belonged to the Supervisory Board. It remains the case that female members of the Supervisory Board sit on two of the three Supervisory Board committees. One woman serves on the Finance and Audit Committee and one is a member of the Nomination Committee.

Furthermore, the Supervisory Board considers it important that an adequate number of Supervisory Board members are independent as defined by the German Corporate Governance Code (DCGK). The criteria for verifying this have changed somewhat with the new Code in the version of 16 December 2019 (which is to be used as a basis since its publication in the Federal Gazette on 20 March 2020). In its own assessment, the Supervisory Board currently meets the target set by the Code because Dr. Lipowsky, Dr. Ollmann and Dr. Pollak are independent within the meaning of Code Recommendation C.6. Dr. Schipporeit similarly largely fulfils the independence criteria according to the Code, but in view of the fact that he was first appointed on 3 May 2007 he has already belonged to the body for longer than 12 years.

The diversity of the Executive Board with respect to female members remained unchanged in 2020. Following the retirement of Mr. Vogel, Mr. Jungsthöfel – in keeping with the succession planning – was appointed as his successor by a resolution of the Supervisory Board adopted at its meeting on 4 August 2020. The goal of appointing at least one woman as a member of the company's Executive Board by the year 2022 has already been fulfilled since the appointment of Ms. Sehm in 2019.

The age diversity on the Executive Board ranged from 49 to 60 in the 2020 financial year. On the Supervisory Board the age range was from 47 to 71.

II. Diversity concept for the composition of the Executive Board and Supervisory Board

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

The composition of the Supervisory Board shall be such that overall its members are equipped with the knowledge, abilities and specialist experience necessary for proper performance of the tasks. The make-up of the Supervisory Board shall ensure that the Executive Board in an internationally operating, broadly positioned reinsurance group receives qualified supervision and advice from the Supervisory Board. Above and beyond the legally required specialist expertise in investing, insurance practice and accounting, the topics of internationality, taxation, M&A, human resources, risk management, IT and compliance have been taken into account on a voluntary basis. The goal is that the Supervisory Board as a whole has all the know-how and experience considered to be material in light of the activities of the Hannover Re Group. Moreover, special attention is to be paid to the integrity, character, commitment, professionalism and independence of individuals put forward for election. In accordance with the Rules of Procedure for the Supervisory Board, for example, members of the Supervisory Board shall ensure that they have sufficient time at their disposal for their activities and that potential conflicts of interest are avoided. Furthermore, candidates shall be put forward to the Annual General Meeting for election to the Supervisory Board only if they will not have passed the age of 72 by the time of their election and – with effect from the election of the new Supervisory Board in 2014 – provided they have not sat on the Supervisory Board for more than three full consecutive terms of office. With regard to the appropriate number of independent Supervisory Board members from the perspective of the Supervisory Board, the Supervisory Board has decided that it shall have three independent members as defined by the German Corporate Governance Code (DCGK). Employee representatives on the Supervisory Board are disregarded in this context.

In order to ensure that the relevant selection criteria are met, the Supervisory Board followed the recommendation of the Nomination Committee and defined a requirements and competence profile for Supervisory Board members; this is intended, among other things, to assure the availability on the Supervisory Board of the expertise needed to cover all the Group's areas of business. In addition, Supervisory Board members may not hold mandates on governing bodies at major competitors of the company or of a Group undertaking, nor may they perform individual advisory tasks for such competitors.

With an eye to Hannover Re's international orientation, it is to be ensured that a sufficient number of members with long-standing international experience belong to the Supervisory Board. Based on their current or former service as a board member/chief executive officer or in a comparable role as managing director with internationally operating undertakings or organisations, all the shareholder representatives on the Supervisory Board have long-standing international experience. In the opinion of the Supervisory Board, due consideration is given to the international dimension of operations. The goal is to maintain the currently existing international profile.

When it comes to selecting candidates who are to be put forward to the Annual General Meeting for election to the Supervisory Board, care is taken to ensure that the individuals concerned have the necessary knowledge, skills and specialist experience. The principle of diversity is also reflected in the selection process.

In selecting members of the Executive Board the goal is to ensure that the members have the skills and experience needed to properly perform their tasks. The Supervisory Board considers diversity in the composition of the Executive Board. Moreover, on the level of the Executive Board the aim is to appoint another woman as a member of the company's Executive Board by the year 2024. The age limit for the Executive Board is set at 65. The members of the Executive Board are appointed by the Supervisory Board for a term of at most five years. Members of the Executive Board are initially appointed for no more than three years.

Information regarding the following items is provided in the remuneration report:

- Remuneration report for the Executive Board and disclosure of the remuneration received by Supervisory Board members pursuant to Principle 25 of the German Corporate Governance Code,
- Securities transactions,
- Shareholdings.

Information on share-based payment is provided in section 8.3 of the notes "Share-based payment", page 242 et seq., and in the remuneration report with respect to the members of the Executive Board.

In addition to the present Declaration on Corporate Governance, the Declaration of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code and the associated reports of recent years are published on our website (www.hannover-re.com/200801/declaration-of-conformity).

Remuneration report

The remuneration report summarises the principles used to determine the remuneration of the Executive Board of Hannover Rück SE and explains the structure, composition and amount of the components of the remuneration received by the Executive Board in the 2020 financial year on the basis of the work performed by the Board members for Hannover Rück SE and companies belonging to the Group.

In addition, the amount of remuneration paid to the Supervisory Board on the basis of its work for Hannover Rück SE and companies belonging to the Group as well as the principles according to which this remuneration is determined are described; we also explain the principles on which the remuneration for senior executives below the level of the Executive Board is based.

The remuneration report is guided by the recommendations of the German Corporate Governance Code and contains information which forms part of the notes to the 2020 consolidated financial statement as required by IAS 24 "Related Party Disclosures". Under German commercial law, too, this information includes data specified as mandatory for the notes (§ 314 HGB) and the management report (§ 315 HGB). These details are discussed as a whole in this remuneration report and presented in summary form in the notes.

The provisions of the Act on the Adequacy of Management Board Remuneration (VorstAG) and of the Insurance Supervision Act (VAG) in conjunction with the Regulation on the Supervisory Law Requirements for Remuneration Schemes in the Insurance Sector (VersVergV) have been observed. In addition, we took into account the more specific provisions of DRS 17 "Reporting on the Remuneration of Members of Governing Bodies".

Remuneration of the Executive Board

Responsibility

In order to efficiently perform its tasks the Supervisory Board has formed various committees. The Standing Committee prepares remuneration-related matters of content relating to the Executive Board for discussion and adoption of a resolution by a full meeting of the Supervisory Board.

Objective, structure and system of Executive Board remuneration

The total remuneration of the Executive Board and its split into fixed and variable components conform to regulatory requirements – especially the provisions of the Act on the Adequacy of Management Board Remuneration (VorstAG) and of Art. 275 Commission Delegated Regulation (EU) 2015/35 and supplemented by those of the Regulation on the Supervisory Law Requirements for Remuneration Schemes in the Insurance Sector (VersVergV). An independent expert's report from February 2020 confirms that the system of remuneration meets the requirements of Art. 275 Commission Delegated Regulation (EU) 2015/35 for a remuneration policy that is in line with the undertaking's business, strategy and risk profile.

The amount and structure of the remuneration of the Executive Board are geared to the size and activities of the company, its economic and financial position, its success and future prospects as well as the customariness of the remuneration, making reference to the benchmark environment (horizontal) and the remuneration structure otherwise applicable at the company (vertical). For the purposes of the market comparison, reference was made to the DAX 30 companies as well as a strategically compatible benchmark group of extremely competitive peers. The remuneration is also guided by the tasks of the specific member of the Executive Board, his or her individual performance and the performance of the Executive Board as a whole.

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

Fixed remuneration (approx. 40% of total remuneration upon 100% goal attainment)

Measurement basis and payment procedures for fixed remuneration **M 75**

Components	Measurement basis/ parameters	Condition for payment	Paid out
Basic remuneration	Function, responsibility, length of service on the Executive Board	Contractual stipulations	12 equal monthly instalments
Non-cash compensation, fringe benefits: Accident, liability and luggage insurance, company car for business and – if desired – personal use (tax on the non-cash benefit payable by the Board member), reimbursement of travel expenses and other expenditures incurred in the interest of the company	The annual fixed salary is determined upon appointment for the entire term of the appointment.		

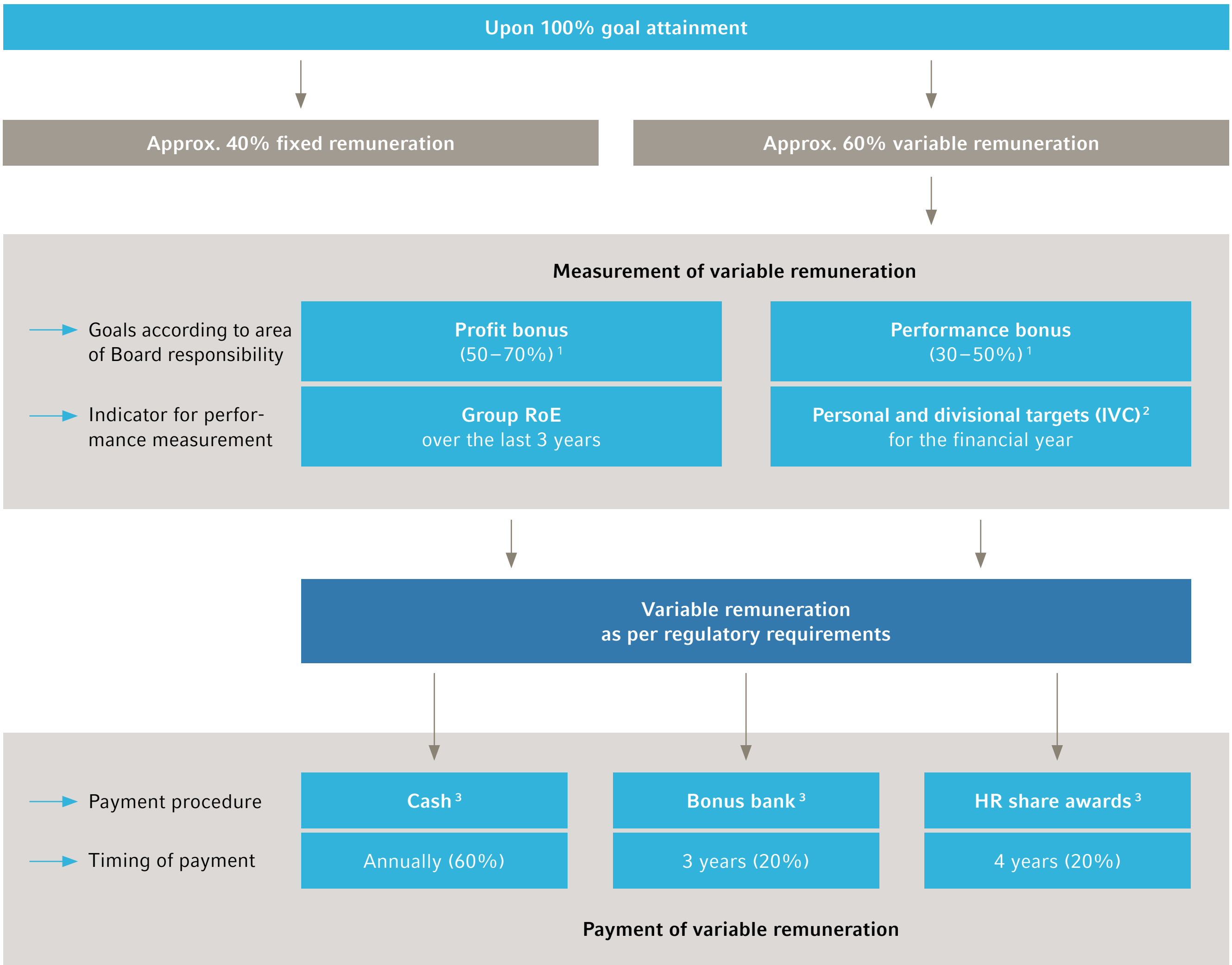
Variable remuneration (approx. 60% of total remuneration upon 100% goal attainment)

The profit- and performance-based remuneration (variable remuneration) is contingent on certain defined results and the attainment of certain set targets. The set targets vary according to the function of the Board member in question. The variable remuneration consists of a profit bonus and a performance bonus.

The variable remuneration is defined at the Supervisory Board meeting that approves the consolidated financial statement for the financial year just ended.

The following chart summarises the make-up of the variable remuneration components. For details of measurement and payment procedures please see the two tables following the chart.

Overview of the composition of variable remuneration M 76



1 Chief Executive Officer/Chief Financial Officer 70% profit bonus, 30% performance bonus (personal targets); Board members with divisional responsibility: 50% profit bonus, 50% performance bonus (25% personal targets/25% divisional targets)

2 An instrument of value-based management used to measure the attainment of long-term goals on the level of the Group, business groups and operational units

3 Split defined by legal minimum requirements

Measurement bases/conditions of payment for variable remuneration **M 77**

Component	Measurement basis/parameters	Condition of payment
Profit bonus		
Proportion of variable remuneration: Chief Executive Officer/ Chief Financial Officer: 70%; Board member with divisional responsibility: 50%	The profit bonus is dependent on the risk-free interest rate and the average Group return on equity (RoE) of the past three financial years. An individually determined and contractually defined basic amount is paid for each 0.1 percentage point by which the RoE of the past three financial years exceeds the risk-free interest rate. Goal attainment of 100% corresponds to an RoE of 8.8% plus the risk-free interest rate (2020: 0.04%). Goal attainment can amount to a maximum of 200% and a minimum of -100%. The IFRS Group net income (excluding non-controlling interests) and the arithmetic mean of the IFRS Group shareholders' equity (excluding non-controlling interests) at the beginning and end of the financial year are used to calculate the RoE. The risk-free interest rate is the average market rate for 10-year German government bonds over the past five years, with the average being calculated on the basis of the respective interest rate at year-end.	Contractual stipulations Attainment of three-year targets Decision of the Supervisory Board
Performance bonus The performance bonus for the Chief Executive Officer and the Chief Financial Officer is arrived at from individual qualitative and, as appropriate, quantitative targets defined annually by the Supervisory Board that are to be accomplished in the subsequent year. For members of the Executive Board with responsibility for a certain division, the performance bonus consists in equal parts of the divisional bonus and the individual bonus.		
Divisional bonus Proportion of variable remuneration: Board member with divisional responsibility: 25%	The basis for the divisional bonus is the return generated on the capital allocated to the division in the respective 3-year period just ended (= RoCA (Return on Capital Allocated)). An individually determined amount specified in the service contract is calculated for each 0.1 percentage point by which the average 3-year RoCA exceeds the level of 0%. Goal attainment of 100% is achieved in property and casualty reinsurance with a RoCA of 9.1% and in life and health reinsurance with a RoCA of 10.1%. These RoCA values are above the cost of capital and thus generate positive intrinsic value creation (IVC).[1] Goal attainment can amount to a maximum of 200% and a minimum of -100%. The method used to calculate the IVC as a basis for determining the divisional performance is checked by independent experts. The divisional bonus is determined by the Supervisory Board according to its best judgement. The determination also takes into account, in particular, the contribution made by the business under the responsibility of the Board member concerned to the achieved divisional performance and the relative change in the average IVC in the remuneration year. The Supervisory Board may make additions to or deductions from the arithmetically calculated values at any time in the event of over- or underfulfilment of the criteria.	Attainment of three-year targets Contractual agreement Decision of the Supervisory Board according to its best judgement

[1] An instrument of value-based management used to measure the attainment of long-term goals on the level of the Group, business groups and operational units (see also page 27 et seq.).

Component	Measurement basis/parameters	Condition of payment
Individual bonus Proportion of variable remuneration: Chief Executive Officer/ Chief Financial Officer: 30%; Board member with divisional responsibility: 25%	Personal qualitative, quantitative targets (individual contribution to the overall result, leadership skills, innovative skills, entrepreneurial skills, specific features of area of responsibility). The individual bonus for goal attainment of 100% is contractually stipulated. Over- and underfulfilment result in additions/deductions. A General Performance Bonus geared to the individual overall performance of the member of the Executive Board can be determined by the Supervisory Board as part of the individual bonus. The minimum individual bonus amounts to EUR 0 and the maximum is double the bonus payable upon complete goal attainment.	Attainment of annual targets Decision by the Supervisory Board according to its best judgement.

Payment procedures for the total variable remuneration

Of the total amount of defined variable remuneration, a partial amount of 60% is paid out in the month following the Supervisory Board meeting that approves the consolidated financial statement. The remaining amount of 40% is initially withheld as explained below with a view to encouraging long-term value creation:

Payment procedures for the total variable remuneration **M 78**

Short-term	Medium-term	Long-term
60% of the variable remuneration with the next monthly salary payment following the Supervisory Board resolution	**20% of the variable remuneration in the bonus bank;** withheld for three years; the positive amount contributed three years prior to the payment date is available for payment, provided this does not exceed the balance of the bonus bank in light of credits/debits up to and including those for the financial year just ended; an impending payment not covered by a positive balance in the bonus bank is omitted; a positive balance in the bonus bank is carried forward to the following year after deduction of any payment made; a negative balance is not carried forward to the following year; loss of claims due from the bonus bank in special cases: resignation from office without a compelling reason; contract extension on the same conditions is rejected; no interest is paid on credit balances.	Automatic granting of **virtual Hannover Re share awards (HR-SAs)** with a value equivalent to **20%** of the variable remuneration; payment of the value calculated at the payment date after a **vesting period of four years;** value of the share on awarding/payment: unweighted arithmetic mean of the Xetra closing prices five trading days before to five trading days after the meeting of the Supervisory Board that approves the consolidated financial statement; additional payment of the sum total of all dividends per share paid out during the vesting period; changes in a cumulative amount of 10% or more in the value of the HR-SAs caused by structural measures trigger an adjustment; the Board member has no entitlement to the delivery of shares.

Negative variable total bonus = payment of EUR 0 variable remuneration.
Any minus value of the variable total bonus for a financial year is transferred in full to the bonus bank (see "Medium-term" column).

Handling of payment of variable remuneration components in special cases

In the event of voluntary resignation or termination / dismissal by the company for a compelling reason or if an offered contract extension on the same conditions (exception: the member of the Executive Board has reached the age of 60 and has served as a member of the Executive Board for two terms of office) is declined, all rights to payment of the balances from the bonus bank and from the HR-SAs are forfeited.

If the contractual relationship ends normally prior to the end of the vesting period for the bonus bank or HR-SAs, and if a contract extension is not offered, the member of the Executive Board retains his entitlements to payment from the bonus bank – making reference to a defined forward projection of the bonus bank – and for already awarded HR-SAs.

All claims to the allocation of amounts to the bonus bank and / or awarding of HR-SAs after leaving the company are excluded. In cases where an individual leaves the company because of non-reappointment, retirement or death this shall not apply with respect to claims to variable remuneration acquired (pro rata) in the final year of the Board member's work for the company.

Continued payment in case of disability

In the event of temporary incapacity for work the fixed annual salary shall continue to be paid in the same amount, at most until termination of the service contract.

If a member of the Executive Board is permanently incapacitated for work during the period of the service contract, the service contract shall terminate at the end of the sixth month after which the permanent incapacity for work is established – although no later than at the end of the service contract.

Other information

The contracts of the Board members do not include a commitment to benefits in the event of a premature termination of employment on the Executive Board owing to a change of control.

With regard to the German Corporate Governance Code in the version of 7 February 2017, Item 4.2.3. Para. 2 – "Caps on the amount of variable compensation elements in management board contracts" and Item 4.2.3 Para. 4 – "Caps on severance payments in management board contracts" as well as in the version of 16 December 2019, Recommendations G.1, G.10, G.11 – "Remuneration of the Management Board", we would refer the reader to our remarks in the Declaration of Conformity with the German Corporate Governance Code provided by Hannover Rück SE pursuant to § 161 AktG in the section "Declaration on Corporate Governance" on page 112 et seq. of the present Group Annual Report.

Amount of remuneration received by the Executive Board

The total remuneration received by the Executive Board of Hannover Rück SE on the basis of its work for Hannover Rück SE and the companies belonging to the Group is calculated from the sum of all the components set out in the following table pursuant to DRS 17.

Total remuneration of the active members of the Executive Board pursuant to DRS 17 (modified in 2010)

Name	Financial year	Non-performance-based remuneration		Performance-based remuneration[1]	
		Basic salary	Non-cash compensation/ fringe benefits[2]	Short-term	
				Variable remuneration payable	
in EUR thousand				60%[3]	Netted remuneration from seats with Group bodies
Jean-Jacques Henchoz[7] from 1 April 2019	**2020**	**880.0**	**30.9**	**763.2**	
	2019	692.5	1,077.0	687.1	
Sven Althoff[8]	**2020**	**408.8**	**16.5**	**370.0**	
	2019	361.3	16.7	457.5	
Claude Chèvre	**2020**	**440.0**	**15.4**	**427.8**	
	2019	390.0	15.9	402.1	
Clemens Jungsthöfel from 1 September 2020	**2020**	**106.7**	**2.8**	**120.7**	
Dr. Klaus Miller	**2020**	**420.0**	**0.9**	**354.5**	**75.0**
	2019	420.0	1.7	496.9	43.8
Dr. Michael Pickel	**2020**	**440.0**	**5.6**	**390.1**	**5.0**
	2019	440.0	14.1	567.6	5.0
Silke Sehm[9]	**2020**	**320.0**	**14.8**	**300.2**	
	2019	292.7	4.7	333.0	
Roland Vogel[10] until 30 September 2020	**2020**	**345.0**	**9.8**	**335.1**	**21.5**
	2019	460.0	16.3	581.3	37.0
Total	**2020**	**3,360.5**	**96.7**	**3,061.6**	**101.5**
Total	2019	3,056.5	1,146.4	3,525.5	85.8

1 As at the balance sheet date no Board resolution was available regarding the performance-based remuneration for 2020. The variable remuneration is recognised on the basis of estimates and the provisions constituted accordingly.

2 The non-cash compensation has been carried in the amounts established for tax purposes.

3 In 2020 EUR 408,400 less in variable remuneration was paid out to active Board members for 2019 than had been reserved.

4 The nominal amount is stated; full or partial repayment in 2024, depending on the development until such time of the balance in the bonus bank. In 2020 altogether EUR 137,800 less was allocated to the bonus bank for active Board members for 2019 than had been originally reserved.

5 The nominal amount is stated; virtual Hannover Re share awards are automatically granted in an amount equivalent to 20% of the variable remuneration. The equivalent amount will be paid in 2025 at the prevailing share price of Hannover Re. In 2020 nominal amounts of EUR 134,400 less than had been originally reserved were used as a basis for allocation of the 2019 share awards.

6 In order to calculate the number of share awards for 2020 reference was made to the Xetra closing price of the Hannover Re share on 30 December 2020 (EUR 130.30). The number to be actually awarded is established from the arithmetic mean of the Xetra closing prices of the Hannover Re share in a period from five trading days before to five trading days after the meeting of the Supervisory Board that approves the consolidated financial statement in March 2021. The applicable market price of the Hannover Re share had decreased from EUR 172.30 (30 December 2019) to EUR 139.04 by the allocation date (10 March 2020) of the share awards for 2019; the share awards actually allocated for 2019 are shown here, not those estimated in the 2019 Annual Report.

7 The fringe benefits received by Mr. Henchoz include a contractually agreed one-time payment of EUR 1 million.

8 Mr. Althoff is entitled to reimbursement of any tax disadvantages and of costs for tax advice in connection with his mandates at UK Group companies with effect from 1 December 2020. The expense in 2020 amounted to EUR 0.

9 Ms. Sehm was appointed to the Executive Board on 6 March 2019. The stated amounts include her remuneration as a senior executive of Hannover Re for the period from 1 January to 5 March 2019.

10 The remuneration stated here is for Mr. Vogel's active Board service (until 30 September 2020). Additional remuneration for the 2020 financial year in an amount of EUR 334,100 is included in the total remuneration of former members of the Executive Board.

M 79

	Performance-based remuneration [1]		Total	Number of share awards [6]
	Medium-term	Long-term		2020 = Estimate 2019 = Actual
	Bonus bank	Share awards		
in EUR thousand	20% (allocation) [4]	20% (allocation) [5]		
	254.4	**254.4**	**2,182.9**	**2,122**
	229.0	229.0	2,914.6	1,489
	123.3	**123.3**	**1,041.9**	**1,102**
	152.5	152.5	1,140.5	882
	142.6	**142.6**	**1,168.4**	**1,174**
	134.0	134.0	1,076.0	891
	40.2	**40.2**	**310.6**	**309**
	118.2	**118.2**	**1,011.8**	**1,121**
	165.6	165.6	1,249.8	993
	130.0	**130.0**	**1,095.7**	**1,190**
	189.2	189.2	1,400.1	1,085
	98.3	**101.8**	**835.1**	**865**
	104.4	117.6	852.4	755
	111.7	**111.7**	**913.3**	**998**
	193.8	193.8	1,445.2	1,246
	1,018.7	1,022.2	8,559.7	8,881
	1,168.5	1,181.7	10,078.6	7,341

The following table shows the expense for share-based remuneration of the Executive Board in the financial year.

The table is to be viewed independently of the presentation of the total remuneration received by active members of the Executive Board pursuant to DRS 17.

Total expense for share-based remuneration of the active members of the Executive Board M 80

Name in EUR thousand	Year	Change in reserve for share awards from previous years[1]	Expense for share awards allocated in current financial year[2]	Total
Jean-Jacques Henchoz from 1 April 2019	**2020**	**57.5**	**123.1**	**180.6**
	2019	–	70.4	70.4
Sven Althoff	**2020**	**48.1**	**55.6**	**103.7**
	2019	286.9	39.8	326.7
Claude Chèvre	**2020**	**42.1**	**31.6**	**73.7**
	2019	340.9	25.8	366.7
Clemens Jungsthöfel from 1 September 2020	**2020**	**–**	**4.5**	**4.5**
	2019	–	–	–
Dr. Klaus Miller	**2020**	**42.1**	**39.8**	**81.9**
	2019	289.0	35.5	324.5
Dr. Michael Pickel	**2020**	**56.3**	**51.7**	**108.0**
	2019	328.8	43.8	372.6
Silke Sehm[3]	**2020**	**44.0**	**51.8**	**95.8**
	2019	401.3	37.0	438.3
Roland Vogel until 30 September 2020	**2020**	**241.8**	**130.1**	**371.9**
	2019	366.7	58.9	425.6
Total	**2020**	**531.9**	**488.2**	**1,020.1**
Total	2019	2,013.6	311.2	2,324.8

[1] The change in the reserve for share awards from previous years derives from the changed market price of the Hannover Re share, the dividend approved for the prior year and the spreading of the expense for share awards across the remaining period of the individual service contracts.
[2] The expense for share awards is spread across the remaining period of the individual service contracts. This gives rise to a difference relative to the nominal amount shown in the table of total remuneration.
[3] Ms. Sehm was appointed to the Executive Board on 6 March 2019. The share awards from prior years as well as a portion of the expense for share awards 2019 relate to her previous work as a senior executive at Hannover Re.

The following two tables show the remuneration of the Executive Board in the 2020 financial year in accordance with the recommendations of the German Corporate Governance Code:

German Corporate Governance Code, Item 4.2.5 Para. 3 – Table 1 (target/minimum/maximum remuneration)

Benefits granted	Jean-Jacques Henchoz Chief Executive Officer from 1 April 2019				Sven Althoff Board member with divisional responsibility Coordinator of worldwide property and casualty reinsurance			
in EUR thousand	2019	2020	2020 (Min)	2020 (Max)	2019	2020	2020 (Min)	2020 (Max)
Fixed remuneration	692.5	880.0	880.0	880.0	361.3	408.8	408.8	408.8
Fringe benefits [1]	1,077.0	30.9	30.9	30.9	16.7	16.5	16.5	16.5
Total	**1,769.5**	**910.9**	**910.9**	**910.9**	**378.0**	**425.3**	**425.3**	**425.3**
One-year variable remuneration	495.0	660.0	0.0	1,320.0	321.7	366.8	0.0	733.5
Multi-year variable remuneration	330.0	448.2	(198.8)	888.2	237.0	266.1	(328.3)	510.5
Bonus bank 2019 (2023 [2])/2020 (2024 [2])	165.0	220.0	(207.0)	440.0	107.3	122.3	(349.8)	244.5
Share Awards 2019 (2024 [2])/2020 (2025 [2]) [3]	165.0	220.0	0.0	440.0	107.3	122.3	0.0	244.5
Dividend on share awards for 2018 [4]	0.0	0.0	0.0	0.0	22.4	0.0	0.0	0.0
Dividend on share awards for 2019 [4]	0.0	8.2	8.2	8.2	0.0	21.5	21.5	21.5
Total	**2,594.5**	**2,019.1**	**712.1**	**3,119.1**	**936.7**	**1,058.2**	**97.0**	**1,669.3**
Service cost [5]	136.6	127.9	127.9	127.9	147.5	151.8	151.8	151.8
Total remuneration	**2,731.1**	**2,147.0**	**840.0**	**3,247.0**	**1,084.2**	**1,210.0**	**248.8**	**1,821.1**

Benefits granted	Dr. Klaus Miller Board member with divisional responsibility				Dr. Michael Pickel Board member with divisional responsibility			
in EUR thousand	2019	2020	2020 (Min)	2020 (Max)	2019	2020	2020 (Min)	2020 (Max)
Fixed remuneration	420.0	420.0	420.0	420.0	440.0	440.0	440.0	440.0
Fringe benefits [1]	1.7	0.9	0.9	0.9	14.1	5.6	5.6	5.6
Total	**421.7**	**420.9**	**420.9**	**420.9**	**454.1**	**445.6**	**445.6**	**445.6**
One-year variable remuneration	378.0	378.0	0.0	756.0	396.0	396.0	0.0	792.0
Multi-year variable remuneration	274.9	274.1	(332.7)	526.1	290.2	289.7	(405.5)	553.7
Bonus bank 2019 (2023 [2])/2020 (2024 [2])	126.0	126.0	(354.8)	252.0	132.0	132.0	(431.2)	264.0
Share Awards 2019 (2024 [2])/2020 (2025 [2]) [3]	126.0	126.0	0.0	252.0	132.0	132.0	0.0	264.0
Dividend on share awards for 2018 [4]	22.9	0.0	0.0	0.0	26.2	0.0	0.0	0.0
Dividend on share awards for 2019 [4]	0.0	22.1	22.1	22.1	0.0	25.7	25.7	25.7
Total	**1,074.6**	**1,073.0**	**88.2**	**1,703.0**	**1,140.3**	**1,131.3**	**40.1**	**1,791.3**
Service cost [5]	96.3	76.5	76.5	76.5	162.3	180.5	180.5	180.5
Total remuneration	**1,170.9**	**1,149.5**	**164.7**	**1,779.5**	**1,302.6**	**1,311.8**	**220.6**	**1,971.8**

1 The fringe benefits of Mr. Henchoz include a contractually agreed one-time payment of EUR 1 million in 2019.
2 Year of payment
3 Maximum value when awarded, amount paid out dependent upon the share price in the year of payment and the dividends paid until such time.
4 In the case of Ms. Sehm, the dividends paid out on share awards include the allocations for work performed as a senior executive prior to appointment as a member of the Executive Board.
5 For details of the service cost see the table “Pension commitments” on page 135.

	Claude Chèvre Board member with divisional responsibility				Clemens Jungsthöfel Chief Financial Officer from 1 September 2020		
	2019	2020	2020 (Min)	2020 (Max)	2020	2020 (Min)	2020 (Max)
	390.0	440.0	440.0	440.0	106.7	106.7	106.7
	15.9	15.4	15.4	15.4	2.8	2.8	2.8
	405.9	**455.4**	**455.4**	**455.4**	**109.5**	**109.5**	**109.5**
	351.0	396.0	0.0	792.0	96.0	0.0	192.0
	260.8	288.3	(344.9)	552.3	64.0	0.0	128.0
	117.0	132.0	(369.2)	264.0	32.0	0.0	64.0
	117.0	132.0	0.0	264.0	32.0	0.0	64.0
	26.8	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	24.3	24.3	24.3	0.0	0.0	0.0
	1,017.7	**1,139.7**	**110.5**	**1,799.7**	**269.5**	**109.5**	**429.5**
	118.7	72.4	72.4	72.4	33.6	33.6	33.6
	1,136.4	1,212.1	182.9	1,872.1	303.1	143.1	463.1

	Silke Sehm Board member with divisional responsibility from 6 March 2019				Roland Vogel Chief Financial Officer until 30 September 2020			
	2019	2020	2020 (Min)	2020 (Max)	2019	2020	2020 (Min)	2020 (Max)
	262.4	320.0	320.0	320.0	460.0	345.0	345.0	345.0
	4.7	14.8	14.8	14.8	16.3	9.8	9.8	9.8
	267.1	**334.8**	**334.8**	**334.8**	**476.3**	**354.8**	**354.8**	**354.8**
	235.2	288.0	0.0	576.0	414.0	310.5	0.0	621.0
	172.4	208.3	(73.7)	400.3	304.9	236.5	(332.8)	443.5
	78.4	96.0	(90.0)	192.0	138.0	103.5	(362.3)	207.0
	78.4	96.0	0.0	192.0	138.0	103.5	0.0	207.0
	15.6	0.0	0.0	0.0	28.9	0.0	0.0	0.0
	0.0	16.3	16.3	16.3	0.0	29.5	29.5	29.5
	674.7	**831.1**	**261.1**	**1,311.1**	**1,195.2**	**901.8**	**22.0**	**1,419.3**
	162.1	326.2	326.2	326.2	52.8	61.7	61.7	61.7
	836.8	1,157.3	587.3	1,637.3	1,248.0	963.5	83.7	1,481.0

German Corporate Governance Code, Item 4.2.5 Para. 3 – Table 2
(cash allocations in 2019 and 2020 of the active members of the Executive Board)

Benefits granted	Jean-Jacques Henchoz Chief Executive Officer from 1 April 2019		Sven Althoff Board member with divisional responsibility Coordinator of worldwide property and casualty reinsurance	
in EUR thousand	2019	2020	2019	2020
Fixed remuneration	692.5	880.0	361.3	408.8
Fringe benefits[1]	1,077.0	30.9	16.7	16.5
Total	**1,769.5**	**910.9**	**378.0**	**425.3**
One-year variable remuneration[2]	0.0	621.0	352.8	367.8
Multi-year variable remuneration	0.0	0.0	276.7	318.1
Bonus bank 2015/2016	0.0	0.0	120.8	121.2
Share Awards 2014/2015	0.0	0.0	155.9	196.9
Total	**1,769.5**	**1,531.9**	**1,007.5**	**1,111.2**
Service cost[3]	136.6	127.9	147.5	151.8
Total remuneration	**1,906.1**	**1,659.8**	**1,155.0**	**1,263.0**

Benefits granted	Dr. Klaus Miller Board member with divisional responsibility		Dr. Michael Pickel Board member with divisional responsibility	
in EUR thousand	2019	2020	2019	2020
Fixed remuneration	420.0	420.0	440.0	440.0
Fringe benefits[1]	1.7	0.9	14.1	5.6
Total	**421.7**	**420.9**	**454.1**	**445.6**
One-year variable remuneration[2]	376.8	445.2	485.4	452.4
Multi-year variable remuneration	343.7	342.4	358.2	360.6
Bonus bank 2015/2016	130.0	130.6	137.8	136.0
Share Awards 2014/2015	213.7	211.8	220.4	224.6
Total	**1,142.2**	**1,208.5**	**1,297.7**	**1,258.6**
Service cost[3]	96.3	76.5	162.3	180.5
Total remuneration	**1,238.5**	**1,285.0**	**1,460.0**	**1,439.1**

1 The fringe benefits of Mr. Henchoz include a contractually agreed one-time payment of EUR 1 million in 2019.
2 The remuneration in question refers to payment of the variable remuneration for the prior year. Remuneration for Group mandates that is counted towards the variable remuneration is allocated in the year of occurrence. The company's Supervisory Board does not decide upon the final amount paid out for the 2020 financial year until after the remuneration report has been drawn up.
3 For details of the service cost see the table "Pension commitments" on page 135.
4 The stated amounts include the remuneration of Ms. Sehm as a senior executive of Hannover Re for the period from 1 January 2019 to 5 March 2019.

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Claude Chèvre Board member with divisional responsibility		Clemens Jungsthöfel Chief Financial Officer from 1 September 2020	
2019	2020	2019	2020
390.0	440.0	–	106.7
15.9	15.4	–	2.8
405.9	**455.4**	**–**	**109.5**
358.8	371.4	–	0.0
376.6	409.9	–	0.0
154.6	158.0	–	0.0
222.0	251.9	–	0.0
1,141.3	**1,236.7**	**–**	**109.5**
118.7	72.4	–	33.6
1,260.0	**1,309.1**	**–**	**143.1**

Silke Sehm[4] Board member with divisional responsibility from 6 March 2019		Roland Vogel Chief Financial Officer until 30 September 2020	
2019	2020	2019	2020
292.7	320.0	460.0	345.0
4.7	14.8	16.3	9.8
297.4	**334.8**	**476.3**	**354.8**
110.9	295.0	497.1	504.1
145.6	135.3	353.8	360.6
0.0	0.0	136.8	137.6
145.6	135.3	217.0	223.0
553.9	**765.1**	**1,327.2**	**1,219.5**
162.1	326.2	52.8	61.7
716.0	**1,091.3**	**1,380.0**	**1,281.2**

Sideline activities of the members of the Executive Board

The members of the Executive Board require the approval of the Supervisory Board to take on sideline activities. This ensures that neither the remuneration granted nor the time required for this activity can create a conflict with their responsibilities on the Executive Board. If the sideline activities involve seats on supervisory boards or comparable control boards, these are listed and published in the Annual Report of Hannover Rück SE. The remuneration received for such seats at Group companies and other board functions is deducted when calculating the variable bonus and shown separately in the table of total remuneration.

Retirement provision

Defined benefit pension commitment (appointment before 2009)

The contracts of members of the Executive Board first appointed prior to 2009 contain commitments to an annual retirement pension calculated as a percentage of the pensionable fixed annual remuneration (defined benefit). The target pension is at most 50% of the monthly fixed salary payable when leaving the company as contractually agreed on reaching the age of 65. A non-pensionable fixed remuneration component was introduced in conjunction with the remuneration structure applicable from 2011 onwards. Under certain circumstances other income received while the pension is being drawn is taken into account pro rata or in its entirety (e.g. in the event of incapacity for work or termination of the service contract before reaching the age of 65).

Defined contribution pension commitment (appointment from 2009 onwards)

The commitments given to members of the Executive Board from 2009 onwards are based on a defined contribution scheme.

A Board member who has reached the age of 65 and left the company's employment receives a life-long retirement pension. The amount of the monthly retirement pension is calculated according to the reference date age (year of the reference date less year of birth) and the funding contribution on the reference date. The annual funding contribution for these contracts is paid by the company in the amount of a contractually specified percentage of the pensionable income (fixed annual remuneration as at the contractually specified reference date).

Provision for surviving dependants

If the Board member dies during the period of the service contract, the surviving spouse – or alternatively the eligible children – shall be entitled to continued payment of the fixed monthly salary for the month in which the Board member dies and the six months thereafter, at most until termination of the service contract. If the member of the Executive Board dies after pension payments begin, the surviving spouse and alternatively the dependent children shall receive continued payment of the retirement pension for the month of death and the following six months.

The widow's pension amounts to 60% of the retirement pay that the Board member received or would have received if they had been incapacitated for work at the time of their death.

An orphan's pension shall be granted in the amount of 15% – in the case of full orphans 25% (final-salary pension commitment) or 30% (contribution-based pension commitment) – of the retirement pay that the Board member received or would have received on the day of his death if the pensionable event had occurred owing to a permanent incapacity for work.

Adjustments

The following parameters are used for adjustments to retirement, widow's and orphan's benefits: the price index for the cost of living of all private households in Germany (contracts from 2001 onwards) or the price index for the cost of living of four-person households of civil servants and higher-income salaried employees (contracts from 1997 to 2000).

Current pensions based on the commitments given from 2009 onwards (defined contribution commitment) are increased annually by at least 1% of their most recent (gross) amount.

Pension payments to former members of the Executive Board

The pension payments to former members of the Executive Board and their surviving dependants, for whom 17 (previous year: 18) pension commitments existed, totalled EUR 3.7 million (EUR 2.0 million) in the year under review. Of this, EUR 1.9 million is attributable to payments due to termination of the employment relationship. The projected benefit obligation of the pension commitments to former members of the Executive Board amounts to altogether EUR 34.5 million (EUR 34.2 million).

Refinement of the system of remuneration for members of the Executive Board effective 1 January 2021

The Act Implementing the Second Shareholder Rights Directive (ARUG II) gave rise to significant changes in the requirements for the system of remuneration for members of the Executive Board in the year under review. In addition, the revised version of the German Corporate Governance Code (DCGK) containing new recommendations for the remuneration of Executive Board members entered into force on 20 March 2020.

The Supervisory Board of Hannover Rück SE took this opportunity to review and thoroughly revise the system of remuneration for members of the Executive Board. At its meeting on 4 August 2020 the Supervisory Board – giving due consideration to the new statutory and regulatory framework conditions and taking into account the expectations of our investors and other key stakeholders – adopted refinements to the system of remuneration for the Executive Board that came into effect on 1 January 2021. In accordance with § 120a Para. 1 Stock Corporation Act (AktG), the Supervisory Board will present the revised system of remuneration for the Executive Board to the Annual General Meeting on 5 May 2021 for approval.

The system of remuneration for members of the Executive Board valid from the 2021 financial year onwards is in complete conformity with the amended statutory and regulatory requirements and recommendations. Through the reduction of the variable remuneration components and the focus on altogether fewer, yet equally central financial and non-financial performance indicators derived from our Group strategy, the system of remuneration is more simply structured overall. Consideration is also given to sustainability criteria. Furthermore, the Executive Board remuneration is aligned even more closely with the interests of our investors through a stronger link to the share and relative measurement of the Hannover Re share's performance in comparison with our peers. What is more, the introduction of penalty and clawback provisions will strengthen the Supervisory Board's position in the event of gross breaches of duty by members of the Executive Board. A detailed description of the new remuneration system will be included in the invitation to the Annual General Meeting 2021 of Hannover Rück SE.

Pension commitments M 83

Name in EUR thousand	Financial year	Attainable annual pension (age 65)	DBO 31.12.	Personnel expense
Jean-Jacques Henchoz	**2020**	**52.8**	**370.7**	**127.9**
	2019	52.4	149.3	136.6
Sven Althoff [1,2]	**2020**	**108.5**	**2,265.9**	**151.8**
	2019	103.7	1,788.7	147.5
Claude Chèvre	**2020**	**100.0**	**1,565.5**	**72.4**
	2019	100.0	1,222.3	118.7
Clemens Jungsthöfel	**2020**	**26.2**	**166.0**	**33.6**
	2019	–	–	–
Dr. Klaus Miller	**2020**	**58.1**	**1,118.3**	**76.5**
	2019	57.8	917.7	96.3
Dr. Michael Pickel	**2020**	**160.0**	**4,235.9**	**180.5**
	2019	160.0	3,521.9	162.3
Silke Sehm [1,3]	**2020**	**58.6**	**1,194.5**	**326.2**
	2019	58.5	707.6	162.1
Roland Vogel [1]	**2020**	**91.0**	**2,308.2**	**61.7**
	2019	97.4	2,040.2	52.8
Total	**2020**	**655.2**	**13,225.0**	**1,030.6**
Total	**2019**	**629.8**	**10,347.7**	**876.3**

[1] Mr. Althoff and Mr. Vogel as well as Ms. Sehm were first granted a pension commitment prior to 2001 on the basis of their service to the company prior to their appointment to the Executive Board; the earned portion of the defined benefit obligation is therefore established as a proportion (in the ratio [currently attained service years since entry] / [attainable service years from entry to exit age]) of the final benefit. The values shown include the entitlements prior to appointment to the Executive Board, which in accordance with a resolution of the company's Supervisory Board shall remain unaffected by the pension commitment as a member of the Executive Board.

[2] The personnel expense includes a past service cost due to a premium increase of EUR 97.5 thousand (2019) and EUR 88.5 thousand (2020).

[3] The personnel expense includes a past service cost due to a premium increase and change in measurement of EUR 139.2 thousand (2019) and EUR 259.5 thousand (2020).

Remuneration of the Supervisory Board

The remuneration of the Supervisory Board is determined by the Annual General Meeting of Hannover Rück SE and regulated by the company's Articles of Association.

In accordance with § 14 of the Articles of Association as amended on 30 May 2016 and the resolution of the Annual General Meeting on 7 May 2013, the members of the Supervisory Board receive fixed annual remuneration of EUR 30,000 per member in addition to reimbursement of their expenses. Furthermore, each member of the Supervisory Board receives variable remuneration measured according to the average earnings per share (EPS) of the company over the past three financial years preceding the Annual General Meeting at which the actions of the Supervisory Board for the last of these three years are ratified. The variable remuneration amounts to EUR 330 for each EUR 0.10 average earnings per share (EPS) of the company. The measurement of this performance-based remuneration component according to the average earnings per share of the last three financial years ensures that the variable remuneration is geared to sustainable corporate development. The variable remuneration is limited to an annual maximum of EUR 30,000. The Chairman of the Supervisory Board receives twice the aforementioned remuneration amounts and the Deputy Chairman of the Supervisory Board receives one-and-a-half times the said amounts.

In addition, the members of the Finance and Audit Committee formed by the Supervisory Board receive remuneration of EUR 15,000 for their committee work and the members of the Standing Committee formed by the Supervisory Board receive remuneration of EUR 7,500. In this case, too, the Chairman of the Committee receives twice and the Deputy Chairman one-and-a-half times the stated amounts. No remuneration is envisaged for the Nomination Committee.

Members who have only belonged to the Supervisory Board or one of its Committees for part of the financial year receive the remuneration pro rata temporis.

All the members of the Supervisory Board receive an attendance allowance of EUR 1,000 for their participation in each meeting of the Supervisory Board and the Committees in addition to the aforementioned remuneration. If a meeting of the Supervisory Board and one or more Committee meetings fall on the same day, the attendance allowance for this day is only paid once in total.

Individual remuneration received by the members of the Supervisory Board M 84

Name in EUR thousand[1]	Function	Type of remuneration	2020	2019
Torsten Leue[3]	Chairman of the • Supervisory Board Chairman of the • Standing Committee • Nomination Committee Member of the • Finance and Audit Committee	Fixed remuneration	100.0	91.4
		Variable remuneration	86.0	91.2
		Remuneration for committee work	50.0	46.7
		Attendance allowances	13.0	13.0
			249.0	**242.3**
Herbert K. Haas[3]	Deputy Chairman of the • Supervisory Board Chairman of the • Finance and Audit Committee Member of the • Standing Committee • Nomination Committee	Fixed remuneration	45.0	57.1
		Variable remuneration	43.6	57.2
		Remuneration for committee work	37.5	40.9
		Attendance allowances	9.0	11.0
			135.1	**166.2**
Natalie Bani Ardalan[2]	Member of the Supervisory Board	Fixed remuneration	30.0	19.4
		Variable remuneration	28.9	19.2
		Attendance allowances	4.0	3.0
			62.9	**41.6**
Wolf-Dieter Baumgartl (until 7 May 2018)	Member of the • Supervisory Board • Standing Committee • Finance and Audit Committee • Nomination Committee	Fixed remuneration	–	–
		Variable remuneration	–	0.1
		Remuneration for committee work	–	–
		Attendance allowances	–	–
			–	**0.1**
Benita Bierstedt[2] (from 1 June 2018 to 6 July 2018)	Member of the Supervisory Board	Fixed remuneration	–	–
		Variable remuneration	–	0.0
		Attendance allowances	–	–
			–	**0.0**

Name in EUR thousand[1]	Function	Type of remuneration	2020	2019
Frauke Heitmüller[2]	Member of the Supervisory Board	Fixed remuneration	30.0	30.0
		Variable remuneration	29.0	30.0
		Attendance allowances	4.0	5.0
			63.0	**65.0**
Ilka Hundeshagen[2] (since 8 May 2019)	Member of the Supervisory Board	Fixed remuneration	30.0	19.4
		Variable remuneration	28.9	19.2
		Attendance allowances	4.0	3.0
			62.9	**41.6**
Dr. Ursula Lipowsky	Member of the • Supervisory Board • Finance and Audit Committee	Fixed remuneration	30.0	30.0
		Variable remuneration	29.0	29.9
		Remuneration for committee work	15.0	15.0
		Attendance allowances	7.0	8.0
			81.0	**82.9**
Ass. jur. Otto Müller[2] (until 8 May 2019)	Member of the Supervisory Board	Fixed remuneration	–	10.7
		Variable remuneration	0.1	10.9
		Attendance allowances	–	2.0
			0.1	**23.6**
Dr. Michael Ollmann (since 8 May 2019)	Member of the Supervisory Board	Fixed remuneration	30.0	19.4
		Variable remuneration	28.9	19.2
		Attendance allowances	4.0	3.0
			62.9	**41.6**
Dr. Andrea Pollak	Member of the • Supervisory Board • Nomination Committee	Fixed remuneration	30.0	30.0
		Variable remuneration	29.0	30.0
		Remuneration for committee work	–	–
		Attendance allowances	4.0	5.0
			63.0	**65.0**
Dr. Immo Querner[3] (until 8 May 2019)	Member of the Supervisory Board	Fixed remuneration	13.3	30.7
		Variable remuneration	9.5	31.0
		Attendance allowances	2.0	5.0
			24.8	**66.7**
Dr. Erhard Schipporeit	Member of the • Supervisory Board • Standing Committee	Fixed remuneration	30.0	30.0
		Variable remuneration	29.0	30.0
		Remuneration for committee work	7.5	7.5
		Attendance allowances	5.0	8.0
			71.5	**75.5**
Maike Sielaff[2] (until 8 May 2019)	Member of the Supervisory Board	Fixed remuneration	–	10.7
		Variable remuneration	0.1	10.9
		Attendance allowances	–	2.0
			0.1	**23.6**
Dr. Klaus Sturany (until 7 May 2018)	Deputy Chairman of the • Supervisory Board Member of the • Standing Committee	Fixed remuneration	–	–
		Variable remuneration	–	0.2
		Remuneration for committee work	–	–
		Attendance allowances	–	–
			–	**0.2**
Total			**876.3**	**935.9**

[1] Amounts excluding reimbursed VAT
[2] Employee representative
[3] Including supervisory board remuneration and remuneration for committee work as well as advisory board remuneration received from entities affiliated with the Group

The individualised presentation of the remuneration shows the expense charged to the financial year in question. Since the remuneration for a financial year becomes due at the end of the Annual General Meeting that ratifies the acts of the Supervisory Board for the financial year, the relevant reserve allocations for the variable remuneration are recognised allowing for any fractional amounts. Value-added tax payable upon the remuneration is reimbursed by the company.

In the year under review no payments or benefits were granted to members of the Supervisory Board in return for services provided individually outside the committee work described above, including for example consulting or mediation services, with the exception of the remuneration paid to employee representatives on the basis of their employment contracts.

Loans to members of the management boards and contingent liabilities

In order to avoid potential conflicts of interest, Hannover Rück SE or its subsidiaries may only grant loans to members of the Executive Board or Supervisory Board or their dependants with the approval of the Supervisory Board.

In 2020 no loan relationships existed with members of the Executive Board or Supervisory Board of Hannover Rück SE, nor did the company enter into any contingent liabilities for members of the management boards.

Securities transactions and shareholdings (directors' dealings)

Dealings in shares, options and derivatives of Hannover Rück SE engaged in by members of the Executive Board or Supervisory Board or by other persons with managerial functions who regularly have access to insider information concerning the company and who are authorised to take major business decisions – as well as such dealings conducted by certain persons closely related to the aforementioned individuals – in excess of EUR 5,000 are to be reported. No reportable transactions took place in the 2020 financial year.

Members of the Supervisory Board and Executive Board of Hannover Rück SE as well as their spouses or registered partners and first-degree relatives hold less than 1.0% of the issued shares. The total holding as at 31 December 2020 amounted to 0.0009% (0.0009%) of the issued shares, i.e. 1,115 (1,125) shares.

Remuneration of staff and senior executives

Structure and system

The remuneration scheme for senior executives below the Executive Board (management levels 2 and 3) and for key function holders in Germany belonging as a matter of principle to the ranks of senior executives consists of a fixed annual salary and a system of variable remuneration. This is comprised of a short-term variable remuneration component, the annual cash bonus and a long-term share-based remuneration component, the Share Award Plan. This variable remuneration has been uniformly applied worldwide since 1 January 2012 to all Group senior executives (i.e. Managing Directors, Directors and General Managers). As part of the reorientation of the remuneration system for senior executives the Share Award Plan of the Executive Board was consciously extended to include management levels 2 and 3. Given that at the same time the stock appreciation rights plan for senior executives was cancelled with effect from the 2012 allocation year, this means that a uniform share-based remuneration component has been maintained for the Executive Board and senior executives alike.

Members of staff on the levels of Chief Manager, Senior Manager and Manager are also able to participate in a variable remuneration system through the Group Performance Bonus (GPB). The Group Performance Bonus (GPB) is a remuneration model launched in 2004 that is linked to the success of the company. This tool is geared to the minimum return on equity of 750 basis points above the risk-free interest rate and the return on equity actually generated. For those participating in the GPB 14.15 monthly salary payments are guaranteed; a maximum of 16.7 salary payments is attainable.

The group of participants and the total number of eligible participants in the variable remuneration system of Hannover Re are set out in the following table.

Measurement of variable remuneration for senior executives

The measurement of the variable remuneration is based on three elements: Group net income, targets in the Property & Casualty and Life & Health business groups and individual targets. The weighting of the elements is dependent upon whether responsibility is carried in a treaty/regional department or in a service department. In the treaty/regional departments the measurement of the variable remuneration is based on weightings of 20% for Group net income, 40% for goal attainment in the respective Property & Casualty or Life & Health business group and 40% for individual goal attainment. In service departments the variable remuneration is based on Group net income and individual targets with a corresponding weighting of 40% and 60%. The degree of goal attainment is defined for both the Group net income and the business groups. Individual targets and the degree of goal attainment are agreed between the senior executive and their supervisor.

The Group net income is measured by the three-year average return on equity (RoE) of the Hannover Re Group above the risk-free interest rate. Goal attainment is calculated as follows: for each individual financial year of the last three financial years it is calculated by how many percentage points the RoE of the Hannover Re Group exceeds the risk-free interest rate. The average of these three differences determines the three-year average RoE above the risk-free interest rate. The risk-free interest rate is the average market interest rate over the past five years for 10-year German government bonds.

If the three-year average RoE above the risk-free interest rate reaches the expected minimum return on equity of 750 basis points, goal attainment stands at 85%. Goal attainment of 100% is recorded at 882 basis points. The maximum possible goal attainment is 200%. A lower limit is placed on goal attainment of -50% (penalty) for management level 2 (Managing Director) and 0% for management level 3 (Director and General Manager).

Group of participants and total number of eligible participants in variable remuneration systems – Valid: 31 December 2020 **M 85**

Participants		Variable remuneration system	Number of eligible participants in the variable remuneration system
Managing Director	Management level 2	Cash bonus and Share Award Plan	**Hannover Re Group** All 152 Group senior executives worldwide receive a cash bonus upon corresponding goal attainment and participate in the Share Award Plan.
Director	Management level 3		
General Manager			
Chief Manager		Group Performance Bonus (GPB)	**Head office Hannover** Of the altogether 1,407 employees at Hannover head office (incl. 90 senior executives), 839 staff (excl. seconded employees) are GPB-eligible.
Senior Manager			
Manager			

The measurement of the business group targets – which in the case of the treaty/regional departments accounts for 40% of overall goal attainment – is geared to the economic value created. The Excess Return on Capital Allocated (xRoCA) of the business group encompassing the respective area of responsibility, namely Property & Casualty reinsurance or Life & Health reinsurance, is therefore taken as a one-year measurement basis. The xRoCA describes the IVC in relation to the allocated capital and shows the relative excess return generated above and beyond the weighted cost of capital. Goal attainment of 100% exists if the xRoCA in Property & Casualty reinsurance reaches 2% and the xRoCA in Life & Health reinsurance reaches 2%. Negative performance contributions are excluded; the minimum goal attainment is 0%. The maximum possible goal attainment is 150%.

Individual targets are agreed and measured for a period of one year. The degree of goal attainment is between 0% and 100%.

Amount and payment of variable remuneration for senior executives

The overall degree of goal attainment determines the amount of variable remuneration including share awards. On management level 2 (Managing Director) 60% of the variable remuneration is paid out annually in cash and 40% is granted in the form of share awards. On management level 3 (Director and General Manager) the variable remuneration is split into 65% cash payment and 35% granted as share awards.

On management level 3 (Director and General Manager), the minimum variable remuneration amounts to EUR 0 based on the premise that the degree of attainment for all goals is 0%. For management level 2 (Managing Director) in treaty/regional departments, the minimum limit for the variable remuneration is set at -10% if the degree of goal attainment for Group net income is -50% while at the same time goal attainment of 0% is determined for the divisional targets and individual targets. For management level 2 (Managing Director) in service departments, -20% of the variable remuneration is possible as the lower limit if the degree of goal attainment for Group net income is -50% and at the same time goal attainment of 0% is determined for the individual targets.

In view of the fact that outperformance of up to 200% is possible for Group net income and up to 150% for business group targets, a maximum total degree of goal attainment of 140% can be attained in both treaty/regional departments and service departments. Given outperformance of all targets, a maximum of 140% of the variable remuneration can therefore be attained on management levels 2 and 3.

Allocation and payment of share awards to senior executives

The total number of share awards allocated is determined according to the value per share of Hannover Re. This value is arrived at from the average of the closing prices of the shares in a period extending from 20 trading days before to 10 trading days after the meeting of the Supervisory Board at which the consolidated financial statement is approved. The number of share awards is established by dividing the specified portion of the total bonus (40% or 35%) by the value per share, rounded up to the next full share.

Following expiry of a vesting period of four years the value of one Hannover Re share calculated at the disbursement date is paid out for each share award. The value of the Hannover Re share is again determined from the average of the closing prices of the shares in a period from 20 trading days before to 10 trading days after the meeting of the Supervisory Board that approves the consolidated financial statement. In addition, a sum in the amount of the dividend is paid out for each share award, insofar as dividends were distributed to shareholders. The level of the dividend payment is the sum total of all dividends per share paid out during the period of the share awards multiplied by the number of share awards.

In the case of the allocation and payment of share awards to participants in the Share Award Plan who are located abroad, the rate of exchange used to convert the average share price is the average of the relevant exchange rate in a period from 20 trading days before to 10 trading days after the meeting of the Supervisory Board that approves the consolidated financial statement. For payment of the dividend to participants in the Share Award Plan who are located abroad, the rate of exchange used to convert the dividend per share is the average of the relevant exchange rate in a period from 20 trading days before to 10 trading days after the Annual General Meeting that approves the dividend payment for the financial year just ended.

The cash bonus for the 2019 financial year was paid out in June 2020. The share awards for the 2019 financial year were also allocated in June 2020; they will be paid out in the spring of 2024 including dividends paid for the 2019, 2020, 2021 and 2022 financial years.

Outlook

Forecast

- Group net income guidance: EUR 1.15 billion to EUR 1.25 billion
- Gross premium for the Group expected to grow by around 5%
- Property and casualty reinsurance: target for combined ratio of no more than 96%
- Major loss budget for property and casualty reinsurance boosted to EUR 1.1 billion
- Life and health reinsurance: sustained strong demand for financial solutions
- Return on investment target of roughly 2.4% for assets under own management

Economic developments

Global economy

In the assessment of the Kiel Institute for the World Economy (IfW), the positive underlying trend remains on an upward trajectory, even though the second wave of infections and associated measures put in place to contain it put the brakes on the economic recovery in the third quarter of 2020. The Kiel-based experts expect output to grow by 6.1% in 2021 (previous year: -3.8%), with economic activity forecast to normalise progressively as more of the population is vaccinated.

As pandemic measures are lifted, manufacturing industries are likely to see an uptick. More contact-intensive sectors – such as tourism, long-distance transportation and the entertainment industry – are expected to bounce back appreciably in the second half of the year. Consumption should also pick up strongly after limited opportunities in the early months of the year.

Governments will support the recovery with further fiscal stimuli. In the United States a comprehensive package of supports is anticipated this spring. In Europe the "NextGenerationEU" recovery fund is to be rolled out with a total volume of 2.5% of the EU's gross domestic product.

The change of administration in the US should further improve the general trading climate, especially between the United States and Europe. It is nevertheless anticipated that the new US administration will continue to put a heavy emphasis on national interests. In Europe, Brexit poses an economic downside risk. The consequences of the split for two such closely linked economic areas will only become apparent in the coming months.

Growth in gross domestic product (GDP) **M 86**

in %	2020 (forecast from previous year)	2020 (provisional calculation)	2021 (forecast)
Economic areas			
World economy	3.1	(3.8)	6.1
Eurozone	1.2	(7.2)	4.9
Selected countries			
United States	1.5	(3.6)	3.7
China	5.9	1.8	9.2
India	6.3	(7.9)	11.6
Japan	0.6	(5.2)	3.7
Germany [1]	1.1	(5.2)	3.1

[1] seasonally adjusted

Sources: Kiel Institute for the World Economy; figures for Germany are adjusted for price, calendar and seasonal effects.

United States

The US economy will put the economic blip of the past year behind it in 2021 and should, according to IfW estimates, achieve growth of 3.7% (-3.6%) on the back of further government actions to stimulate economic activity. The propensity towards private consumption should remain intact and slightly outpace the previous year with growth of 4%. Capital investment will likely move back into clearly positive territory (+5.2%) after a decline in the year just ended. The same is true of imports and exports, which should rise by 8.8% and 8.0% respectively after the double-digit decline seen in the previous year. As the economy stabilises, the overall state of the labour market will also pick up: the jobless rate should drop from 8.1% to 5.7%, albeit still far from the pre-crisis level of 2019 (3.7%).

Europe

Reflecting tighter measures taken by countries to contain the pandemic, IfW estimates suggest that output in the Eurozone will contract again during the six winter months of 2020/2021, only to surge sharply over the rest of the year. Experts anticipate a growth rate of 4.9% (-7.2%) for 2021. Expenditures for private consumption are forecast to show a sizeable gain of 5.1% after a marked decline in the previous year (-8.3%). Governments will step up their spending and companies are expected to boost capital investment by 8.5% (-8.4%). Foreign trade is also set to pick up again: imports are expected to grow by 10.1% and exports by 10.3%, following contractions that almost reached double-digits in the previous year. The state of the employment market will likely deteriorate slightly year-on-year, which should push the jobless rate up by 0.3 percentage points to 8.4%. Inflation will likely rise from 0.3% to 1.7% as the economy gathers momentum, thereby surpassing the level of 2019.

After the massive slump experienced in the previous year (-11.3%), the economy in the United Kingdom should also switch over to recovery mode – with growth forecast to reach 7.2%. In absolute terms, though, the performance indicators for the former EU member are set to remain well short of 2019 levels.

Germany

The German economy's recovery has been interrupted by the softer winter half-year, although what will probably be mild setbacks are not fundamentally any cause for concern. Most notably, foreign trade and industrial activity should be appreciably less impacted than they were a year ago. Similarly, supply chains have remained intact – unlike in the previous year. Growth of 3.1% is anticipated for the year as a whole (-5.2%).

Asia

Output in Asia is estimated to grow by 9.3% in 2021 (-1.6%), driven above all by India (+11.6%) and China (+9.2%). Yet the other Asian (emerging) economies should also enjoy clearly positive growth numbers. Industrial production in China was already posting rates of increase back above pre-crisis levels by last autumn. As the year progresses, the normalisation of economic development will also reach the service sectors that had been especially hard hit by the pandemic, such as transportation and hospitality.

Japan's growth rate in the current year will likely reach 3.7% (-5.2%), thereby making up for some of the previous year's contraction. The driving forces here will be private consumption (+3.3%) and government spending (+3.3%), but also the business sector. Capital investment, for example, is expected to grow by 3.1% and exports should be up by 6.6%.

Capital markets

The defining feature of 2021 will continue to be the course of the pandemic and its scope and impacts on economies around the world. Particularly at the start of the year, we anticipate widespread localised shutdowns affecting public life that will initially hamper economic recovery in individual sectors. The ongoing support from central banks and governments will serve as a key pillar of stability, although very close attention will have to be paid to whether these measures are conducive to inflationary tendencies, market overheating or indeed instances of countries becoming insolvent. Similarly, the reorganisation of supply chains may lead to a lasting restructuring of global trade. Furthermore, it should not be forgotten that even before the pandemic geopolitical and populist currents were fanning uncertainty on the markets. These will continue to be an influencing factor going forward.

We expect the advance of digitalisation to inject fresh, positive stimuli into the economy. As far as capital markets are concerned, we anticipate a continued low level of interest rates – facilitating the associated higher equity valuations and the appreciation of real asset classes. The economic climate will be additionally supported by catch-up effects in private consumption.

As a consequence of the unusual capital market constellations seen in recent years, the behaviour of capital market participants can no longer be explained by market fundamentals. With this in mind, we shall continue to invest major parts of our asset portfolio conservatively. At the same time, due consideration will be paid to the economic prospects offered by certain markets and countries by entering into commensurate risks. However, we are not planning any significant changes in our asset allocation. We shall continue to attach great importance to broad diversification. The interest rate risk will be tightly managed through as neutral a modified duration as possible.

Insurance industry

In 2021 the global insurance industry once again found itself faced with a myriad of sometimes considerable challenges, including first and foremost the ongoing Covid-19 pandemic. The associated uncertainties had lasting impacts on the insurance industry and its business operations. Yet the industry is going into the new year with a mood of optimism. The increasing availability of coronavirus vaccines around the world and higher levels of savings are causes for hope in this respect. Catch-up effects are likely in life insurance. Along with a general boost to the digitalisation of the insurance industry from the pandemic, insurers and reinsurers are driving the development of flexible, tailored products and business models. At the same time, many companies are now actively integrating insurtechs – which are increasingly joining the market – into their business models as partners and identifying numerous potential avenues for new products.

In general terms, the digital transformation will evolve into a major driver of growth for the insurance industry. Due to the pandemic and far more widespread working from home, the acceptance of online offerings and digital communication tools has improved considerably. As digitalisation continues to make advances, customers' expectations as regards products and services are shifting markedly. In response, insurers are stepping up their management of customer contacts, focusing on service quality and developing new products.

Further areas that offer a host of opportunities for new products include the growing need to take out protection against the effects of climate change, increased political risks and the ever more important segment of cyber risks. In this context, the digital transformation of the industry is especially key in opening up new approaches to loss prevention. Going forward, it will result in the insurance industry partnering more widely with players from the technology sector.

On the investment side, the insurance industry remains preoccupied with the low level of interest rates, a situation which became even more acute in 2020. It remains the case that the Eurozone cannot be expected to turn its back on low rates any time soon. Hardest hit here are life insurers: they find themselves challenged to adjust their business models and develop new products tailored to market circumstances.

The (re)insurance industry remains under considerable pressure to take cost-cutting actions. Against this backdrop, efforts will continue to move forward with the digitalisation of business processes and their successful implementation. At the same time, the automation of back office processes and more flexible IT structures can open up further scope to improve customer care.

Property & Casualty reinsurance

Overview

In the property and casualty reinsurance treaty renewals as at 1 January 2021 expectations of sustained hardening on the reinsurance market were confirmed. Hannover Re was able to write significantly more business at sometimes appreciably better prices and conditions. The price increase in the renewed business averaged 5.5%, with prices in non-proportional reinsurance rising considerably more sharply (8.8%) than those in proportional reinsurance, which improved by 4.4%. Yet here, too, the marked price gains that we are seeing on the primary insurance side in many lines should progressively support rates in reinsurance business.

Adjusted for exchange rate effects, we grew our premium volume in traditional property and casualty reinsurance on an underwriting-year basis by altogether 8.5% to EUR 8,414 million (EUR 7,049 million) as at 1 January 2021. On this date 67% of the traditional property and casualty reinsurance portfolio (excluding facultative reinsurance, ILS business and structured reinsurance) was up for renewal.

Improved prices and conditions were similarly obtained in the reinsurance of natural catastrophe risks. Price increases of around 10% could be achieved in US catastrophe business, especially under programmes that had suffered losses. In Europe significant price increases were for the most part only attainable under loss-affected programmes, while prices for loss-free programmes were stable or slightly higher. Here too, though, the rate level improved on the previous year's renewals. We increased our risk appetite for coverage of natural catastrophe risks for the 2021 financial year to 18.0% of the economic capital, compared to 16.8% in the previous year.

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

Property & Casualty reinsurance: Forecast development for 2021 M 87

	Volume[1]	Profitability[2]
Regional Markets		
Americas[3]	↗	+
APAC[3]	→	+/–
EMEA (including CIS)[3]	↗	+
Worldwide Markets		
Facultative Reinsurance	↗	+
Structured Reinsurance and Insurance-Linked Securities	↗	++
Aviation and Marine	→	+
Agricultural Risks	↘	+
Credit, Surety and Political Risks	↗	+/–

1 In EUR, development in original currencies can be different
2 ++ = significantly above the cost of capital
+ = above the cost of capital
+/– = cost of capital earned
– = below the cost of capital
3 All lines of business except those stated separately

Regional Markets

Americas

The rather heavy losses incurred in prior years necessitated further rate increases across all lines in **North America** in 2020. In the 1 January 2021 renewals we secured appreciable improvements in prices and conditions. It is our expectation that market conditions will continue to improve for the 2021 financial year, with the result that steady growth and better profitability can be anticipated. The uncertainties caused by Covid-19 are leading to further business opportunities for Hannover Re because stable and financially robust reinsurers are increasingly in demand.

In **Latin America** and the Caribbean we continue to see heightened awareness of the exposure to natural catastrophes and political risks. Most notably, loss-impacted programmes and treaties with catastrophe exposure in Chile already recorded appreciable price rises in the renewals as at 1 January 2021. Large parts of the portfolio in Latin America are, however, only renewed by Hannover Re in the course of the year. To this extent, we are looking to a further improvement in conditions on the reinsurance market.

Asia-Pacific

In the **Asia-Pacific** region we anticipate substantial growth rates both in property and casualty reinsurance and in the area of health and provision over the medium and long term. Following the launch of our Asia-Pacific growth initiative and with the price increases and general improvements in conditions expected for 2021, Hannover Re should be superbly placed to share in the further above-average growth of the Asia-Pacific region.

As part of our strategic growth initiative, underwriting responsibility for the property and casualty reinsurance business in Asia previously written out of Hannover was reassigned to Asia. From 2021 onwards the branches in Kuala Lumpur, Malaysia and Shanghai will then – in concert with the network of regional offices – represent our interests in the Asia-Pacific at all locations.

Hannover Re views the renewals as at 1 January 2021 and 1 April 2021 with optimism, although price movements in Asia will likely vary from region to region depending on the burden of losses.

The major reinsurers have used the most recent events to recalibrate their risk models and hence their assessment of the Japanese typhoon risk and their exposures. This will likely lead to further significant price increases in 2021 and should help bring about technical adequacy, which constitutes the foundation for reinsurers' long-term support for this market.

In Australia there remains a need for improved conditions in catastrophe business, especially for aggregate covers and lower programme layers, owing to significant and repeated frequency losses in recent years.

Europe, Middle East and Africa

In the markets of **Continental Europe** we achieved broadly higher prices and increased our margins in the 1 January 2021 renewals. This was especially true of programmes that were substantially impacted by Covid-19. Demand for reinsurance is on a sustained high level and we anticipate further market hardening and rising pressure on prices.

For 2021 Hannover Re expects significantly lower growth on the primary market in **Germany** compared to previous years. The pandemic-driven economic downturn has been felt particularly acutely in the SME segment. The impacts on business with private customers should therefore tend to be more limited. We further cemented our leading position in the 1 January treaty renewals. Overall, improved prices and conditions were obtained.

Opportunities in emerging segments such as telematics or cyber continue to support the favourable development of business. Activities undertaken by market leaders are putting the industry spotlight on the use of telematics, in particular. At the same time, the accelerated trend towards digitalisation is prompting an increased need for coverage of cyber risks, which will likely have positive implications for the development of this line over the medium term.

In the **United Kingdom, Ireland and the London Market** we achieved price increases in all major reinsurance lines in the treaty renewals as at 1 January 2021. Continued hardening is expected on the original market in 2021, especially for Lloyd's business. With further syndicates pulling out of the market and others facing restricted scope for growth in an improving market environment, additional upward pricing momentum is anticipated. We shall push for further price increases in all the main reinsurance lines. What is more, we are negotiating exclusions for pandemic risks in our treaties.

Our premium volume in the **Middle East** and in our retakaful business will probably remain stable, although the economic slowdown could also result in a modest decline. For 2021 we see some potential in business with private customers, not only in the Middle East and North Africa but also in Asia. Profitability is expected to rise on the back of improved rates and selective underwriting. In addition, the diversification between property & casualty reinsurance and life & health reinsurance should improve.

In **South Africa** the 1 January 2021 treaty renewals brought improved conditions, although the market remains highly competitive for reinsurers writing South African business. Through our managing general agents (MGAs) and Compass Insure we are able to skirt this competition to some extent, thereby enabling us to continue writing margin-driven open market business.

Worldwide Markets

Facultative Reinsurance

We expect ongoing stability in the current direction of the **facultative reinsurance** market over the coming 12 to 18 months. In the 2021 financial year we anticipate sustained strong demand for facultative reinsurance.

Considerable growth potential is identified in Asia. We intend to step up our participation in the associated business opportunities and will expand our activities in the region accordingly. Yet in other regions, too, we shall press ahead on our growth track.

Sustainability is an increasingly prominent issue that is very much in keeping with our corporate strategy and its values. At the heart of our approach is our striving to avoid facilitating non-sustainable practices in economic activity through our reinsurance support.

Structured Reinsurance and Insurance-Linked Securities

In view of the adoption and strengthening of risk-based models for calculating solvency requirements not only within but also outside the European Union, we expect further growth in demand in **structured reinsurance.** The extraordinary market conditions due to the Covid-19 pandemic are facilitating almost globally the further shift in this segment towards a provider market. Moreover, the growing pressure on our clients' profit margins around the world is generating a greater need for tailor-made reinsurance solutions designed to optimise their cost of capital. We expect the implementation of IFRS 17 to boost demand for solutions of this type.

In the area of **insurance-linked securities (ILS)** we anticipate rising demand over the long term. Investors are seeking a negative or minimal correlation with other financial investments and hence greater diversification. We are responding to this demand with a strong emphasis on service, offering individually tailored solutions – from collateralised reinsurance to the transformation of catastrophe bonds – for property and life reinsurance risks. Over the coming years we expect our ILS activities to deliver a positive and consistently rising profit contribution. The capital market also remains an important element in our own retrocession protection.

Aviation and Marine

In all segments of the primary market for **aviation** business we expect the rate increases seen so far to continue. However, the growth in the total premium will – just like developments on the exposure side – be crucially dependent on the further impacts of Covid-19 on the aviation market. In proportional reinsurance Hannover Re will participate directly in these developments; thanks to our conservative positioning in this market segment, we are looking to generate a good result considering the circumstances. We expect to push through additional rate increases for non-proportional covers.

Depending on the individual customer's loss experience and portfolio development, we were already able to obtain sometimes significant price increases with improved treaty conditions in **marine** business over the course of 2020. This trend was sustained in the treaty renewals as at 1 January 2021 and we are looking for an improved pricing structure combined with unchanged or slightly reduced exposure in marine and offshore reinsurance lines.

Agricultural Risks

We anticipate further growth in our portfolio of **agricultural risks.** The increasing need for agricultural commodities and foodstuffs as well as the more widespread prevalence of extreme weather events are generating stronger demand for corresponding reinsurance covers, particularly in emerging and developing markets. We engage both in traditional reinsurance and in intensified cooperation with our customers and partners on the development of innovative tools for primary insurance. Index-linked products and parametric covers offer growth potential. In addition, the more widespread implementation of public-private partnerships opens up new opportunities to write profitable business in markets that have still to establish themselves as well as to close protection gaps, especially in emerging and developing countries.

A promising initiative for our company in this respect is the cooperation entered into in 2019 with Global Parametrics, a provider of parametric covers, the Federal Ministry of Economic Cooperation and Development, Kreditanstalt für Wiederaufbau and the UK Department for International Development. Together, we have developed an innovative concept for the protection of climate risks in developing countries on the basis of parametric indices.

Credit, Surety and Political Risks

The effects of the global recession on covers for credit, surety and political risks will be reflected in increased loss expenditure depending on how long government support measures stay in place. It is to be expected that rising prices in primary insurance and reinsurance as well as risk-mitigating measures will offset this effect to some extent.

Moreover, the increased level of uncertainty in relation to further economic developments around the world will likely result in stronger demand for insurance and reinsurance protection. In the context of this trend, it is our expectation that premium growth will pick up again in the course of 2021 as government supports wind down and we are looking to book an improved result on the back of rising prices.

Life & Health reinsurance

For the 2021 financial year we anticipate further good business prospects in life and health reinsurance despite additional pandemic-related strains and fierce competition. As a further factor, the low interest rate environment is having an increasingly adverse impact on the investment income generated by the insurance industry – a scenario that opens up additional opportunities for financially robust reinsurers such as Hannover Re, including for example in the financial solutions segment. In our assessment, the issue of longevity is also set to become the focus of much closer attention. Along with declining interest rates, a major driver here is the exacting capital requirements placed on primary insurers and pension funds in connection with such business. In the reporting category Mortality and Morbidity Solutions, expenditures associated with the pandemic are again likely to prove a drag on profitability in life and health reinsurance in 2021.

Life & Health reinsurance: Forecast development for 2021 **M 88**

	Volume [1]	Profitability [2]
Financial Solutions	↗	++
Risk Solutions		
Longevity	↗	+
Mortality	↘	–
Morbidity	→	+/–

[1] In EUR, development in original currencies can be different
[2] ++ = significantly above the cost of capital
+ = above the cost of capital
+/– = cost of capital earned
– = below the cost of capital

In the context of the pandemic and the accompanying increased mortality we anticipate additional loss expenditures primarily in the United States, but also in Latin America, the United Kingdom and France. Positive one-time income from a restructuring measure in our US mortality business is expected to have an opposite effect to the pandemic-related strains. The business outlook in Germany will be crucially shaped by the even lower interest rate environment, the decline in business with traditional life insurance policies and the more exacting requirements placed on capital adequacy ratios. We expect this situation to drive a favourable business development, especially in the area of financial solutions. We similarly consider Asia to be a major growth region for the financial solutions and morbidity solutions segments. Special mention should be made here of China, where – as was already the case in recent years – we identify promising business potential for 2021. At the same time, we have an upbeat assessment of the Latin American market and anticipate healthy demand and good opportunities to write new business.

The business outlook in Germany will be crucially shaped by the even lower interest rate environment, the decline in business with traditional life insurance policies and the more exacting requirements placed on capital adequacy ratios. With this in mind, we expect our business to fare especially well in the area of financial solutions. We similarly consider Asia to be a major growth region for the financial solutions and morbidity solutions segments. Special mention should be made here of China, where – as was already the case in recent years – we identify promising business potential for 2021. At the same time, we have an upbeat assessment of the Latin American market and anticipate healthy demand and good opportunities to write new business.

Our automated underwriting systems will also continue to stimulate considerable interest among our customers as part of the progressive march towards digitalisation. Numerous new deployments of "hr | ReFlex" and "hr | Quirc" are currently in the pipeline. Moreover, lifestyle products that combine health-related aspects (such as fitness and nutritional habits) with insurance protection will come to have even more significant implications for the life insurance industry around the world going forward.

Our customers increasingly see Hannover Re no longer as just a pure risk carrier, but rather as an expert and financially strong partner that stands ready to support them with its worldwide know-how as they face up to a diverse range of issues.

Investments

Given the uncertainties associated with geopolitical developments and the pandemic, we shall continue to invest major parts of our asset portfolio conservatively. Nevertheless, quite aside from the issues around sovereign debt, we also envisage appropriate risk-taking in response to the further decline in interest rates against the backdrop of a likely acceleration effect triggered by gradual containment of the pandemic's impacts. Our emphasis on broad diversification will remain in place. By maintaining the most neutral possible modified duration, we shall ensure that the interest rate risk is tightly managed.

The further enlargement of the asset portfolio, supported by a good operating cash flow from the favourable development of business, is expected to have a positive effect on investment income. The interest rate declines observed during the reporting period in our main currency areas will, however, prove challenging in this respect. In view of the low returns on high-quality investments, we shall press ahead with our activities relating to products offering attractive credit spreads. With this in mind, we shall somewhat expand the portfolio of real assets or financing of such asset classes, although we shall maintain a particular focus on intact risk-return profiles going forward. We also intend to selectively grow our exposure, as appropriate, to the areas of private equity and emerging markets.

If the valuation levels of listed equities experience sharp corrections or stabilise, we are prepared to moderately increase the holding of listed equities and equity funds.

Given the protracted low level of interest rates, we anticipate an average return of 2.4% on our investments for 2021.

Outlook for the 2021 financial year

Despite the continued uncertainties surrounding the course of the pandemic, it is our expectation that Covid-19 will have significantly less influence on the development of Hannover Re's business in the 2021 financial year.

Based on sustained improvement in prices and conditions in primary insurance and reinsurance, we are looking to book growth of around 5% in gross premium for total business at constant exchange rates.

Based on the highly satisfactory treaty renewals as at 1 January 2021, we expect gross premium in **property and casualty reinsurance** to grow by at least 5% adjusted for exchange rate effects in the current financial year. We shall retain unchanged our selective underwriting policy, under which in large part we write only business that satisfies our margin requirements.

Thanks to our good rating, our long-standing stable customer relationships and our low expense ratio, we should be able to generate another good result, provided the burden of large losses remains within our expectations. We are aiming for a combined ratio of no more than 96%.

In **life and health reinsurance** we expect to generate growth of at least 3% in gross premium for the current financial year based on constant exchange rates. The value of new business should amount to at least EUR 250 million.

With regard to the IVC targets that we use to map economic value creation, it remains our expectation that a minimum xRoCA of 2% will be generated for property and casualty reinsurance and for life and health reinsurance.

In view of the expected positive cash flow that we generate from the technical account and the investments themselves, and assuming roughly stable exchange rates and interest rate levels, our asset portfolios should continue to grow. We are looking to deliver a return on investment of around 2.4% for 2021.

For the 2021 financial year we again expect to achieve a return on equity above our minimum target, which we define as an additional 900 basis points above the five-year average return on ten-year German government bonds. As far as the solvency ratio is concerned, we continue to anticipate a level in excess of our minimum 200% target.

Group net income is expected to be in the range of EUR 1.15 billion to EUR 1.25 billion. This is subject to the proviso that large loss expenditure does not significantly exceed the budgeted level of EUR 1.1 billion and assumes that there are no unforeseen distortions on capital markets.

Hannover Re anticipates an unchanged payout ratio for the ordinary dividend in the range of 35% to 45% of its IFRS Group net income. The ordinary dividend will be supplemented by payment of a special dividend in light of capital management considerations if the comfortable level of capitalisation remains unchanged and Group net income is in line with expectations.

Consolidated financial statements

Consolidated balance sheet as at 31 December 2020

Assets

in EUR thousand	Notes	31.12.2020	31.12.2019
Fixed-income securities – held to maturity	6.1	185,577	223,049
Fixed-income securities – loans and receivables	6.1	2,532,146	2,194,064
Fixed-income securities – available for sale	6.1	38,851,723	38,068,459
Fixed-income securities – at fair value through profit or loss	6.1	105,711	578,779
Equity securities – available for sale	6.1	378,422	29,215
Other financial assets – at fair value through profit or loss	6.1	234,689	235,019
Investment property	6.1	1,589,238	1,749,517
Real estate funds	6.1	582,296	534,739
Investments in associated companies	6.1	361,617	245,478
Other invested assets	6.1	2,794,016	2,211,905
Short-term investments	6.1	327,426	468,350
Cash and cash equivalents	6.1	1,278,071	1,090,852
Total investments and cash under own management		**49,220,932**	**47,629,426**
Funds withheld	6.2	9,659,807	10,948,469
Contract deposits	6.3	298,344	325,302
Total investments		**59,179,083**	**58,903,197**
Reinsurance recoverables on unpaid claims	6.7	1,883,270	2,050,114
Reinsurance recoverables on benefit reserve	6.7	192,135	852,598
Prepaid reinsurance premium	6.7	165,916	116,176
Reinsurance recoverables on other technical reserves	6.7	1,106	9,355
Deferred acquisition costs	6.4	2,857,071	2,931,722
Accounts receivable	6.4	5,605,803	5,269,792
Goodwill	6.5	80,965	88,303
Deferred tax assets	7.5	597,986	442,469
Other assets	6.6	858,170	640,956
Accrued interest and rent		18,264	15,414
Assets held for sale	4.4	–	36,308
Total assets		**71,439,769**	**71,356,404**

Liabilities

in EUR thousand	Notes	31.12.2020	31.12.2019
Loss and loss adjustment expense reserve	6.7	33,929,230	32,996,231
Benefit reserve	6.7	7,217,988	9,028,000
Unearned premium reserve	6.7	5,070,009	4,391,848
Other technical provisions	6.7	701,577	673,221
Funds withheld	6.8	582,316	1,157,815
Contract deposits	6.9	3,255,453	3,581,057
Reinsurance payable		1,777,761	1,505,680
Provisions for pensions	6.10	229,252	201,952
Taxes	7.5	132,736	191,706
Deferred tax liabilities	7.5	2,731,648	2,189,372
Other liabilities	6.11	541,107	623,075
Financing liabilities	6.12	3,431,276	3,461,968
Total liabilities		**59,600,353**	**60,001,925**
Shareholders' equity			
Common shares	6.13	120,597	120,597
Nominal value: 120,597 Conditional capital: 60,299	6.13		
Additional paid-in capital		724,562	724,562
Common shares and additional paid-in capital		**845,159**	**845,159**
Cumulative other comprehensive income			
Unrealised gains and losses on investments		2,275,936	1,287,907
Cumulative foreign currency translation adjustment		(330,693)	385,153
Changes from hedging instruments		(8,678)	(1,276)
Other changes in cumulative other comprehensive income		(83,792)	(66,077)
Total other comprehensive income		**1,852,773**	**1,605,707**
Retained earnings		8,297,114	8,077,123
Equity attributable to shareholders of Hannover Rück SE		**10,995,046**	**10,527,989**
Non-controlling interests	6.14	844,370	826,490
Total shareholders' equity		**11,839,416**	**11,354,479**
Total liabilities		**71,439,769**	**71,356,404**

Consolidated statement of income 2020

in EUR thousand	Notes	1.1.–31.12.2020	1.1.–31.12.2019
Gross written premium	7.1	24,765,462	22,597,640
Ceded written premium		2,442,720	2,252,259
Change in gross unearned premium		(1,028,172)	(636,972)
Change in ceded unearned premium		61,345	21,317
Net premium earned		**21,355,915**	**19,729,726**
Ordinary investment income	7.2	1,243,075	1,380,815
Profit/loss from investments in associated companies	7.2	88,129	26,354
Realised gains and losses on investments	7.2	329,610	273,741
Change in fair value of financial instruments	7.2	63,971	72,855
Total depreciation, impairments and appreciation of investments	7.2	129,393	80,646
Other investment expenses	7.2	129,034	122,491
Net income from investments under own management		**1,466,358**	**1,550,628**
Income/expense on funds withheld and contract deposits	7.2	221,765	206,433
Net investment income		**1,688,123**	**1,757,061**
Other technical income	7.3	15	3,458
Total revenues		**23,044,053**	**21,490,245**
Claims and claims expenses	7.3	16,782,658	14,649,056
Change in benefit reserves	7.3	(103,487)	10,793
Commission and brokerage, change in deferred acquisition costs	7.3	5,109,528	4,805,447
Other acquisition costs		4,466	3,956
Administrative expenses	7.3	478,182	480,084
Total technical expenses		**22,271,347**	**19,949,336**
Other income	7.4	823,391	668,389
Other expenses	7.4	382,022	356,123
Other income/expenses	7.4	441,369	312,266
Operating profit/loss (EBIT)		**1,214,075**	**1,853,175**
Financing costs	6.12	90,204	87,078
Net income before taxes		**1,123,871**	**1,766,097**
Taxes	7.5	205,086	392,731
Net income		**918,785**	**1,373,366**
thereof			
Non-controlling interest in profit and loss	6.14	35,712	89,199
Group net income		**883,073**	**1,284,167**
Earnings per share (in EUR)	**8.5**		
Basic earnings per share		7.32	10.65
Diluted earnings per share		7.32	10.65

Consolidated statement of comprehensive income 2020

in EUR thousand	1.1.–31.12.2020	1.1.–31.12.2019
Net income	**918,785**	**1,373,366**
Not reclassifiable to the consolidated statement of income		
Actuarial gains and losses		
Gains (losses) recognised directly in equity	(28,342)	(21,231)
Tax income (expense)	9,020	6,818
	(19,322)	**(14,413)**
Changes from the measurement of associated companies		
Gains (losses) recognised directly in equity	(272)	(149)
	(272)	**(149)**
Income and expense recognised directly in equity that cannot be reclassified		
Gains (losses) recognised directly in equity	(28,614)	(21,380)
Tax income (expense)	9,020	6,818
	(19,594)	**(14,562)**
Reclassifiable to the consolidated statement of income		
Unrealised gains and losses on investments		
Gains (losses) recognised directly in equity	1,547,846	1,438,957
Transferred to the consolidated statement of income	(235,899)	(157,243)
Tax income (expense)	(282,509)	(314,952)
	1,029,438	**966,762**
Currency translation		
Gains (losses) recognised directly in equity	(804,401)	201,360
Transferred to the consolidated statement of income	–	2,230
Tax income (expense)	78,208	(21,201)
	(726,193)	**182,389**
Changes from the measurement of associated companies		
Gains (losses) recognised directly in equity	(1,670)	2,641
Transferred to the consolidated statement of income	–	157
	(1,670)	**2,798**
Changes from hedging instruments		
Gains (losses) recognised directly in equity	(10,742)	7,545
Tax income (expense)	3,247	(2,544)
	(7,495)	**5,001**
Reclassifiable income and expense recognised directly in equity		
Gains (losses) recognised directly in equity	731,033	1,650,503
Transferred to the consolidated statement of income	(235,899)	(154,856)
Tax income (expense)	(201,054)	(338,697)
	294,080	**1,156,950**
Total income and expense recognised directly in equity		
Gains (losses) recognised directly in equity	702,419	1,629,123
Transferred to the consolidated statement of income	(235,899)	(154,856)
Tax income (expense)	(192,034)	(331,879)
	274,486	**1,142,388**
Total recognised income and expense	**1,193,271**	**2,515,754**
thereof		
Attributable to non-controlling interests	63,132	117,700
Attributable to shareholders of Hannover Rück SE	1,130,139	2,398,054

Consolidated statement of changes in shareholders' equity 2020

in EUR thousand	Common shares	Additional paid-in capital	Other reserves (cumulative other comprehensive income) Unrealised gains/losses	Currency translation
Balance as at 1.1.2019	**120,597**	**724,562**	**346,509**	**201,369**
Effects from initial application of new standards	–	–	–	–
Balance as at 1.1.2019 (restated)	**120,597**	**724,562**	**346,509**	**201,369**
Net income	–	–	–	–
Total income and expense recognised directly in equity	–	–	941,398	183,784
Total recognised income and expense	**–**	**–**	**941,398**	**183,784**
Dividends paid	–	–	–	–
Changes in ownership interest with no change of control status	–	–	–	–
Changes in the consolidated group	–	–	–	–
Capital increases/additions	–	–	–	–
Capital repayments	–	–	–	–
Acquisition/disposal of treasury shares	–	–	–	–
Other changes recognised outside income	–	–	–	–
Balance as at 31.12.2019	**120,597**	**724,562**	**1,287,907**	**385,153**
Balance as at 1.1.2020	**120,597**	**724,562**	**1,287,907**	**385,153**
Net income	–	–	–	–
Total income and expense recognised directly in equity	–	–	988,029	(715,846)
Total recognised income and expense	**–**	**–**	**988,029**	**(715,846)**
Dividends paid	–	–	–	–
Changes in ownership interest with no change of control status	–	–	–	–
Capital increases/additions	–	–	–	–
Capital repayments	–	–	–	–
Acquisition/disposal of treasury shares	–	–	–	–
Balance as at 31.12.2020	**120,597**	**724,562**	**2,275,936**	**(330,693)**

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Continuation: Other reserves (cumulative other comprehensive income)		Retained earnings	Equity attributable to shareholders of Hannover Rück SE	Non-controlling interests	Total shareholders' equity
Hedging instruments	Other				
(3,160)	**(53,364)**	**7,440,278**	**8,776,791**	**765,237**	**9,542,028**
–	–	1,732	1,732	–	1,732
(3,160)	**(53,364)**	**7,442,010**	**8,778,523**	**765,237**	**9,543,760**
–	–	1,284,167	1,284,167	89,199	1,373,366
1,884	(13,179)	–	1,113,887	28,501	1,142,388
1,884	**(13,179)**	**1,284,167**	**2,398,054**	**117,700**	**2,515,754**
–	–	(633,135)	(633,135)	(54,117)	(687,252)
–	–	142	142	404	546
–	466	(466)	–	(3,192)	(3,192)
–	–	–	–	498	498
–	–	–	–	(40)	(40)
–	–	37	37	–	37
–	–	(15,632)	(15,632)	–	(15,632)
(1,276)	(66,077)	8,077,123	10,527,989	826,490	11,354,479
(1,276)	**(66,077)**	**8,077,123**	**10,527,989**	**826,490**	**11,354,479**
–	–	883,073	883,073	35,712	918,785
(7,402)	(17,715)	–	247,066	27,420	274,486
(7,402)	**(17,715)**	**883,073**	**1,130,139**	**63,132**	**1,193,271**
–	–	(663,284)	(663,284)	(45,553)	(708,837)
–	–	235	235	385	620
–	–	–	–	31	31
–	–	–	–	(115)	(115)
–	–	(33)	(33)	–	(33)
(8,678)	(83,792)	8,297,114	10,995,046	844,370	11,839,416

Consolidated cash flow statement 2020

in EUR thousand	1.1.–31.12.2020	1.1.–31.12.2019
I. Cash flow from operating activities		
Net income	918,785	1,373,366
Appreciation/depreciation	165,100	110,434
Realised gains and losses on investments	(329,610)	(273,741)
Change in fair value of financial instruments (through profit or loss)	(63,971)	(72,855)
Realised gains and losses on deconsolidation	–	(58,551)
Amortisation	106,644	20,427
Changes in funds withheld	111,208	284,970
Changes in contract deposits	(108,890)	(242,149)
Change in prepaid reinsurance premium	966,827	615,655
Change in tax assets/provisions for taxes	(65,753)	100,555
Change in benefit reserve	(691,060)	(422,776)
Change in claims reserves	2,867,687	2,284,285
Change in deferred acquisition costs	(85,261)	(568,095)
Change in other technical provisions	75,532	86,940
Change in accounts receivable / payable	(407,067)	(684,896)
Change in other assets and liabilities	(229,145)	(44,364)
Cash flow from operating activities	**3,231,026**	**2,509,205**

in EUR thousand	1.1.–31.12.2020	1.1.–31.12.2019
II. Cash flow from investing activities		
Fixed-income securities – held to maturity		
Maturities	34,895	26,876
Fixed-income securities – loans and receivables		
Maturities, sales	367,534	415,703
Purchases	(740,021)	(194,638)
Fixed-income securities – available for sale		
Maturities, sales	14,227,952	16,972,790
Purchases	(15,774,256)	(19,693,765)
Fixed-income securities – at fair value through profit or loss		
Maturities, sales	1,131,435	1,683,337
Purchases	(673,087)	(1,673,735)
Equity securities – available for sale		
Sales	25,719	6,425
Purchases	(269,983)	(4,124)
Other financial assets – at fair value through profit or loss		
Sales	148,255	125,772
Purchases	(127,143)	(99,358)
Other invested assets		
Sales	1,456,900	1,243,502
Purchases	(2,011,242)	(1,416,151)
Affiliated companies and participating interests		
Sales	279	215,662
Purchases	(73,958)	(212,088)
Real estate and real estate funds		
Sales	199,743	281,451
Purchases	(196,588)	(399,621)
Short-term investments		
Changes	106,915	(37,872)
Other changes	(77,924)	50,422
Cash flow from investing activities	**(2,244,575)**	**(2,709,412)**

in EUR thousand	1.1.–31.12.2020	1.1.–31.12.2019
III. Cash flow from financing activities		
Contribution from capital measures	31	498
Payment on capital measures	(112)	(40)
Structural change without loss of control	620	546
Dividends paid	(708,837)	(687,252)
Proceeds from long-term debts	509,001	833,007
Repayment of long-term debts	(526,712)	(38,541)
Other changes (net)	(33)	37
Cash flow from financing activities	**(726,042)**	**108,255**
IV. Exchange rate differences on cash	**(73,190)**	**31,295**
Cash and cash equivalents at the beginning of the period	**1,090,852**	**1,151,509**
Thereof cash and cash equivalents of the disposal group: previous year 78,594		
Change in cash and cash equivalents (I. + II. + III. + IV.)	**187,219**	**(60,657)**
Cash and cash equivalents at the end of the period	1,278,071	1,090,852
Supplementary information on the cash flow statement[1]		
Income taxes paid (on balance)	(268,859)	(299,630)
Dividend receipts[2]	176,068	214,599
Interest received	1,596,761	1,482,924
Interest paid	(439,884)	(296,925)

[1] The income taxes paid, dividend receipts as well as interest received and paid are included entirely in the cash flow from operating activities.
[2] Including dividend-like profit participations from investment funds.

Notes to the consolidated financial statements 2020

1. Company information

Hannover Rück SE and its subsidiaries (collectively referred to as the "Hannover Re Group" or "Hannover Re") transact all lines of property & casualty and life & health reinsurance. With gross premium of approximately EUR 24.8 billion, Hannover Re is the third-largest reinsurance group in the world. The company's network consists of more than 170 subsidiaries, affiliates, branches and representative offices worldwide with a total workforce of roughly 3,100. The Group's German business is conducted by the subsidiary E+S Rückversicherung AG. Hannover Rück SE is a European Company, Societas Europaea (SE), which has its registered office at Karl-Wiechert-Allee 50, 30625 Hannover, Germany, and is entered in the commercial register of Hannover County Court under the number HR Hannover B 6778. 50.2% (rounded) of the shares of Hannover Rück SE are held by Talanx AG, Hannover, which in turn is majority-owned – with an interest of 79% – by HDI Haftpflichtverband der Deutschen Industrie V.a.G. (HDI), Hannover.

2. Accounting principles

Hannover Rück SE and its subsidiaries are required to prepare a consolidated financial statement and group management report in accordance with § 290 German Commercial Code (HGB).

Pursuant to EU Regulation (EC) No. 1606/2002, the present consolidated financial statement and group management report of Hannover Re have been drawn up in accordance with the International Financial Reporting Standards (IFRS) that are to be applied within the European Union. In addition, we have made allowance for the regulations that are also applicable pursuant to § 315e Para. 1 German Commercial Code (HGB) and the supplementary provisions of the Articles of Association of Hannover Rück SE.

The consolidated financial statement reflects all IFRS in force as at 31 December 2020 as well as all interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC), application of which was mandatory for the year under review. IFRS 4.38 et seq. "Insurance Contracts" requires disclosures on the nature and extent of risks stemming from reinsurance contracts, while IFRS 7.31-42 "Financial Instruments: Disclosures" requires similar information on risks from financial instruments. Furthermore, § 315 Para. 2 Number 1 German Commercial Code (HGB) also contains requirements for insurance undertakings with regard to information on the management of underwriting and financial risks that is to be provided in the management report. The disclosures resulting from these requirements are included in the risk report. With regard to the disclosures required by IFRS 4 and IFRS 7, we would refer in particular to pages 93 to 97 "Underwriting risks in property and casualty reinsurance/Underwriting risks in life and health reinsurance" and to pages 98 to 102 "Market risks" respectively. We have dispensed with an additional presentation of the same content in the notes. In order to obtain a comprehensive overview of the risks to which Hannover Re is exposed it is therefore necessary to consider both the risk report and the relevant information in the notes. We refer the reader accordingly to the corresponding remarks in the risk report and the notes.

In view of the fact that reinsurance contracts, in conformity with IFRS 4 "Insurance Contracts", are recognised according to the pertinent provisions of United States Generally Accepted Accounting Principles (US GAAP) as applicable on the date of initial application of IFRS 4 on 1 January 2005, we cite individual insurance-specific standards of US GAAP using the designation "Statement of Financial Accounting Standard (SFAS)" that was valid at that time.

All capital market-oriented companies in the EU are required by a regulation of the European Commission to publish their consolidated financial statements, among other financial reports, in the European Single Electronic Format (ESEF) with effect from 1 January 2020. The purpose of the regulation is to simplify reporting and facilitate the accessibility, analysis and comparability of the disclosures contained in the annual financial report. Hannover Re is publishing its consolidated financial statement as at 31 December 2020 in accordance with the provisions of the German ESEF Implementation Act.

The declaration of conformity required pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code has been submitted and, as described in the Declaration of the Executive Board regarding the Corporate Governance of the Company, made permanently available on the Hannover Re website.

The annual financial statements included in the consolidated financial statement were for the most part drawn up as at 31 December. Pursuant to IFRS 10 "Consolidated Financial Statements" there is no requirement to compile interim accounts for Group companies with diverging reporting dates because their closing dates are no earlier than three months prior to the closing date for the consolidated financial statement. Insofar as no interim accounts were drawn up, allowance has been made for the effects of significant transactions between the diverging reporting dates and the closing date for the consolidated financial statement.

The annual financial statements of all companies were drawn up in accordance with standard Group accounting and measurement rules pursuant to IFRS.

The consolidated financial statement was drawn up in euros (EUR), the amounts shown have been rounded to EUR thousands and – provided this does not detract from transparency – to EUR millions. Figures indicated in brackets refer to the previous year.

The present consolidated financial statement was released for publication by a resolution of the Executive Board on 8 March 2021.

New accounting standards or accounting standards applied for the first time

As a consequence of the reform of interest rate benchmarks – primarily Interbank Offered Rates (IBOR) – initiated by the G-20 countries, under which the existing reference rates are to be either redefined or replaced with alternative reference rates by the end of 2021, the IASB launched a two-phase project. The "Amendments to IFRS 9, IAS 39 and IFRS17: Interest Rate Benchmark Reform" were published in September 2019 as a product of Phase 1. The amendments to these standards were adopted by the EU in January 2020 and are effective for financial years beginning on or after 1 January 2020. The changes relate to the period until the actual interest rate benchmark transition and are intended to ensure that existing hedging relationships can continue and new ones be designated despite the anticipated replacement of various reference rates. In addition, relief is provided for testing effectiveness. Initial application of these changes had no implications for Hannover Re in the financial year.

In May 2020 the IASB issued "Amendment to IFRS 16 'Leases': Covid-19-Related Rent Concessions" in order to facilitate for lessees the accounting of concessions, e.g. deferral of rent payments and rent reductions, granted in connection with the outbreak of the coronavirus pandemic. The amendment is applicable to financial years beginning on or after 1 June 2020 and was adopted by the EU in October 2020. Earlier application, including in interim financial statement, is permitted. Hannover Re did not apply the amendment in the financial year.

In addition, the amendments to existing standards listed below were effective for the first time in the year under review and had no significant implications overall for the net assets, financial position or result of operations of Hannover Re.

- Amendments to IFRS 3 "Business Combinations"
- Amendments to IAS 1 and IAS 8: Definition of Material
- Amendments to References to the Conceptual Framework in IFRS Standards

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

In the context of Phase 2 of the Interest Rate Benchmark Reform project the IASB published "Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 Interest Rate Benchmark Reform" in August 2020. The amendments to these standards were adopted by the EU in January 2021 and are effective for financial years beginning on or after 1 January 2021. The changes address specific issues that may arise in connection with replacement of an existing interest rate benchmark with an alternative reference interest rate.

A separate implementation project was initiated to explore the implications of the IBOR reform for Hannover Re and ensure a smooth transition to alternative interest rate benchmarks. The investigation is conducted at the level of individual contracts. The implications for the measurement of financial assets and the corresponding adjustments that need to be made in the IT systems are also considered.

In addition to a status assessment, the effects on the accounting and financial reporting were analysed as at 31 December 2020 and our investment strategy was modified accordingly. Furthermore, Group-wide communication took place and we also communicated with counterparties and issuers. Since the transition to the new interest rate benchmarks is planned for the beginning of 2021, there are no measurement effects for the year under review. It should be pointed out that measurement effects may still arise in the case of certain assets in our portfolio even though the contractual terms do not make explicit reference to the reformed interest rate benchmarks – if the determination of their fair value draws on such reference interest rates.

At the reporting date Hannover Re's portfolio contained 225 contracts with a fair value of altogether EUR 691.9 million that make reference in their contractual terms to the interest rate benchmarks that are to be transitioned and will be affected by the interest rate benchmark transition. It is our assumption that the transition will not have any appreciable effects on the result.

Reference interest rate-based contracts N 06

IBOR rate (old)	Number of contracts	Fair value in EUR million
USD LIBOR	220	674.1
JPY LIBOR	1	7.8
SOFR (Secured overnight financing rate)	4	10.0
Total	225	691.9

With the publication of IFRS 17 "Insurance Contracts" in May 2017, the IASB issued a standard that replaces the existing transitional arrangements of IFRS 4 and for the first time establishes a single common framework for the recognition, measurement and disclosure of insurance contracts, reinsurance contracts and investment contracts with discretionary participation features. In addition, IFRS 17 requires extensive new disclosures in the notes.

The measurement model of IFRS 17 requires entities to measure groups of insurance contracts based on estimates of discounted future cash flows with an explicit risk adjustment for non-financial risks ("fulfilment cash flows") as well as a contractual service margin, representing the expected (i.e. unearned) profit for the provision of insurance coverage in the future.

Furthermore, the standard fundamentally changes the presentation in the consolidated statement of income and introduces the new concept of insurance revenue instead of the disclosure of gross written premium. Insurance revenue is reported when it is earned by recognising in each period the changes in the liability for providing coverage for which the insurance entity receives compensation as well as the part of the premiums that covers acquisition costs. Receipts and payments relating to savings components are not recognised as revenue or as profit or loss in the statement of income. Insurance finance income and expenses result from discounting effects and financial risks. In accordance with the transition choices offered by IFRS 17, for each portfolio of insurance contracts they may be recognised either in profit or loss in the statement of income or directly in equity.

Changes in assumptions that do not relate to interest rates or financial risks are not recognised directly in the statement of income but are booked against the contractual service margin and hence spread across the remaining coverage period. Recognition in profit or loss is only immediate in the case of those groups of insurance contracts that are expected to be loss-making.

Initial application of the standard was originally mandatory on a retrospective basis for annual reporting periods beginning on or after 1 January 2021; it has still to be endorsed by the EU.

In view of the considerable complexity of the rules and the associated implementation effort, the IASB published an exposure draft of proposed amendments to IFRS 17 in June 2019, including deferral of the date of the standard's initial application to annual reporting periods beginning on or after 1 January 2022 and other content-related changes. Based on this draft and having regard to additional content-related changes, the IASB issued "Amendments to IFRS 17" in June 2020, thereby deferring the date of initial application of the standard including the changes for another year, i.e. to financial years beginning on or after 1 January 2023.

The exemption from initial application of IFRS 9 "Financial Instruments" granted to insurance and reinsurance entities has similarly been extended until 1 January 2023, thereby continuing to facilitate first-time application of both standards at the same time. In this connection we would also refer to our remarks on IFRS 9 in this section.

Given that the standard affects Hannover Re's core business activity, major implications are expected for the consolidated financial statement. In view of the special significance of the new accounting rules, a multi-year implementation project was launched back in 2017 to explore the implications of the standard for the consolidated financial statement – including the interdependency with IFRS 9 – and the necessary implementation steps were defined and initiated. Based on the elaboration of the accounting foundations, the implementation of extensive adjustments to processes and systems that began in 2019 continued in the year under review. Further development and testing activities, including an analysis of the implications of the standard for Group financials, are planned for 2021. The effects on the consolidated financial statement cannot yet be quantified at the current time.

In July 2014 the IASB published the first version of IFRS 9 "Financial Instruments" (last amended in October 2017), which supersedes all previous versions of this standard and replaces the existing IAS 39 "Financial Instruments: Recognition and Measurement". The standard contains requirements governing classification and measurement, impairment based on the new expected credit loss impairment approach and general hedge accounting. The new classification requirements result in more financial instruments being measured at fair value through profit or loss. Initial mandatory application of the standard, which was endorsed by the EU in November 2016, is set for annual periods beginning on or after 1 January 2018. In September 2016, however, the IASB published "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts (Amendments to IFRS 4)" and in June 2020 "Amendments to IFRS 4: Extension of the Temporary Exemption from Applying IFRS 9". Under the deferral approach provided for in the amendments, entities whose predominant activity is issuing insurance and reinsurance contracts within the scope of IFRS 4 are granted an optional temporary exemption from recognising their financial instruments in accordance with IFRS 9 until probable entry into force of IFRS 17 on 1 January 2023. Hannover Re reviewed the application requirements based on the consolidated financial statement as at 31 December 2015 with a positive outcome and decided to make use of the deferral approach. Since the review of the application requirements there has been no change in business activity that would have necessitated a re-evaluation of the predominant activity.

Hannover Re primarily anticipates implications for the classification of financial instruments. The portfolio of financial instruments to be recognised at fair value through profit or loss will increase as a consequence of the new classification rules. In addition, the Group expects the new impairment model to have implications for debt instruments.

The IFRS 9 implementation project is running parallel to and in close coordination with the IFRS 17 implementation project. Disclosures regarding the fair values of financial instruments currently in the portfolio split according to the cash flow criterion as well as disclosures about the credit risks of securities that solely generate payments of principal and interest are provided in section 6.1 of the notes to the consolidated financial statement "Investments under own management". This information is intended to facilitate some comparability with entities that are already applying IFRS 9.

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

Further IFRS Amendments and Interpretations **N 07**

Published	Title	Initial application to annual periods beginning on or after the following date:
January/July 2020	Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current and Classification of Liabilities as Current or Non-current – Deferral of Effective Date	1 January 2023 (still to be endorsed by the EU)
May 2020	Amendments to IFRS 3 Business Combinations: Reference to the Conceptual Framework	1 January 2022 (still to be endorsed by the EU)
May 2020	Amendments to IAS 16 Property, Plant and Equipment: PP&E: Proceeds before Intended Use	1 January 2022 (still to be endorsed by the EU)
May 2020	Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts Costs of Fulfilling a Contract	1 January 2022 (still to be endorsed by the EU)
May 2020	Annual Improvements 2018–2020: IFRS 1, IFRS 9, IFRS 16, IAS 41	1 January 2022 (still to be endorsed by the EU)

3. Accounting policies

3.1 Summary of major accounting policies

Reinsurance contracts: IFRS 4 sets out basic principles for the accounting of insurance contracts. Underwriting business is to be subdivided into insurance and investment contracts. Contracts with a significant insurance risk are considered to be insurance contracts, while contracts without significant insurance risk are to be classified as investment contracts. The standard is also applicable to reinsurance contracts.

IFRS 4 contains fundamental rules governing specific circumstances, such as the separation of embedded derivatives and unbundling of deposit components, but it does not set out any more extensive provisions relating to the measurement of insurance and reinsurance contracts. In conformity with the basic rules of IFRS 4 and the IFRS Framework, our reinsurance business therefore continues to be recognised in accordance with the pertinent provisions of US GAAP (United States Generally Accepted Accounting Principles) as applicable on the date of initial application of IFRS 4 on 1 January 2005.

IFRS 4 "Insurance Contracts" represents the outcome of Phase I of the IASB project "Insurance Contracts" and constitutes a transitional arrangement. IFRS 17, which was issued by the IASB in May 2017, establishes binding principles for the recognition and measurement of insurance contracts effective for annual reporting periods beginning on or after 1 January 2021. With the amendments to IFRS 17 published in June 2019 and June 2020, the IASB ultimately adopted a deferral of the date of initial application to 1 January 2023 as well as further content-related amendments to the standard.

Financial assets: as a basic principle we recognise the purchase and sale of directly held financial assets including derivative financial instruments as at the settlement date. The recognition of fixed-income securities includes apportionable accrued interest.

Financial assets held to maturity are comprised of non-derivative assets that entail fixed or determinable payments on a defined due date and are acquired with the intent and ability to be held until maturity. They are measured at amortised cost. The corresponding premiums or discounts are recognised in profit or loss across the duration of the instruments using the effective interest rate method. An impairment loss is taken in the event of permanent impairment. Please refer to our comments on impairments in this section.

Loans and receivables are non-derivative financial instruments that include fixed or determinable payments on a defined due date, are not listed on an active market and are not sold at short notice. They are carried at amortised cost.

Premiums or discounts are deducted or added within the statement of income using the effective interest rate method until the amount repayable becomes due. An impairment loss is taken only to the extent that repayment of a loan is unlikely or no longer expected in the full amount. Please refer to our comments on impairments in this section.

Valuation models N 08

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

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

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

Establishment of the fair value of financial instruments carried as assets or liabilities: we establish the fair value of financial instruments carried as assets or liabilities using the methods and models described below. The fair value of a financial instrument corresponds to the amount that Hannover Re would receive or pay if it were to sell or settle the said financial instrument on the balance sheet date. Insofar as market prices are listed on markets for financial assets, their bid price is used; financial liabilities are valued at ask price. In other cases the fair values are established on the basis of the market conditions prevailing on the balance sheet date for financial assets with similar credit rating, duration and return characteristics or using recognised models of mathematical finance. Hannover Re uses a number of different valuation models for this purpose. The details are set out in the table above. Financial assets for which no publicly available prices or observable market data can be used as inputs (financial instruments belonging to fair value hierarchy level 3) are for the most part measured on the basis of proven valuations drawn up by knowledgeable, independent experts, e.g. audited net asset value, the plausibility of which has previously been subjected to systematic review. For further information please see our explanatory remarks on the fair value hierarchy in section 6.1 "Investments under own management".

Impairments: as at each balance sheet date we review our financial assets with an eye to the need to take impairments. Permanent impairments on all invested assets are recognised directly in the statement of income. In this context we take as a basis the same indicators as those subsequently discussed for fixed-income securities and securities with the character of equity. Qualitative case-by-case analysis is also carried out. IAS 39 "Financial Instruments: Recognition and Measurement" contains a list of objective, substantial indications for impairments of financial assets. In the case of fixed-income securities and loans reference is made, in particular, to the rating of the instrument, the rating of the issuer/borrower as well as the individual market assessment in order to establish whether they are impaired. With respect to held-to-maturity instruments as well as loans and receivables recognised at amortised cost, the level of impairment is arrived at from the difference between the book value of the asset and the present value of the expected future cash flows. The book value is reduced directly by this amount which is then recognised as an expense. With the exception of value adjustments taken on accounts receivable, we recognise impairments directly on the assets side – without using an adjustment account – separately from the relevant items. If the reasons for the write-down no longer apply, a write-up is made in income up to at most the original amortised cost in the case of fixed-income securities.

With respect to impairments on securities with the character of equity, IAS 39 "Financial Instruments: Recognition and Measurement" states, in addition to the aforementioned principles, that a significant or prolonged decrease in fair value below acquisition cost constitutes objective evidence of impairment. Hannover Re considers equity securities to be impaired under IAS 39 if their fair value falls significantly, i.e. by at least 20%, or for a prolonged period, i.e. at least nine months, below acquisition cost. In accordance with IAS 39 the reversal of impairment losses on equities to the statement of income once impairment has been taken is prohibited, as is adjustment of the cost basis. Impairment is tested in each reporting period using the criteria defined by Hannover Re. If an equity security is considered to be impaired on the basis of these criteria, IAS 39 requires that a value adjustment be recognised in the amount of the fair value less historical cost and less prior value adjustments, meaning that depreciation is taken on the fair value as at the closing date – if available, on the publicly quoted stock exchange price. We also apply this method to participations in funds that invest in private equity. In order to reflect the specific character of these funds (in this case initially negative yield and liquidity flows from the so-called "J curve" effect during the investment period of the funds), we take an impairment to net asset value as an approximation of the fair value for the first time after a two-year waiting period if there is a significant or prolonged decrease in value. If, however, significant changes in value occur within the funds during this period that are not attributable to the J curve effect in addition to the increased investment expenses, the resulting impairment is recognised directly as a write-down.

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

Other invested assets are for the most part recognised at nominal value. Insofar as such financial assets are not listed on public markets (e. g. participating interests in private equity firms), they are carried at the latest available net asset value as an approximation of the fair value. Loans included in this item are recognised at amortised cost.

Investments in associated companies are valued at equity on the basis of the proportionate shareholders' equity attributable to the Group. Further information is provided in section 4.1 "Consolidation principles".

Investment property is valued at cost less depreciation and impairment. Straight-line depreciation is taken over the expected useful life – at most 50 years. Under the impairment test the market value of investment property (recoverable amount) is determined using accepted valuation methods, compared with the book value and, where necessary, impairments are recognised. Maintenance costs and repairs are expensed. Value-enhancing expenditures are capitalised if they extend the useful life.

Cash and cash equivalents are carried at face value. Cash collateral that we have received for the hedging of positive fair values of derivatives is shown under other liabilities.

Repurchase agreements (repo transactions): fully collateralised, term repurchase agreements (repos) are entered into as a supplementary liquidity management tool. In this context the Group sells securities and at the same time commits to repurchase them at a later date for an agreed price. Given that the material risks and opportunities associated with the financial instruments remain within the Group, we continue to recognise these assets. The repurchase commitment arising out of the payment received is accounted for under "sundry liabilities"; any difference between the amount received for the transfer of the securities and the amount agreed for their repurchase is spread across the term of the repo using the effective interest rate method and shown in investment income.

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

Contract deposits: under this item we report receivables and liabilities under insurance contracts that satisfy the test of a significant risk transfer to the reinsurer as required by IFRS 4 "Insurance Contracts" but fail to meet the risk transfer required by US GAAP. IFRS 4 in conjunction with SFAS 113 requires insurance contracts that transfer a significant technical risk from the ceding company to the reinsurer to be differentiated from those under which the risk transfer is of merely subordinate importance. Since the risk transfer under the affected transactions is of subordinate importance, these contracts are recognised using the "deposit accounting" method and hence eliminated from the technical account. The compensation for risk assumption booked to income under these contracts is netted under other income/expenses. The payment flows resulting from these contracts are shown in the cash flow statement under operating activities.

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

Deferred acquisition costs principally consist of commissions and other variable costs directly connected with the acquisition or renewal of existing reinsurance contracts. These acquisition costs are capitalised and amortised over the expected period of the underlying reinsurance contracts. Deferred acquisition costs are regularly tested for impairment.

Reinsurance recoverables on technical reserves: shares of our retrocessionaires in the technical reserves are calculated according to the contractual conditions on the basis of the gross technical reserves. An appropriate impairment is taken to allow for objective substantial indications of credit risks that are based on an event after initial recognition and suggest impairment, insofar as this can be reliably measured.

Intangible assets: in accordance with IFRS 3 "Business Combinations" goodwill is not amortised; instead, impairments may be taken after an annual impairment test or as indicated. For the purposes of the impairment test, goodwill is to be allocated pursuant to IAS 36 "Impairment of Assets" to so-called "cash generating units" (CGUs). Each CGU to which goodwill is allocated should represent the lowest level on which goodwill is monitored for internal management purposes and may not be larger than a segment. Following allocation of the goodwill it is necessary to determine for each CGU the recoverable amount, defined as the higher of the value in use and the fair value less costs to sell. For impaired goodwill the recoverable amount is to be stated. The recoverable amount is to be compared with the book value of the CGU including goodwill. When the latter exceeds the recoverable amount, an impairment expense is to be recognised. For detailed information on the impairment method used and the goodwill recognised as at the balance sheet date, please see section 6.5 "Goodwill".

The other intangible assets include the expected profits from acquired life reinsurance portfolios. These are carried at the present value of future profits (PVFP) at time of acquisition, which is calculated as the present value of profits expected from the acquired blocks of business disregarding new business and tax effects. Amortisation is taken according to the periods of the underlying acquired contracts. The PVFP is regularly tested for impairment using a liability adequacy test and impairment losses are taken if necessary. In this regard please see section 3.2 "Major discretionary decisions and estimates". Separately identifiable intangible assets in connection with business combinations, such as customer base or contractual/legal rights, are also recognised under this item.

Purchased and proprietary software is recognised at acquisition cost less depreciation. Intangible assets are regularly tested for impairment and an impairment loss is recognised where necessary.

Deferred tax assets: IAS 12 "Income Taxes" requires that assets-side deferred taxes be established if assets have to be recognised in a lower amount or liabilities in a higher amount in the consolidated balance sheet than in the tax balance sheet and if these temporary differences will lead to reduced tax burdens in the future. In principle, temporary differences result from the valuation differences between the tax balance sheets drawn up in accordance with national standards and the IFRS balance sheets of the companies included in the consolidated financial statement drawn up in accordance with uniform group standards as well as from consolidation processes. Deferred tax assets and liabilities are not established if they arise out of assets or liabilities, the book value of which upon first-time recognition diverges from their initial tax base.

Deferred tax assets are also recognised on tax loss carry-forwards and tax credits. Insofar as the deferred taxes refer to items carried directly in equity, the resulting deferred taxes are also recognised directly in equity. Value adjustments are taken on deferred tax assets as soon as realisation of the receivable no longer appears likely. Deferred taxes are measured according to the tax regulations specific to the country concerned that are applicable or have been adopted as at the closing date.

Deferred tax assets may only be netted with deferred tax liabilities if an enforceable right exists to net actual tax refund claims with actual taxes owing. A precondition here is that the deferred tax assets and deferred tax liabilities refer to income taxes that are levied by the same revenue authority either for (i) the same taxable entity or for (ii) different taxable entities. In this regard, there must be an intention – in every future period in which the discharge or realisation of substantial amounts of deferred tax liabilities/deferred tax assets is to be expected – either to bring about the settlement of the actual taxes owing and refund claims on a net basis or to discharge the liabilities at the same time as the claims are realised.

Own-use real estate: the portfolio of own-use real estate is measured at cost less straight-line depreciation over a useful life of no more than 50 years. The fair values are determined for comparative purposes using the discounted cash flow method.

Right-of-use assets from lease contracts are measured at amortised cost in the amount of the initial measurement of the lease liability (cf. here the paragraph below), adjusted by prepaid lease payments, lease incentives received, initial direct costs incurred and probable restoration costs.

Right-of-use assets are amortised on a straight-line basis over the term of the lease contract.

Revenue from contracts with customers is realised when control of the promised goods or services is transferred to the customer. The amount of revenue realised corresponds to the consideration that the Group expects to receive in return for the transfer of goods or services to the customer. Under its contracts that fall within the scope of application of IFRS 15 the Group generally acts as a principal, because it normally controls the services or goods before transferring them to the customer.

Other assets are accounted for at amortised cost.

Technical reserves: the technical reserves are shown for gross account in the balance sheet, i. e. before deduction of the share attributable to our reinsurers; cf. here the remarks concerning the corresponding assets. The reinsurers' portion is calculated and accounted for on the basis of the individual reinsurance contracts.

Loss and loss adjustment expense reserves are constituted for payment obligations from reinsurance losses that have occurred but have not yet been settled. They are subdivided into reserves for reinsurance losses reported by the balance sheet date and reserves for reinsurance losses that have already been incurred but not yet reported (IBNR) by the balance sheet date. The loss and loss adjustment expense reserves are based on estimates that may diverge from the actual amounts payable. In reinsurance business a considerable period of time may elapse between the occurrence of an insured loss, notification by the insurer and pro-rata payment of the loss by the reinsurer. For this reason the realistically estimated future settlement amount based on long-standing established practice is carried. Recognised actuarial methods are used for estimation purposes. In this regard we make allowance for past experience, currently known facts and circumstances, the expertise of the market units as well as other assumptions relating to the future development, in particular economic, social and technical influencing factors. Subsequently, based on Group-wide analyses, we give separate consideration in this context to the inherent volatility of the reserves constituted for the reinsurance business, e. g. due to large losses. The interest rate-induced portion of the change in the reserve is shown in the statement of income on a consistent Group basis.

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

Provisions for pensions are established in accordance with IAS 19 "Employee Benefits" using the projected unit credit method. They are calculated according to actuarial principles and are based upon the commitments made by the Hannover Re Group for retirement, disability and widows' benefits. The amount of the commitments is determined according to length of service and salary level. The pension plans are defined benefit plans. The basis of the valuation is the estimated future increase in the rate of compensation of the pension beneficiaries. The benefit entitlements are discounted by applying the capital market rate for highest-rated securities. All changes in valuation, especially actuarial gains and losses, are captured immediately in cumulative other comprehensive income. Service cost and interest cost are recognised in the statement of income. Returns on plan assets are determined using the same interest rate as that used in the calculation of the present value of the defined benefit obligation.

Contributions to defined contribution plans are expensed when the beneficiary of the commitment has performed the work that entitles them to such contributions.

Deferred tax liabilities: in accordance with IAS 12 "Income Taxes" deferred tax liabilities must be recognised if assets are to be recognised in a higher amount or liabilities in a lower amount in the consolidated balance sheet than in the tax balance sheet and if these temporary differences will lead to additional tax loads in the future; please see our explanatory remarks on deferred tax assets.

Under the balance sheet item **Other liabilities** we recognise not only the sundry non-technical provisions but also minority interests in partnerships. Direct minority interests in partnerships, i.e. liabilities to holders of minority shares in partnerships arising out of long-term capital commitments, which are puttable at fair value by the holder of the interest, are recognised as debt pursuant to IAS 32 and measured at the fair value of the redemption amount as at the balance sheet date.

Sundry non-technical provisions are established according to a realistic estimate of the amount required and shown under the balance sheet item "Other liabilities". Allocation to such provisions is conditional upon the Group currently having a legal or actual obligation that results from a past event and in respect of which utilisation is probable and the amount can be reliably estimated.

Restructuring provisions are recognised if a detailed formal plan for restructuring measures exists and steps to implement it have already begun or if key details of the restructuring have been published. The provisions cover only expenditures arising directly as a consequence of restructuring that are not connected with the company's regular activities.

Partial retirement obligations are carried at present value according to actuarial principles. During the phase when the employee is still working a provision is set aside to cover the liability amounting to the working hours not yet compensated. Top-up payments are accumulated in instalments until the end of the work phase. In periods when the employee is remunerated according to the partial retirement arrangements without performing any work, the provision is released.

Share-based payments: the share-based payment models existing within the Hannover Re Group are remuneration plans with cash settlement. In accordance with the requirements of IFRS 2 "Share-based Payments", the services rendered by the eligible beneficiaries and the resulting liability are to be recognised at the fair value of the liability and expensed over the vesting period. Until settlement of the liability the fair value of the liability is remeasured at each closing date and at the settlement date. All changes in fair value are recognised in profit or loss for the period.

Financing liabilities consist of liabilities from lease contracts and above all long-term debt and notes payable. In some instances these involve subordinated liabilities that can only be satisfied after the claims of other creditors in the event of liquidation or bankruptcy. Both long-term debt and notes payable are measured at amortised cost using the effective interest rate method. The transaction costs as well as premiums/discounts arising in connection with the issuance of bonds are amortised and recognised together with the nominal interest as financing costs.

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

Financial liabilities at fair value through profit or loss: Hannover Re does not make use of the fair value option provided by IAS 39 "Financial Instruments: Recognition and Measurement" to classify financial liabilities in this category upon first-time recognition.

Shareholders' equity: the items "common shares" and "additional paid-in capital" are comprised of the amounts paid in by the shareholders of Hannover Rück SE on its shares. In addition to the statutory reserves of Hannover Rück SE and the allocations from net income, the retained earnings consist of reinvested profits generated by the Hannover Re Group companies in previous periods. What is more, in the event of a retrospective change of accounting policies, the adjustment for previous periods is recognised in the opening balance sheet value of the retained earnings and comparable items of the earliest reported period. Unrealised gains and losses from the fair value measurement of financial instruments held as available for sale are carried in cumulative other comprehensive income under unrealised gains and losses on investments. Translation differences resulting from the currency translation of separate financial statements of foreign subsidiaries are recognised under cumulative foreign currency translation adjustments.

Non-controlling interests are shares in the equity of affiliated companies not held by companies belonging to the Group. IAS 1 "Presentation of Financial Statements" requires that non-controlling interests be recognised separately within Group shareholders' equity. The non-controlling interest in profit or loss is shown separately following the net income. Further information is provided in section 6.14 "Non-controlling interests".

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

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

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

Currency translation: financial statements of Group subsidiaries were drawn up in the currencies corresponding to the economic environment in which each subsidiary primarily operates. These currencies are referred to as functional currencies. The euro is the reporting currency in which the consolidated financial statement is prepared.

Transactions in foreign currencies reported in Group companies' individual financial statements are converted into the functional currency at the transaction rate. In accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates" the recognition of exchange differences on translation is guided by the nature of the underlying balance sheet item. Exchange differences from the translation of monetary assets and liabilities are recognised directly in the statement of income. Currency translation differences from the translation of non-monetary assets measured at fair value via the statement of income are recognised as profit or loss from fair value measurement changes. Exchange differences from non-monetary items – such as equity securities – classified as available for sale are initially recognised outside income in a separate item of shareholders' equity and only booked to income when such non-monetary items are settled.

The individual companies' statements of income prepared in the local currencies are converted into euro at the average rates of exchange and transferred to the consolidated financial statement. The conversion of foreign currency items in the balance sheets of the individual companies and the transfer of these items to the consolidated financial statement are effected at the mean rates of exchange on the balance sheet date. In accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates" differences from the currency translation of financial statements of foreign Group companies must be recognised in the consolidated financial statement as a separate item in shareholders' equity.

Currency translation differences resulting from long-term loans or lendings without specified maturity between Group companies are similarly recognised outside the statement of income in a separate item of shareholders' equity.

Key exchange rates N 09

1 EUR corresponds to:	31.12.2020	31.12.2019	2020	2019
	Mean rate of exchange on the balance sheet date		Average rate of exchange	
AUD	1.6030	1.6000	1.6533	1.6095
BHD	0.4634	0.4219	0.4320	0.4226
CAD	1.5704	1.4620	1.5326	1.4872
CNY	8.0199	7.8181	7.8887	7.7355
GBP	0.9041	0.8520	0.8869	0.8781
HKD	9.5286	8.7135	8.8827	8.7805
INR	90.1030	79.8393	84.5591	78.9090
KRW	1,335.8500	1,293.5200	1,346.0585	1,301.2831
MYR	4.9613	4.5951	4.7958	4.6425
SEK	10.0560	10.4372	10.4782	10.5618
USD	1.2291	1.1190	1.1449	1.1208
ZAR	18.0114	15.7385	18.6678	16.1594

Earned premium and unearned premium: assumed reinsurance premiums, commissions and claim settlements as well as assumed portions of the technical reserves are recognised according to the terms and conditions of the reinsurance treaties, giving due consideration to the underlying contracts for which reinsurance was taken out.

Ceded reinsurance premiums are deducted from the gross written premium for the purpose of reconciliation to net premium earned. Assets and liabilities in connection with reinsurance ceded are recognised on a gross basis. The reinsured portions of the reserves are estimated on a basis consistent with the reserves attributable to the reinsured risk. Income and expenses in connection with reinsurance treaties are recognised on a basis consistent with the underlying risk of the reinsured business.

Premiums for reinsurance treaties are booked to income as earned across the period of the contracts in proportion to the insurance protection already provided or when they become due. Unearned premiums are calculated individually for each treaty in order to establish the portion of the premium volume that is not booked to income. This applies principally to property and casualty reinsurance and parts of accident and health reinsurance. Premiums already collected that are attributable to future risk periods are deferred pro rata temporis and recognised in conformity with the pertinent standards of US GAAP. In this context, assumptions are to be made if the data required for a calculation pro rata temporis is not available. The unearned premium corresponds to the insurance protection afforded in future periods.

Taxes: the taxes are comprised of the actual tax load on corporate profits of the Group companies, to which the applicable local tax rates are applied, as well as changes in deferred tax assets and liabilities. Income and expenses arising out of interest or penalties payable to the revenue authorities are shown under other income/expenses. The calculation of the deferred tax assets and liabilities is based on tax loss carry-forwards, unused tax credits and temporary differences between the book values of assets and liabilities in the consolidated balance sheet of the Hannover Re Group and their carrying amounts in the tax balance sheet. Further information on deferred taxes is provided in our remarks on deferred tax assets and liabilities.

Non-current assets held for sale and discontinued operations: in accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", non-current assets and disposal groups are classified as held for sale if the relevant book value is realised largely through sale rather than through continued use. Components of an entity that can be clearly distinguished from the rest of the entity for operational and accounting purposes and were classified as sold or for sale are recognised as discontinued operations. Measurement is at the lower of book value and fair value less costs to sell. Depreciation or amortisation is not taken on non-current assets as long as they are classified as held for sale. Impairment losses on fair value less costs to sell are recognised in profit or loss; a gain for any subsequent increase in fair value less costs to sell leads to the realisation of profit up to the amount of the cumulative impairment. If the impairment loss to be taken on a disposal group exceeds the book value of the corresponding non-current assets, the need to establish a provision within the meaning of IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" is reviewed.

3.2 Major discretionary decisions and estimates

In the consolidated financial statement it is to some extent necessary to make estimates and assumptions which affect the assets and liabilities shown in the balance sheet, the information on contingent claims and liabilities as at the balance sheet date and the disclosure of income and expenses during the reporting period. This is especially true during the present Covid-19 pandemic. Key facts and circumstances subject to such assumptions and estimates include, for example, the recoverability of contingent reinsurance liabilities, the recoverability of investments in associated companies, the valuation of derivative financial instruments as well as assets and liabilities relating to employee benefits. The actual amounts may diverge from the estimated amounts.

The Covid-19 pandemic heavily influenced the entire global economy in the year under review and hence also had implications for Hannover Re's consolidated financial statement. Against the backdrop of the pandemic, the critical issues in the areas of investments, goodwill impairment and reinsurance obligations, in particular, were subjected to closer analysis. For further information we would refer to our explanatory remarks in section 6.5 "Goodwill", 7.2 "Investment income" and 7.3 "Reinsurance result".

Supplementary or complete estimates of the corresponding profit and loss items, assets and liabilities including relevant retrocessions are made where ceding company accounts with substantial premium income are missing. Missing ceding company accounts with a low premium volume are included in the following year.

In order to measure the ultimate liability in property and casualty reinsurance the expected ultimate loss ratios are calculated for all lines. Actuarial methods such as the "chain ladder" method provide the starting point for these calculations. The realistically estimated future settlement amount is recognised in the balance sheet. The development until completion of the run-off is projected on the basis of statistical triangles from the original notifications of ceding companies. The more recent underwriting years in actuarial projections are of course subject to greater uncertainty, although this can be considerably reduced with the aid of a variety of additional information on improvements in the rates and conditions of the business written and on loss trends. The amounts arrived at as the difference between the ultimate losses and the reported losses are set aside as the IBNR reserve for losses that have been incurred but are not yet known or have still to be reported. In applying statistical methods, separate consideration is given to large losses.

By analysing a broad range of observable information it is possible to classify losses as major individual loss events. Measurement of the obligations existing in this connection is carried out using a separate process, which is based largely on contract-specific estimates.

For further particulars, including information required by IFRS 4, the reader is referred to our remarks on the underwriting risks in property and casualty reinsurance on page 93 et seq. of the management report – for example, with regard to the modelling of natural catastrophe scenarios and the assumptions relating to asbestos and pollution risks. We would further refer to our explanatory remarks on the technical reserves in section 3.1 "Summary of major accounting policies" and section 6.7 "Technical provisions".

In life and health reinsurance, too, the calculation of reserves and assets is crucially dependent on actuarial projections of the covered business. So-called model points are defined according to the type of business covered. The main distinguishing criteria are the age, sex and (non-)smoker status of the insured, tariff, policy period, period of premium payment and amount of insurance. The portfolio development is simulated for each model point, in which regard the key input parameters are either predefined by the tariff (e. g. allowance for costs, amount of premium, actuarial interest rate) or need to be estimated (e. g. mortality or disability rates, lapse rates). These assumptions are heavily dependent on country-specific parameters and on the sales channel, quality of the cedant's underwriting and claims handling, type of reinsurance and other framework conditions of the reinsurance treaty. The superimposition of numerous model points gives rise to a projection, which incorporates inter alia assumptions concerning the portfolio composition and the commencement of covered policies within the year. Such assumptions are estimated at the inception of a reinsurance treaty and subsequently adjusted to the actual projection.

The projections, which cover various model scenarios ("conservative assumptions" versus "best estimate"), constitute the starting point for numerous areas of application encompassing quotation, the determination of carrying amounts and embedded values as well as contract-specific analyses, e. g. regarding the appropriateness of the recognised reinsurance liabilities ("liability adequacy test"). In this context we would refer the reader to our comments on technical assets and provisions in section 3.1 "Summary of major accounting policies" and on the liability adequacy test in section 6.7 "Technical provisions".

In determining the carrying amounts for certain financial assets it is sometimes necessary to make assumptions in order to calculate fair values. In this regard we would refer the reader to our remarks in section 3.1 "Summary of major accounting policies" concerning financial assets at fair value through profit or loss and securities held as available for sale as well as in section 6.7 "Technical provisions" concerning investment property. Assumptions concerning the appropriate applicability criteria are necessary when determining the need for impairments on non-monetary financial assets held as available for sale. In this regard we would again refer the reader to our explanatory remarks in section 3.1 "Summary of major accounting policies".

4. Consolidation

4.1 Consolidation principles

Capital consolidation

The capital consolidation is carried out according to the requirements of IFRS 10 "Consolidated Financial Statements" on the basis of a consistent consolidation model for all entities that identifies control as the single basis for verifying the consolidation requirement, irrespective of whether control is substantiated in company law, contractually or economically. Group companies are consolidated from the point in time when Hannover Re gains control over them. Control exists if Hannover Re directly or indirectly has decision-making power over a Group company on the basis of voting rights or other rights, if it has exposure or rights to positive and negative variable returns from its involvement with the Group company and if it can use its power to influence these returns. All of these criteria must be met. Other circumstances may also give rise to control, for example the existence of a principal-agent relationship. In this case a party outside the Group with decision-making powers (agent) acts for Hannover Re, but does not control the company since it merely exercises decision-making powers that have been delegated by Hannover Re (principal). These principles are also applied to structured entities, on which further information is provided in section 4.2 "Consolidated companies and complete list of shareholdings". Group companies are consolidated until the Hannover Re Group loses control over them. The accounting policies of Group companies are adjusted, where necessary, in order to ensure consistent application of the Hannover Re Group's accounting policies.

The capital consolidation is based on the acquisition method. Goodwill derives from the acquisition of subsidiaries and corresponds to the sum of the consideration rendered, the amount of all non-controlling interests in the acquired company and the fair value of the equity interests previously held in the acquired company less the fair value of the acquired net assets. Under IFRS 3 goodwill is not amortised, but instead impairment is taken where necessary on the basis of annual impairment tests. Immaterial and negative goodwill are recognised in the statement of income in the year of their occurrence. Costs associated with acquisition are expensed.

Companies over which Hannover Re is able to exercise a significant influence are consolidated as associated companies using the equity method of accounting. We therefore measure investments in associated companies with the proportion of the shareholders' equity attributable to the Group. According to the proportionate interest method required by IAS 28 "Investments in Associates", the goodwill attributable to associated companies is recognised together with the investments in associated companies. The share of an associated company's year-end profit or loss relating to the Group is included in the income from investments and shown separately in the consolidated statement of income. Shareholders' equity and profit or loss are taken from the associated company's latest available financial statement. A significant influence is presumed to exist if a company belonging to the Hannover Re Group directly or indirectly holds at least 20% – but no more than 50% – of the voting rights. We also derive evidence of significant influence over an associated company from representation on a governing body of such company, participation in its policy-making processes – e.g. with respect to dividends or other distributions –, the existence of material inter-company transactions, the possibility of interchanging managerial personnel or the provision of key technical information for the company. Further particulars on companies consolidated using the equity method of accounting are provided in section 6.1 "Investments under own management" under "Associated companies".

Only subsidiaries which are of minor importance – both individually and in their entirety – for the net assets, financial position and results of operations of the Hannover Re Group are exempted from consolidation. Hannover Re assesses whether a subsidiary is of minor importance on the basis of the company's total assets and net income relative to the corresponding values for the Group as a whole on average over the last three years. For this reason 12 (12) companies at home and abroad were not consolidated in the year under review. A further 2 (4) individual companies were not included at equity in the consolidated financial statement for the same reason. The business object of these altogether 14 (16) companies is for the most part the rendering of services for reinsurance companies within the Group.

Consolidation of business transactions within the Group

Receivables and liabilities between the companies included in the consolidated financial statement were offset against each other. Profits and expenses from business transactions within the Group were also eliminated. Transactions between a disposal group and the continuing operations of the Group were similarly eliminated in accordance with IFRS 10.

4.2 Consolidated companies and complete list of shareholdings

In addition to Hannover Rück SE as the parent company of the Group, the scope of consolidation of the Hannover Re Group encompasses the companies listed in the table below.

Information on subsidiaries

Scope of consolidation N 10

Number of companies	2020	2019
Consolidated companies (Group companies)		
Germany	11	11
Abroad	102	99
Total	**113**	**110**
Companies included at equity		
Germany	3	3
Abroad	6	6
Total	**9**	**9**

Information on the non-controlling interests in shareholders' equity and profit or loss as well as on the major non-controlling interests is provided in section 6.14 "Non-controlling interests". On the balance sheet date there were no significant restrictions on access to or the use of Group assets due to protective rights in favour of non-controlling interests.

The sale or transfer of shares of E+S Rückversicherung AG takes place by way of an endorsement and is permissible only with the approval of the company's Supervisory Board. The Supervisory Board enjoys the right to grant or deny approval unconditionally, without being obliged to state reasons in the event of denial.

National provisions of company law or requirements of supervisory law may in certain countries limit the ability of the Hannover Re Group to transfer assets between companies belonging to the Group. These limitations result principally from local minimum capital and solvency requirements as well as to a lesser extent from foreign exchange restrictions.

List of shareholdings

The following information is the list of shareholdings in accordance with § 313 Para. 2 German Commercial Code (HGB). We make use of the exemptions pursuant to § 313 Para. 3 German Commercial Code (HGB). The stipulations of IFRS 12.10 and IFRS 12.21 have also been observed. With regard to the major acquisitions and disposals in the year under review, please see our remarks in the following subsections of this section.

List of shareholdings N 11

Name and registered office of the company	Participation in %
Domestic companies	
Affiliated consolidated companies	
Hannover Rück Beteiligung Verwaltungs-GmbH, Hannover/Germany	100.00
FUNIS GmbH & Co. KG, Hannover/Germany	100.00
Hannover America Private Equity Partners II GmbH & Co. KG, Hannover/Germany	95.42
HAPEP II Holding GmbH, Hannover/Germany	95.42
Hannover Re Global Alternatives GmbH & Co. KG, Hannover/Germany	94.72
Hannover Re Euro PE Holdings GmbH & Co. KG, Hannover/Germany	91.20
Hannover Re Euro RE Holdings GmbH, Hannover/Germany	87.68
HR GLL Central Europe GmbH & Co. KG, Munich/Germany	87.67
HR GLL Central Europe Holding GmbH, Munich/Germany	87.67
HAPEP II Komplementär GmbH, Hannover/Germany	82.40
E+S Rückversicherung AG, Hannover/Germany	64.79
Affiliated non-consolidated companies	
HILSP Komplementär GmbH, Hannover/Germany	100.00
Associated companies	
HDI Global Specialty SE, Hannover/Germany	49.78
WeHaCo Unternehmensbeteiligungs-GmbH, Hannover/Germany	32.96
HANNOVER Finanz GmbH, Hannover/Germany	27.78
Other participations	
SWISS INSUREVOLUTION PARTNERS Holding Deutschland GmbH & Co. KG AG, Göttingen/Germany	15.00
Internationale Schule Hannover Region GmbH, Hannover/Germany	9.17
FinLeap GmbH, Berlin/Germany	8.41
ELEMENT Insurance AG, Berlin/Germany	6.08

Name and registered office of the company	Participation in %
Foreign companies	
Affiliated consolidated companies	
Hannover Finance (Luxembourg) S.A., Leudelange/Luxembourg	100.00
Hannover Finance (UK) Limited, London/United Kingdom	100.00
Hannover Re Holdings (UK) Ltd., London/United Kingdom	100.00
Hannover Life Reassurance Company of America, Orlando/USA	100.00
Hannover Life Reassurance Company of America (Bermuda) Ltd., Hamilton/Bermuda	100.00
Hannover Re (Ireland) Designated Activity Company, Dublin/Ireland	100.00
Hannover Life Re of Australasia Ltd, Sydney/Australia	100.00
Hannover Re (Bermuda) Ltd., Hamilton/Bermuda	100.00
Hannover ReTakaful B.S.C. (c), Manama/Bahrain	100.00
Hannover Services (UK) Limited, London/United Kingdom	100.00
Inter Hannover (No. 1) Limited, London/United Kingdom	100.00
Integra Insurance Solutions Limited, Bradford/United Kingdom	100.00
Argenta Holdings Limited, London/United Kingdom	100.00
Argenta Private Capital Limited, London/United Kingdom	100.00
APCL Corporate Director No.1 Limited, London/United Kingdom	100.00
APCL Corporate Director No.2 Limited, London/United Kingdom	100.00
Fountain Continuity Limited, Edinburgh/United Kingdom	100.00
Names Taxation Service Limited, London/United Kingdom	100.00
Argenta Secretariat Limited, London/United Kingdom	100.00
Argenta Continuity Limited, London/United Kingdom	100.00
Argenta General Partner Limited, Edinburgh/United Kingdom	100.00

Name and registered office of the company	Partici-pation in %
Argenta LLP Services Limited, London / United Kingdom	100.00
Argenta SLP Continuity Limited, Edinburgh / United Kingdom	100.00
Argenta Syndicate Management Limited, London / United Kingdom	100.00
Argenta Tax & Corporate Services Limited, London / United Kingdom	100.00
Argenta Underwriting No.1 Limited, London / United Kingdom	100.00
Argenta Underwriting No.2 Limited, London / United Kingdom	100.00
Argenta Underwriting No.3 Limited, London / United Kingdom	100.00
Argenta Underwriting No.4 Limited, London / United Kingdom	100.00
Argenta Underwriting No.7 Limited, London / United Kingdom	100.00
Argenta Underwriting No.9 Limited, London / United Kingdom	100.00
Argenta Underwriting No.10 Limited, London / United Kingdom	100.00
Argenta Underwriting No.11 Limited, London / United Kingdom	100.00
Argenta No.13 Limited, London / United Kingdom	100.00
Argenta No.14 Limited, London / United Kingdom	100.00
Argenta No.15 Limited, London / United Kingdom	100.00
Argenta No.16 Limited[1], London / United Kingdom	100.00
Residual Services Limited[2], London / United Kingdom	100.00
Residual Services Corporate Director Limited, London / United Kingdom	100.00
Argenta Underwriting Asia Pte. Ltd., Singapore / Singapore	100.00
Argenta Underwriting Labuan Ltd[3], Labuan / Malaysia	100.00
Glencar Underwriting Managers, Inc., Chicago / USA	100.00
Glencar Insurance Company, Orlando / USA	100.00
Kubera Insurance (SAC) Ltd, Hamilton / Bermuda	100.00
Leine Investment General Partner S.à r.l., Luxembourg / Luxembourg	100.00
Leine Investment SICAV-SIF, Luxembourg / Luxembourg	100.00
LI RE, Hamilton / Bermuda	100.00
Fracom FCP[4], Paris / France	100.00
Hannover Finance, Inc., Wilmington / USA	100.00

Name and registered office of the company	Partici-pation in %
Sand Lake Re, Inc., Burlington / USA	100.00
Hannover Reinsurance Group Africa (Pty) Ltd., Johannesburg / South Africa	100.00
Hannover Life Reassurance Africa Limited, Johannesburg / South Africa	100.00
Hannover Reinsurance Africa Limited, Johannesburg / South Africa	100.00
Compass Insurance Company Limited, Johannesburg / South Africa	100.00
Hannover Re Real Estate Holdings, Inc., Orlando / USA	95.25
HR US Infra Equity LP, Wilmington / USA	95.24
320AUS LLC, Wilmington / USA	95.15
GLL HRE CORE Properties, L.P., Wilmington / USA	95.15
101BOS LLC, Wilmington / USA	95.15
402 Santa Monica Blvd, LLC, Wilmington / USA	95.15
111ORD LLC, Wilmington / USA	95.15
140EWR LLC, Wilmington / USA	95.15
7550IAD LLC, Wilmington / USA	95.15
Nashville West, LLC, Wilmington / USA	95.15
590ATL LLC, Wilmington / USA	95.15
975 Carroll Square, LLC, Wilmington / USA	95.15
Broadway 101, LLC, Wilmington / USA	95.15
River Terrace Parking, LLC, Wilmington / USA	95.15
3290ATL LLC, Wilmington / USA	95.15
1600FLL LLC, Wilmington / USA	95.15
2530AUS LLC, Wilmington / USA	95.15
7550BWI LLC, Wilmington / USA	95.15
7659BWI LLC, Wilmington / USA	95.15
M8 Property Trust, Sydney / Australia	94.72
Markham Real Estate Partners (KSW) Pty Limited, Sydney / Australia	94.72
PAG Real Estate Asia Select Fund Limited, George Town / Cayman Islands	94.72
HR US Infra Debt LP, George Town / Cayman Islands	94.71

Name and registered office of the company	Partici-pation in %
Orion No.1 Professional Investors Private Real Estate Investment LLC, Seoul/South Korea	94.39
Peace G.K., Tokyo/Japan	93.77
Morea Limited Liability Company, Tokyo/Japan	93.77
Kaith Re Ltd., Hamilton/Bermuda	90.40
Highgate sp. z o.o., Warsaw/Poland	87.67
3541 PRG s.r.o., Prague/Czech Republic	87.67
HR GLL Roosevelt Kft, Budapest/Hungary	87.67
HR GLL Liberty Corner SPÓŁKA Z OGRAN-ICZONĄ ODPOWIEDZIALNOŚCIĄ, Warsaw/Poland	87.67
HR GLL Griffin House SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ, Warsaw/Poland	87.67
92601 BTS s.r.o., Bratislava/Slovakia	87.67
Akvamarín Beta s.r.o., Prague/Czech Republic	87.67
HR GLL Europe Holding S.à r.l., Luxembourg/Luxembourg	87.67
HR GLL CDG Plaza S.r.l., Bucharest/Romania	87.67
Commercial & Industrial Acceptances (Pty) Ltd., Johannesburg/South Africa	79.20
Lireas Holdings (Pty) Ltd., Johannesburg/South Africa	70.00
SUM Holdings (Pty) Ltd., Johannesburg/South Africa	70.00
Film & Entertainment Underwriters SA (Pty) Ltd., Johannesburg/South Africa	68.18
Transit Underwriting Managers (Pty) Ltd., Durban/South Africa	63.00
Garagesure Consultants and Acceptances (Pty) Ltd., Johannesburg/South Africa	63.00
MUA Insurance Acceptances (Pty) Ltd., Cape Town/South Africa	59.50
Hospitality Industrial and Commercial Underwrit-ing Managers (Pty) Ltd., Johannesburg/South Africa	59.50
Firedart Engineering Underwriting Managers (Pty) Ltd., Johannesburg/South Africa	49.00
Thatch Risk Acceptances (Pty) Ltd., Johannesburg/South Africa	49.00
Landmark Underwriting Agency (Pty) Ltd., Bloemfontein/South Africa	45.85
Real Assist (Pty) Ltd., Pretoria/South Africa	40.39

Name and registered office of the company	Partici-pation in %
Affiliated non-consolidated companies	
HR Hannover Re, Correduría de Reaseguros, S.A., Madrid/Spain	100.00
Hannover Re Services Japan, Tokyo/Japan	100.00
Hannover Re Consulting Services India Private Limited, Mumbai/India	100.00
Hannover Services (México) S.A. de C.V., Mexico City/Mexico	100.00
Hannover Re Services USA, Inc., Itasca/USA	100.00
Hannover Mining Engineering Services LLC, Itasca/USA	100.00
Hannover Rück SE Escritório de Representação no Brasil Ltda., Rio de Janeiro/Brasil	100.00
Hannover Re Risk Management Services India Private Limited, New Delhi/India	100.00
U FOR LIFE SDN. BHD.[1], Petaling Jaya/Malaysia	100.00
Dynastic Underwriting Limited, London/United Kingdom	100.00
Hannover Re Services Italy S.r.l., Milan/Italia	99.65
Associated companies	
Monument Insurance Group Limited[5], Hamilton/Bermuda	20.00
Monument Midco Limited[5], Hamilton/Bermuda	28.38
Investsure Technologies Proprietary Limited, Johannesburg/South Africa	26.35
Clarendon Transport Underwriting Managers (Pty) Ltd., Johannesburg/South Africa	22.87
Kopano Ventures (Pty) Ltd, Johannesburg/South Africa	20.34
Pineapple Tech (Pty) Ltd, Johannesburg/South Africa	17.50
Inqaku FC (Pty) Ltd, Port Elizabeth/South Africa	14.72
Other participations	
Reaseguradora del Ecuador S.A., Guayaquil/Equador	30.00
Trinity Underwriting Managers Ltd., Toronto/Canada	20.37
Meribel Mottaret Limited, St. Helier/Jersey	18.92
SWISS INSUREVOLUTION PARTNERS Holding (FL) AG, Triesen/Liechtenstein	15.00
SWISS INSUREVOLUTION PARTNERS Holding (CH) AG, Freienbach/Switzerland	15.00

Name and registered office of the company	Partici-pation in %
Sureify Labs, Inc., Wilmington/USA	13.49
Somerset Reinsurance Ltd., Hamilton/Bermuda	12.31
Qinematic AB, Lidingö/Sweden	11.94
Acte Vie S.A., Schiltigheim/France	9.38
Centaur Animal Health, Inc., Olathe/USA	6.90
The Sociotech Institute Proprietary Limited, Cape Town/South Africa	6.56
Different Technology (Pty) Ltd, Johannesburg/South Africa	3.50
Liberty Life Insurance Public Company Ltd, Nicosia/Cyprus	3.30
B3i Services AG, Zurich/Switzerland	1.46

1 The company is in liquidation
2 The company holds 42 subsidiaries with capital and reserves of altogether EUR 0.5 million
3 The company is inactive
4 Investment fund
5 The company is included in measurement at equity through a consolidated financial statement

Material branches within the Group

We define the branch of a Group company as an unincorporated business unit that is physically and organisationally separate from the Group company, is bound by the latter's instructions in their internal relationship and has its own independent market presence.

Hannover Rück SE maintains branches that are listed below according to the amount of gross written premium in the current financial year.

Material branches within the Group N 12

Group company/Branch	Gross written premium[1]		Net income[1]	
Figures in EUR thousand	2020	2019	2020	2019
Hannover Rück SE				
Hannover Rück SE Shanghai Branch, Shanghai/China	2,186,683	1,726,805	-13,535	24,281
Hannover Rück SE Succursale Francaise, Paris/France	934,771	876,850	-6,621	36,032
Hannover Rueck SE Malaysian Branch, Kuala Lumpur/Malaysia	606,071	447,232	38,612	26,894
Hannover Rueck SE Australian Branch, Sydney/Australia	540,523	426,221	9,886	10,607
Hannover Rück SE Canadian Branch, Toronto/Canada	433,932	305,894	-1,194	40,272
Hannover Rück SE, Tyskland Filial, Stockholm/Sweden	400,662	349,856	7,604	19,635
Hannover Rück SE, Hong Kong Branch, Wanchai/Hong Kong	292,796	365,967	862	2,973
Hannover Re UK Life Branch, London/United Kingdom	288,609	280,647	15,568	5,183
Hannover Rueck SE Bahrain Branch, Manama/Bahrain	137,951	127,629	-29,911	11,763
Hannover Rück SE – India Branch, Mumbai/India	125,322	152,248	5,669	1,351
Hannover Rück SE Korea Branch, Seoul/South Korea	47,634	49,067	2,586	2,640

1 IFRS figures before consolidation.

In addition, other companies belonging to the Hannover Re Group maintain further branches that both individually and collectively are to be classified as immaterial to the Group.

Consolidation of structured entities

Business relations with structured entities are to be examined in accordance with IFRS 10 with an eye to their implications for consolidation. In the context of their operational activities some companies belonging to the Hannover Re Group enter into business relations with structured entities that are to be analysed and accounted for according to these new provisions.

Structured entities are entities designed in such a way that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. A structured entity frequently has some or all of the following features or attributes:

- restricted activities;
- a narrow and well-defined business objective;
- insufficient equity to allow it to finance its activities without subordinated financial support;
- financing in the form of multiple contractually linked instruments issued to investors that create concentrations of credit or other risks (tranches).

In accordance with the consistent consolidation model, a structured entity – just like a subsidiary – must be consolidated if Hannover Re gains control over the said entity. With regard to the criteria for control please see also section 4.1 "Consolidation principles". Within the Hannover Re Group the requirement to consolidate structured entities is examined as part of an analysis that encompasses both transactions in which a structured entity is initiated by us with or without the involvement of third parties and those in which we enter into contractual relations with an already existing structured entity with or without the involvement of third parties. Consolidation decisions are reviewed as necessary and at least once a year. The list of all consolidated structured entities forms part of the list of shareholdings.

Consolidated structured entities

The following structured entities were consolidated as at the balance sheet date:

- Kaith Re Ltd., Hamilton, Bermuda
- Kubera Insurance (SAC) Ltd, Hamilton, Bermuda
- LI RE, Hamilton, Bermuda

Kaith Re Ltd. is a so-called segregated accounts company (SAC), the sole object of which is the securitisation of reinsurance risks in the form of investment products. Under this transformation a complete underwriting risk transfer always takes place to the investor in question. In a SAC further segregated accounts exist under a general account; it is in these segregated accounts, which for liability purposes are entirely separate from one another and from the general account, that the aforementioned securitisations take place for the investors.

Kubera Insurance (SAC) Ltd is similarly a segregated accounts company, the object of which is to establish segregated accounts that are made available to non-Group companies for structured finance transactions.

Pursuant to IFRS 10 we consider the general account and the segregated accounts to be separate units to which the principles of so-called "silo accounting" are applied. In accordance with this concept, Hannover Re is required to consolidate the general account of Kaith Re Ltd. and Kubera Insurance (SAC) Ltd and is contractually responsible for the fees due to external service providers that are to be covered from the general account's own funds. Each individual segregated account is to be examined separately with an eye to a consolidation requirement and consolidated according to the particular contractual arrangements in each case.

LI RE is a segregated account of Kaith Re Ltd., the purpose of which – as with all segregated accounts under Kaith Re Ltd. – is the securitisation of underwriting risks. In contrast to the other segregated accounts, the sole investor and hence the risk carrier of LI RE is the Hannover Re Group through its subsidiary Leine Investment SICAV-SIF, Luxembourg.

As at the balance sheet date Hannover Re had not rendered any financial or other support for a consolidated structured entity. Hannover Re does not intend to render financial or other support for one or more of such entities without being contractually required to do so.

Unconsolidated structured entities

The business relations of Hannover Re Group companies with structured entities set out below do not give rise to consolidation because the criteria for control pursuant to IFRS 10 contained in our consolidation principles are not met.

Investing activities and investments in catastrophe bonds (ILS)

Within the scope of its investment activities Hannover Re participates inter alia in numerous structured entities. These are predominantly special purpose entities in the form of funds, which for their part transact certain types of equity and debt capital investments. These investments encompass private equity funds, fixed income funds, collateralised debt obligations, real estate funds, index funds and other public funds. The volume of these transactions is derived from the book values of the respective investments and amounted to EUR 3,799.9 million (EUR 3,323.6 million) as at the balance sheet date. The maximum risk of loss corresponds to the book values.

Hannover Re participates through its subsidiary Leine Investment SICAV-SIF, Luxembourg, in a number of structured entities that issue catastrophe bonds for the securitisation of catastrophe risks by investing in such bonds. Leine Investment General Partner S.à.r.l. is the managing partner of the asset management company Leine Investment SICAV-SIF, the business object of which is to build, hold and manage a portfolio of insurance-linked securities (catastrophe bonds) – including for third-party investors outside the Group. The volume of these transactions is derived from the book values of the respective investments and amounted to EUR 100.5 million (EUR 78.5 million) as at the balance sheet date. The maximum risk of loss corresponds to the book values.

Retrocession and securitisation of reinsurance risks

The securitisation of reinsurance risks takes place largely through the use of structured entities.

By way of its "K" transactions Hannover Re has raised underwriting capacity for catastrophe risks on the capital market. The "K Cession", which was placed with investors in North and South America, Europe and Asia, involves a quota share cession on worldwide natural catastrophe business as well as aviation and marine risks. Of the total volume of the "K Cession", a large part equivalent to EUR 432.3 million (EUR 409.8 million) was securitised via structured entities as at the balance sheet date. The transaction has an indefinite term and can be cancelled annually by the investors. Segregated accounts of Kaith Re Ltd. are used for transformer purposes for part of this transaction. Hannover Re also uses further segregated accounts of Kaith Re Ltd. and other structured entities outside the Group for various retrocessions of both its traditional and ILS covers, which in each case are passed on to institutional investors in securitised form. The volume of these transactions is measured by the ceded exposure limit of the underlying retrocession agreements and amounted to altogether EUR 4,063.4 million (EUR 3,716.0 million) as at the balance sheet date. The structured entities are in all cases fully funded by contractually defined investments in the form of cash and equivalent liquid assets. Given that the entire exposure limit of the structured entities is therefore wholly collateralised in each case, there is no risk of loss for Hannover Re.

Collateralised fronting (ILS)

As part of its extended insurance-linked securities (ILS) activities, Hannover Re has concluded so-called collateralised fronting arrangements under which risks assumed from ceding companies are passed on to institutional investors outside the Group using structured entities. The purpose of such transactions is to directly transfer clients' business. The volume of the transactions is derived from the ceded exposure limit of the underlying retrocession agreements and amounted to EUR 3.919.9 million (EUR 6,559.4 million) as at the balance sheet date. Part of the ceded exposure limit is funded and collateralised by contractually defined investments in the form of cash and equivalent liquid assets; a further part remains uncollateralised or is collateralised by less liquid assets. The maximum risk of loss from the uncollateralised exposure limit amounted to EUR 1,365.6 million (EUR 3,125.9 million) as at the balance sheet date. This does not, however, correspond to the economic risk of loss, which is established using recognised actuarial methods. The expected loss on a modelled basis in a worst-case scenario of 10,000 years amounts to at most EUR 35.9 million (EUR 37.1 million).

The book values of the assets and liabilities from the specified transactions with unconsolidated structured entities were as follows as at the balance sheet date:

Book values from business relations with unconsolidated structured entities N 13

in EUR thousand	31.12.2020 General investing activities	Investment in catastrophe bonds (ILS)	Retrocession incl. securitisations and ILS transactions
Assets			
Fixed-income securities – held to maturity	600	–	–
Fixed-income securities – loans and receivables	1,060	–	217,012
Fixed-income securities – available for sale	1,784,580	–	–
Fixed-income securities – at fair value through profit or loss	–	100,488	–
Equity securities – available for sale	377,799	–	–
Real estate and real estate funds	403,740	–	–
Other invested assets	1,232,162	–	–
Funds withheld	–	–	5,545
Reinsurance recoverables on unpaid claims	–	–	842,277
Prepaid reinsurance premium	–	–	74,090
Accounts receivable	–	–	126,630
Total assets	**3,799,941**	**100,488**	**1,265,554**
Liabilities			
Reinsurance payable	–	–	552,360
Total liabilities	**–**	**–**	**552,360**

Book values from business relations with unconsolidated structured entities N 14

in EUR thousand	31.12.2019 General investing activities	Investment in catastrophe bonds (ILS)	Retrocession incl. securitisations and ILS transactions
Assets			
Fixed-income securities – held to maturity	779	–	–
Fixed-income securities – loans and receivables	1,715	–	–
Fixed-income securities – available for sale	1,801,194	–	–
Fixed-income securities – at fair value through profit or loss	–	78,451	–
Equity securities – available for sale	10,510	–	–
Real estate and real estate funds	422,714	–	–
Other invested assets	1,086,735	–	–
Funds withheld	–	–	1,554
Reinsurance recoverables on unpaid claims	–	–	991,827
Prepaid reinsurance premium	–	–	71,997
Accounts receivable	–	–	162,988
Total assets	**3,323,648**	**78,451**	**1,228,365**
Liabilities			
Reinsurance payable	–	–	502,900
Total liabilities	**–**	**–**	**502,900**

The income and expenses from business relations with unconsolidated structured entities are shown in investment income insofar as they result from general investment activities or investments in catastrophe bonds and are recognised in the technical account insofar as they are attributable to retrocessions and securitisations.

As at the balance sheet date Hannover Re had not rendered any financial or other support for an unconsolidated structured entity. Hannover Re does not intend to render financial or other support for one or more of such entities without being contractually required to do so.

In September 2020 Kubera Insurance (SAC) Ltd established another segregated account that gathered investor capital by means of issued bonds which was made available to an Australian intermediary of insurance business under a swap agreement for the financing of the latter's business. Repayment of the bonds is contingent on the development of the intermediary's business. Hannover Rück SE is an investor in the bond along with other external parties. The segregated account can be used flexibly for additional rounds of financing. Hannover Re is not the owner of the segregated account.

With regard to commitments and obligations that we do not consider to be support, particularly outstanding capital commitments from special investments, please see our remarks in section 8.7 "Contingent liabilities and commitments".

4.3 Major acquisitions and new formations

In July 2020 HR GLL Central Europe GmbH & Co., Munich, acquired all shares in Highgate sp. z.o.o., Warsaw/Poland, for the purpose of real estate acquisition. An amount of roughly EUR 23.4 million was invested in this connection after commencement of business operations.

In August 2020 Hannover Rück Beteiligung Verwaltungs-GmbH, Hannover, a wholly owned subsidiary of Hannover Rück SE, established Hannover Re Holdings (UK) Limited, London/United Kingdom. This is a holding company in which our operational entities in the United States and Bermuda were included.

4.4 Major disposals and retirements

In August 2020 all shares in the special purpose property company Pipera Business Park S.r.l., Bucharest/Romania, were sold through HR GLL Europe Holding S.à.r.l., Luxembourg, for a purchase price of EUR 84.4 million. Deconsolidation of the company gave rise to income of EUR 4.5 million, which was recognised in investment income.

4.5 Other corporate changes

Effective 31 December 2020 Hannover Life Reassurance Bermuda Ltd., Hamilton/Bermuda, was merged into its affiliate Hannover Re (Bermuda) Ltd., Hamilton/Bermuda. This intragroup transaction has no implications for Group net income.

5. Segment reporting

Based on the “management approach” of IFRS 8, which requires segment information to be presented as it is reported internally to management and normally used by the chief operating decision maker to decide upon the allocation of resources to a segment and evaluate its performance, Hannover Re has identified the reportable segments of property & casualty reinsurance and life & health reinsurance. With regard to the object of business operations within the two segments please see our explanatory remarks on Hannover Re’s business model on page 26 of the management report. The report on economic position on page 31 et seq. contains remarks on the economic environment in which the Group operates.

The segment information shown follows the system used for internal reporting purposes, on the basis of which the full Executive Board regularly evaluates the performance of segments and decides on the allocation of resources to them.

The “Consolidation” column includes not only the elimination of cross-segment transactions but also, more significantly, companies whose business operations cannot be unambiguously allocated to property and casualty reinsurance or life and health reinsurance. These are principally the service and financing companies belonging to the Group.

During the financial year no material changes occurred in the organisational structure that could have influenced the composition of the segments. Since the performance indicators used to steer the segments correspond to the system according to which the consolidated financial statement is prepared, a separate reconciliation of the segment results with the Group result is not provided.

There are no cross-segment gross premiums between the two segments of property & casualty reinsurance and life & health reinsurance. To this extent, the gross premiums shown are exclusively amounts from business with external third parties.

The acquisitions and new formations as well as the disposals and retirements referred to in the previous two subsections involving real estate companies are allocated to the property and casualty reinsurance segment. The operations of the newly established Hannover Re Holdings (UK) Limited, London/United Kingdom, encompass activities that can be allocated to the property & casualty reinsurance and life & health reinsurance segments.

Consolidated segment report

Segmentation of assets

in EUR thousand	Property and casualty reinsurance	
	31.12.2020	31.12.2019
Assets		
Fixed-income securities – held to maturity	139,867	171,542
Fixed-income securities – loans and receivables	2,217,917	2,139,810
Fixed-income securities – available for sale	29,422,685	28,806,079
Equity securities – available for sale	378,422	29,215
Financial assets at fair value through profit or loss	110,304	88,400
Other invested assets	4,384,139	4,287,654
Short-term investments	244,474	296,052
Cash and cash equivalents	901,989	780,340
Total investments and cash under own management	**37,799,797**	**36,599,092**
Funds withheld	2,569,420	2,393,222
Contract deposits	5,404	2,186
Total investments	**40,374,621**	**38,994,500**
Reinsurance recoverables on unpaid claims	1,730,507	1,868,390
Reinsurance recoverables on benefit reserve	–	–
Prepaid reinsurance premium	165,834	114,764
Reinsurance recoverables on other reserves	562	4,489
Deferred acquisition costs	1,169,521	1,061,931
Accounts receivable	4,155,372	3,610,380
Other assets in the segment	2,579,470	1,998,897
Assets held for sale	–	36,308
Total assets	**50,175,887**	**47,689,659**

Segmentation of liabilities

in EUR thousand		
Liabilities		
Loss and loss adjustment expense reserve	29,194,354	28,364,351
Benefit reserve	–	–
Unearned premium reserve	4,709,229	4,068,957
Provisions for contingent commissions	395,296	353,359
Funds withheld	342,420	379,411
Contract deposits	80,369	73,023
Reinsurance payable	1,157,650	824,467
Financing liabilities	420,348	446,282
Other liabilities in the segment	2,483,144	2,157,872
Total liabilities	**38,782,810**	**36,667,722**

N 15

Life and health reinsurance		Consolidation		Total	
31.12.2020	31.12.2019	31.12.2020	31.12.2019	31.12.2020	31.12.2019
45,710	51,507	–	–	185,577	223,049
299,180	39,205	15,049	15,049	2,532,146	2,194,064
9,429,038	9,247,666	–	14,714	38,851,723	38,068,459
–	–	–	–	378,422	29,215
230,096	725,398	–	–	340,400	813,798
920,960	426,191	22,068	27,794	5,327,167	4,741,639
82,221	172,298	731	–	327,426	468,350
371,972	307,237	4,110	3,275	1,278,071	1,090,852
11,379,177	**10,969,502**	**41,958**	**60,832**	**49,220,932**	**47,629,426**
7,090,387	8,555,247	–	–	9,659,807	10,948,469
292,940	323,116	–	–	298,344	325,302
18,762,504	**19,847,865**	**41,958**	**60,832**	**59,179,083**	**58,903,197**
152,763	181,724	–	–	1,883,270	2,050,114
192,135	852,598	–	–	192,135	852,598
82	1,412	–	–	165,916	116,176
544	4,866	–	–	1,106	9,355
1,687,550	1,869,791	–	–	2,857,071	2,931,722
1,450,628	1,659,675	(197)	(263)	5,605,803	5,269,792
469,316	452,806	(1,493,401)	(1,264,561)	1,555,385	1,187,142
–	–	–	–	–	36,308
22,715,522	24,870,737	(1,451,640)	(1,203,992)	71,439,769	71,356,404

4,734,876	4,631,880	–	–	33,929,230	32,996,231
7,217,988	9,028,000	–	–	7,217,988	9,028,000
360,780	322,891	–	–	5,070,009	4,391,848
306,281	319,862	–	–	701,577	673,221
239,896	778,404	–	–	582,316	1,157,815
3,175,084	3,508,034	–	–	3,255,453	3,581,057
620,111	681,213	–	–	1,777,761	1,505,680
35,010	37,731	2,975,918	2,977,955	3,431,276	3,461,968
2,652,472	2,314,045	(1,500,873)	(1,265,812)	3,634,743	3,206,105
19,342,498	21,622,060	1,475,045	1,712,143	59,600,353	60,001,925

Consolidated segment report

Segment statement of income	**Property and casualty reinsurance**	
in EUR thousand	1.1.–31.12.2020	1.1.–31.12.2019
Gross written premium	16,744,058	14,781,258
Net premium earned	14,205,380	12,797,639
Net investment income	990,144	1,069,437
thereof		
Change in fair value of financial instruments	964	(1,349)
Total depreciation, impairments and appreciation of investments	127,600	73,566
Income/expense on funds withheld and contract deposits	50,452	47,652
Claims and claims expenses	10,344,343	8,831,517
Change in benefit reserve	–	–
Commission and brokerage, change in deferred acquisition costs and other technical income/expenses	3,911,440	3,554,571
Administrative expenses	223,557	223,843
Other income/expenses	115,080	28,612
Operating profit/loss (EBIT)	**831,264**	**1,285,757**
Financing costs	2,096	2,288
Net income before taxes	**829,168**	**1,283,469**
Taxes	174,911	325,863
Net income	**654,257**	**957,606**
thereof		
Non-controlling interest in profit or loss	33,927	85,897
Group net income	**620,330**	**871,709**

N 15

Life and health reinsurance		Consolidation		Total	
1.1.–31.12.2020	1.1.–31.12.2019	1.1.–31.12.2020	1.1.–31.12.2019	1.1.–31.12.2020	1.1.–31.12.2019
8,021,404	7,816,382	–	–	24,765,462	22,597,640
7,150,309	6,931,919	226	168	21,355,915	19,729,726
695,260	684,452	2,719	3,172	1,688,123	1,757,061
63,007	74,204	–	–	63,971	72,855
1,793	7,080	–	–	129,393	80,646
171,313	158,781	–	–	221,765	206,433
6,438,315	5,817,539	–	–	16,782,658	14,649,056
(103,487)	10,793	–	–	(103,487)	10,793
1,202,539	1,251,374	–	–	5,113,979	4,805,945
254,107	255,728	518	513	478,182	480,084
330,682	289,013	(4,393)	(5,359)	441,369	312,266
384,777	**569,950**	**(1,966)**	**(2,532)**	**1,214,075**	**1,853,175**
1,512	1,597	86,596	83,193	90,204	87,078
383,265	**568,353**	**(88,562)**	**(85,725)**	**1,123,871**	**1,766,097**
58,154	93,438	(27,979)	(26,570)	205,086	392,731
325,111	**474,915**	**(60,583)**	**(59,155)**	**918,785**	**1,373,366**
1,785	3,302	–	–	35,712	89,199
323,326	**471,613**	**(60,583)**	**(59,155)**	**883,073**	**1,284,167**

6. Notes on the individual items of the balance sheet

6.1 Investments under own management

Hannover Re classifies investments according to the following categories: held-to-maturity, loans and receivables, financial assets at fair value through profit or loss and available-for-sale. The allocation and measurement of investments is determined by the investment intent and complies with the requirements of IAS 39 "Financial Instruments: Recognition and Measurement".

The investments under own management also encompass investments in associated companies, real estate and real estate funds (also includes: investment property), other invested assets, short-term investments and cash. The recognition and measurement of these items is based on the respective applicable IFRS for this type of assets.

The following table shows the regional origin of the investments under own management.

Investments N 16

in EUR thousand	2020	2019
Regional origin		
Germany	8,206,449	8,159,917
United Kingdom	3,673,652	3,728,373
France	1,439,647	1,617,012
Other	6,814,913	6,019,997
Europe	**20,134,661**	**19,525,299**
USA	15,621,305	15,617,670
Other	2,584,030	2,070,537
North America	**18,205,335**	**17,688,207**
Asia	5,044,810	4,571,088
Australia	2,982,749	2,876,907
Australasia	**8,027,559**	**7,447,995**
Africa	335,887	376,152
Other	2,517,490	2,591,773
Total	**49,220,932**	**47,629,426**

Maturities of the fixed-income and variable-yield securities N 17

in EUR thousand	2020 Amortised cost[1]	2020 Fair value	2019 Amortised cost[1]	2019 Fair value
Held to maturity				
due in one year	136,693	139,574	35,277	36,392
due after one through two years	–	–	138,711	146,834
due after two through three years	48,284	51,684	–	–
due after three through four years	–	–	48,282	52,963
due after four through five years	–	–	–	–
due after five through ten years	–	–	–	–
due after more than ten years	600	217	779	268
Total	**185,577**	**191,475**	**223,049**	**236,457**
Loans and receivables				
due in one year	273,701	277,587	114,559	116,540
due after one through two years	191,024	200,587	292,962	302,232
due after two through three years	597,031	613,668	192,558	208,214
due after three through four years	92,742	99,564	214,525	236,356
due after four through five years	136,620	152,813	97,782	105,475
due after five through ten years	674,921	778,086	803,813	937,856
due after more than ten years	566,107	620,681	477,865	506,720
Total	**2,532,146**	**2,742,986**	**2,194,064**	**2,413,393**
Available for sale				
due in one year[2]	4,304,412	4,318,468	4,930,829	4,946,309
due after one through two years	3,278,457	3,359,359	2,747,789	2,774,964
due after two through three years	3,294,465	3,413,253	3,458,407	3,524,451
due after three through four years	2,919,887	3,077,189	3,022,147	3,098,443
due after four through five years	3,347,071	3,485,182	2,853,983	2,960,945
due after five through ten years	14,567,732	15,567,648	13,017,561	13,541,446
due after more than ten years	6,397,959	7,236,121	8,240,612	8,781,103
Total	**38,109,983**	**40,457,220**	**38,271,328**	**39,627,661**
Financial assets at fair value through profit or loss				
due in one year	29,009	29,009	513,831	513,831
due after one through two years	28,145	28,145	18,880	18,880
due after two through three years	31,446	31,446	16,840	16,840
due after three through four years	9,122	9,122	18,489	18,489
due after four through five years	3,757	3,757	–	–
due after five through ten years	4,232	4,232	10,739	10,739
due after more than ten years	–	–	–	–
Total	**105,711**	**105,711**	**578,779**	**578,779**

1 Including accrued interest
2 Including short-term investments, cash and cash equivalents

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

Variable-rate bonds (so-called "floaters") are shown under the maturities due in one year and constitute an interest-related, within-the-year reinvestment risk.

Amortised cost, unrealised gains and losses and accrued interest on the portfolio of investments classified as held to maturity as well as their fair value N 18

	2020				
in EUR thousand	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Investments held to maturity					
Fixed-income securities					
Debt securities issued by semi-governmental entities	23,260	130	554	–	23,814
Corporate securities	48,285	1,292	3,400	–	51,685
Covered bonds/asset-backed securities	114,032	2,627	2,327	383	115,976
Total	185,577	4,049	6,281	383	191,475

Amortised cost, unrealised gains and losses and accrued interest on the portfolio of investments classified as held to maturity as well as their fair value N 19

	2019				
in EUR thousand	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Investments held to maturity					
Fixed-income securities					
Debt securities issued by semi-governmental entities	24,048	129	1,299	–	25,347
Corporate securities	48,282	1,292	4,681	–	52,963
Covered bonds/asset-backed securities	150,719	2,981	7,940	512	158,147
Total	223,049	4,402	13,920	512	236,457

The carrying amount of the portfolio held to maturity is arrived at from the amortised cost plus accrued interest.

Amortised cost, unrealised gains and losses and accrued interest on loans and receivables as well as their fair value N 20

	2020				
in EUR thousand	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Loans and receivables					
Debt securities issued by semi-governmental entities	1,117,235	17,285	124,022	–	1,241,257
Corporate securities	1,036,414	12,802	30,470	2,312	1,064,572
Covered bonds/asset-backed securities	378,497	6,399	58,660	–	437,157
Total	2,532,146	36,486	213,152	2,312	2,742,986

Amortised cost, unrealised gains and losses and accrued interest on loans and receivables as well as their fair value **N 21**

in EUR thousand	2019				
	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Loans and receivables					
Debt securities issued by semi-governmental entities	1,228,959	20,108	134,288	–	1,363,247
Corporate securities	585,958	2,721	22,589	4,381	604,166
Covered bonds/asset-backed securities	379,147	6,738	66,833	–	445,980
Total	**2,194,064**	**29,567**	**223,710**	**4,381**	**2,413,393**

The carrying amount of the loans and receivables is arrived at from the amortised cost plus accrued interest.

Amortised cost, unrealised gains and losses and accrued interest on the portfolio of investments classified as available for sale as well as their fair value **N 22**

in EUR thousand	2020				
	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Available for sale					
Fixed-income securities					
Government debt securities of EU member states	5,012,966	20,970	380,394	1,540	5,391,820
US Treasury notes	7,260,239	24,856	505,067	11,222	7,754,084
Other foreign government debt securities	3,700,451	31,029	165,774	6,671	3,859,554
Debt securities issued by semi-governmental entities	5,870,954	46,222	400,193	3,523	6,267,624
Corporate securities	12,140,504	116,310	818,711	8,595	12,950,620
Covered bonds/asset-backed securities	2,390,407	18,538	102,621	8,271	2,484,757
Investment funds	128,820	–	14,726	282	143,264
	36,504,341	**257,925**	**2,387,486**	**40,104**	**38,851,723**
Equity securities					
Shares	587	–	36	–	623
Investment funds	267,442	–	110,357	–	377,799
	268,029	**–**	**110,393**	**–**	**378,422**
Short-term investments	327,571	1,655	54	199	327,426
Total	**37,099,941**	**259,580**	**2,497,933**	**40,303**	**39,557,571**

Amortised cost, unrealised gains and losses and accrued interest on the portfolio of investments classified as available for sale as well as their fair value N 23

in EUR thousand	2019				
	Amortised cost including accrued interest	thereof accrued interest	Unrealised gains	Unrealised losses	Fair value
Available for sale					
Fixed-income securities					
Government debt securities of EU member states	5,220,153	22,517	244,693	18,299	5,446,547
US Treasury notes	7,682,488	31,582	189,173	8,919	7,862,742
Other foreign government debt securities	2,965,895	25,202	99,412	10,282	3,055,025
Debt securities issued by semi-governmental entities	5,505,215	50,359	265,550	16,529	5,754,236
Corporate securities	12,654,213	130,218	563,648	32,101	13,185,760
Covered bonds/asset-backed securities	2,559,209	23,381	82,118	18,971	2,622,356
Investment funds	124,911	–	16,882	–	141,793
	36,712,084	**283,259**	**1,461,476**	**105,101**	**38,068,459**
Equity securities					
Shares	12,806	–	5,898	–	18,704
Investment funds	4,411	–	6,100	–	10,511
	17,217	**–**	**11,998**	**–**	**29,215**
Short-term investments	468,392	4,747	61	103	468,350
Total	**37,197,693**	**288,006**	**1,473,535**	**105,204**	**38,566,024**

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

Fair value of financial assets at fair value through profit or loss before and after accrued interest as well as accrued interest on such financial assets N 24

in EUR thousand	2020	2019	2020	2019	2020	2019
	Fair value before accrued interest		Accrued interest		Fair value	
Financial assets at fair value through profit or loss						
Fixed-income securities						
US Treasury notes	–	53,955	–	–	–	53,955
Other foreign government debt securities	–	288,315	–	–	–	288,315
Corporate securities	105,007	236,131	704	378	105,711	236,509
	105,007	**578,401**	**704**	**378**	**105,711**	**578,779**
Other financial assets						
Derivatives	234,728	234,882	(39)	137	234,689	235,019
	234,728	**234,882**	**(39)**	**137**	**234,689**	**235,019**
Total	**339,735**	**813,283**	**665**	**515**	**340,400**	**813,798**

The carrying amounts of the financial assets at fair value through profit or loss correspond to their fair values including accrued interest.

Hannover Re recognised in this category as at the balance sheet date designated fixed-income securities amounting to EUR 105.7 million (EUR 578.8 million) as well as derivative financial instruments in an amount of EUR 234.7 million (EUR 235.0 million) that are originally allocable to this item.

Analysis of the fair value changes in the portfolio of fixed-income securities at fair value through profit or loss indicated that, just as in the previous year, no fair value changes were attributable to a changed credit risk.

We additionally use an internal rating method to back up this analysis. Our internal rating system is based on the corresponding credit ratings of securities assigned by the agencies Standard & Poor's and Moody's and in each case reflects the lowest of the available ratings.

For further information please see the explanatory remarks in section 8.1 "Derivative financial instruments and financial guarantees".

Carrying amounts before impairment **N 25**

	2020		2019	
in EUR thousand	Carrying amount before impairment	Impairment	Carrying amount before impairment	Impairment
Fixed-income securities – held to maturity	185,577	–	223,049	–
Fixed-income securities – loans and receivables	2,532,146	–	2,194,064	–
Fixed-income securities – available for sale	38,863,495	11,772	38,068,588	129
Short-term investments	327,554	128	468,420	70
Equity securities – available for sale	378,422	–	29,215	–
Participating interests and other invested assets, real estate funds	3,451,555	75,243	2,782,340	35,696
Total	**45,738,749**	**87,143**	**43,765,676**	**35,895**

For further explanatory remarks on the impairment criteria please see section 3.1 "Summary of major accounting policies".

Rating structure of fixed-income securities **N 26**

	2020								
in EUR thousand	AAA	AA	A	BBB	BB	B	C	Other	Total
Fixed-income securities – held-to-maturity	100,863	36,430	48,284	–	–	–	–	–	185,577
Fixed-income securities – loans and receivables	1,453,828	40,844	432,361	259,619	30,114	–	–	315,380	2,532,146
Fixed-income securities – available-for-sale	17,200,308	5,677,906	6,787,056	7,020,943	1,077,843	297,430	15,340	774,897	38,851,723
Fixed-income securities – at fair value through profit or loss	–	–	–	–	–	–	–	105,711	105,711
Total fixed-income securities	**18,754,999**	**5,755,180**	**7,267,701**	**7,280,562**	**1,107,957**	**297,430**	**15,340**	**1,195,988**	**41,675,157**

Rating structure of fixed-income securities N 27

in EUR thousand	2019								
	AAA	AA	A	BBB	BB	B	C	Other	Total
Fixed-income securities – held-to-maturity	137,415	37,352	48,282	–	–	–	–	–	223,049
Fixed-income securities – loans and receivables	1,475,126	131,265	93,367	240,953	–	6,557	–	246,796	2,194,064
Fixed-income securities – available-for-sale	16,256,013	5,912,584	6,069,245	7,457,803	1,033,472	282,076	33,638	1,023,628	38,068,459
Fixed-income securities – at fair value through profit or loss	53,955	288,315	–	–	2,011	–	–	234,498	578,779
Total fixed-income securities	**17,922,509**	**6,369,516**	**6,210,894**	**7,698,756**	**1,035,483**	**288,633**	**33,638**	**1,504,922**	**41,064,351**

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

Breakdown of investments by currencies N 28

in EUR thousand	2020								
	AUD	CAD	CNY	EUR	GBP	USD	ZAR	Other	Total
Fixed-income securities – held to maturity	–	–	–	163,071	13,783	8,723	–	–	185,577
Fixed-income securities – loans and receivables	219,307	–	421,977	1,519,177	5,591	366,094	–	–	2,532,146
Fixed-income securities – available-for-sale	3,176,026	1,374,374	1,374,186	11,054,552	3,141,105	16,273,618	306,424	2,151,438	38,851,723
Fixed-income securities – at fair value through profit or loss	–	–	–	–	–	105,711	–	–	105,711
Equity securities – available-for-sale	–	–	–	120,102	9,697	248,623	–	–	378,422
Other financial assets – at fair value through profit or loss	–	(9,766)	–	10,750	182,598	50,873	–	234	234,689
Other invested assets	81,203	–	–	2,336,290	80,489	2,611,385	6,539	211,261	5,327,167
Short-term investments, cash	138,705	47,047	77,627	104,174	314,490	539,512	98,413	285,529	1,605,497
Total	**3,615,241**	**1,411,655**	**1,873,790**	**15,308,116**	**3,747,753**	**20,204,539**	**411,376**	**2,648,462**	**49,220,932**

Breakdown of investments by currencies **N 29**

in EUR thousand	2019								
	AUD	CAD	CNY	EUR	GBP	USD	ZAR	Other	Total
Fixed-income securities – held to maturity	–	–	–	198,656	14,716	9,677	–	–	223,049
Fixed-income securities – loans and receivables	159,486	–	40,051	1,637,453	5,933	351,141	–	–	2,194,064
Fixed-income securities – available-for-sale	2,451,101	1,241,105	1,173,321	10,122,140	3,398,166	17,253,614	337,397	2,091,615	38,068,459
Fixed-income securities – at fair value through profit or loss	–	–	–	–	–	290,464	–	288,315	578,779
Equity securities – available-for-sale	–	–	–	18,091	–	11,124	–	–	29,215
Other financial assets – at fair value through profit or loss	2,684	27	–	5,982	144,548	79,924	–	1,854	235,019
Other invested assets	82,296	–	–	2,017,952	83,659	2,331,617	4,670	221,445	4,741,639
Short-term investments, cash	124,508	26,439	82,176	117,296	243,618	507,099	138,024	320,042	1,559,202
Total	**2,820,075**	**1,267,571**	**1,295,548**	**14,117,570**	**3,890,640**	**20,834,660**	**480,091**	**2,923,271**	**47,629,426**

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

Associated companies

The associated companies included at equity in the consolidated financial statement that both on an individual basis and in their entirety are not material for the Hannover Re Group pursuant to IFRS 12 are comprised of

- WeHaCo Unternehmensbeteiligungs-GmbH, Hannover, Germany,
- HANNOVER Finanz GmbH, Hannover, Germany,
- HDI Global Specialty SE, Hannover, Germany
- Monument Insurance Group Limited, Hamilton, Bermuda

as well as the following companies included at equity within the subgroup Hannover Reinsurance Group Africa (Pty) Ltd., Johannesburg, South Africa:

- Clarendon Transport Underwriting Managers (Pty) Ltd., Johannesburg, South Africa,
- Inqaku FC (Pty) Ltd, Port Elizabeth, South Africa,
- Investsure Technologies Proprietary Limited, Johannesburg, South Africa,
- Kopano Ventures (Pty) Ltd, Johannesburg, South Africa,
- Pineapple Tech (Pty) Ltd, Johannesburg, South Africa.

Information on the percentage share held by the Hannover Re Group in the capital of the associated companies is provided in the list of shareholdings in section 4.2 “Consolidated companies and complete list of shareholdings”.

The following table shows combined financial information on the Hannover Re Group's individually non-material investments in associated companies.

Financial information on investments in associated companies N 30

in EUR thousand	2020	2019
Group share of net income from continuing operations	88,129	26,354
Group share of income and expense recognised directly in equity	(1,942)	2,649
Group share of total recognised income and expense	**86,187**	**29,003**

The carrying amount of the investments in associated companies changed as follows in the year under review:

Investments in associated companies N 31

in EUR thousand	2020	2019
Net book value at 31 December of the previous year	**245,478**	**110,545**
Currency translation at 1 January	(182)	51
Net book value after currency translation	**245,296**	**110,596**
Additions	31,334	171,531
Disposals	–	48,000
Profit or loss on investments in associated companies	88,129	26,354
Dividend payments	1,236	2,027
Change recognised outside income	(1,942)	(12,983)
Currency translation at 31 December	36	7
Net book value at 31 December of the year under review	**361,617**	**245,478**

No discontinued operations existed in the year under review among the companies measured at equity. Insofar as there are commitments from contingent liabilities of associated companies, the Hannover Re Group shares in such commitments in proportion to its respective shareholding.

The additions to the companies measured at equity are attributable most notably in an amount of EUR 30.4 million to Monument Insurance Group Limited, Hamilton/Bermuda.

Public price listings are not available for companies valued at equity. The net book value of associated companies includes goodwill in the amount of EUR 17.7 million (EUR 16.9 million). For further details please see section 4 "Consolidation".

Real estate

Real estate is divided into real estate for own use and investment property. Own-use real estate is recognised under other assets.

The investment property in the portfolio which is used to generate income is shown under the investments. Income and expenses from rental agreements are included in the investment income.

Real estate is valued at cost of acquisition less depreciation with useful lives of at most 50 years.

Development of investment property N 32

in EUR thousand	2020	2019
Gross book value at 31 December of the previous year	1,935,208	1,844,408
Currency translation at 1 January	(87,574)	19,787
Gross book value after currency translation	**1,847,634**	**1,864,195**
Additions	61,528	251,166
Disposals	107,641	214,612
Changes pursuant to IAS 8	–	34,362
Currency translation at 31 December	(3,760)	97
Gross book value at 31 December of the year under review	**1,797,761**	**1,935,208**
Cumulative depreciation at 31 December of the previous year	185,691	159,476
Currency translation at 1 January	(10,002)	1,923
Cumulative depreciation after currency translation	**175,689**	**161,399**
Disposals	8,099	20,930
Depreciation	36,609	36,686
Impairments	6,069	8,503
Currency translation at 31 December	(1,745)	33
Cumulative depreciation at 31 December of the year under review	**208,523**	**185,691**
Net book value at 31 December of the previous year	**1,749,517**	**1,684,932**
Net book value at 1 January of the year under review	**1,671,945**	**1,702,796**
Net book value at 31 December of the year under review	**1,589,238**	**1,749,517**

With regard to the right-of-use assets included as part of the accounting of leases, please see section 8.8 "Leases".

The fair value of investment property excluding capitalised right-of-use assets amounted to EUR 1,897.4 million (EUR 2,003.9 million) as at the balance sheet date.

Changes in this item are attributable to investment activities at the relevant real estate companies belonging to the Hannover Re Group.

In terms of diversification across various real estate sectors, the focus is on office buildings (58%), complemented by retail (18%) and logistics properties (21%). In geographical terms, exposures are spread across the United States (44%), Europe (excluding Germany; 19%) as well as Germany (21%) and Asia (16%).

The real estate in the investment portfolio is normally subject to internal and external valuation by an appraiser as at the balance sheet date. The two analyses do not differ from one another in the methodology used, which means that the findings are comparable at all times and on a continuous basis. Generally speaking, the fair value of the real estate is determined using the discounted cash flow (DCF) method, with rental income capitalised in consideration of the associated management costs. The valuation result is also influenced by increases and reductions based on specific property circumstances (upkeep, vacancies, rent divergences from the market level, etc.). The evaluation of international real estate also draws primarily on the discounted cash flow method. The main feature of this method is the present value estimation of projected annual free cash flows.

Real estate which is held for sale as defined by IFRS 5 is recognised separately in the consolidated balance sheet. Intentions to sell are substantiated by individual real estate market conditions and specific property circumstances, taking into consideration current and future opportunity/risk profiles. In the year under review no properties were reclassified to assets held for sale.

In addition, we held indirect real estate investments measured at fair values in an amount of EUR 582.3 million (EUR 534.7 million) in the year under review, the amortised costs of which amounted to EUR 527.9 million (EUR 475.0 million). The differences between the carrying amounts and amortised costs were recognised as unrealised gains of EUR 58.6 million (EUR 65.3 million) and unrealised losses of EUR 4.2 million (EUR 5.6 million) under cumulative other comprehensive income.

Other invested assets

The other invested assets consisted largely of participating interests in partnerships measured at fair value in an amount of EUR 1,867.7 million (EUR 1,702.6 million), the amortised cost of which amounted to EUR 1,493.1million (EUR 1,343.6 million). The differences between the carrying amounts and the amortised costs were recognised as unrealised gains of EUR 415.8 million (EUR 380.7 million) and unrealised losses of EUR 41.1 million (EUR 21.7 million) under cumulative other comprehensive income.

In addition, acquired life insurance policies measured at fair value through profit or loss were recognised under the other invested assets in an amount of EUR 16.6 million (EUR 24.0 million). Loans granted in an amount of EUR 183.5 million (EUR 206.8 million) were similarly recognised under other invested assets.

Short-term investments

This item comprises investments with a maturity of up to one year at the time of investment. This includes overnight and time deposits as well as shares in investment funds that invest in such securities.

Fair value hierarchy

For the purposes of the disclosure requirements pursuant to IFRS 13 "Fair Value Measurement", financial assets and liabilities are to be assigned to a three-level fair value hierarchy.

The fair value hierarchy, which reflects characteristics of the price data and inputs used for measurement purposes, is structured as follows:

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

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

The operational units responsible for coordinating and documenting measurement are organisationally separate from the operational units that enter into investment risks. All relevant valuation processes and valuation methods are documented. Decisions on fundamental valuation issues are taken by a valuation committee that meets monthly.

In the financial year just ended, as in the previous year, no investments were allocable to another level of the fair value hierarchy.

The following table shows the breakdown of financial assets and liabilities recognised at fair value into the three-level fair value hierarchy.

Fair value hierarchy of financial assets and liabilities recognised at fair value N 33

	2020			
in EUR thousand	Level 1	Level 2	Level 3	Total
Fixed-income securities	22,301	38,935,133	–	38,957,434
Equity securities	378,422	–	–	378,422
Other financial assets	–	80,000	154,689	234,689
Real estate funds	–	–	582,296	582,296
Other invested assets	–	–	1,982,592	1,982,592
Short-term investments	327,426	–	–	327,426
Total financial assets	**728,149**	**39,015,133**	**2,719,577**	**42,462,859**
Other liabilities	–	58,798	26,488	85,286
Total financial liabilities	**–**	**58,798**	**26,488**	**85,286**

Fair value hierarchy of financial assets and liabilities recognised at fair value N 34

	2019			
in EUR thousand	Level 1	Level 2	Level 3	Total
Fixed-income securities	20,421	38,626,817	–	38,647,238
Equity securities	29,215	–	–	29,215
Other financial assets	–	74,601	160,418	235,019
Real estate funds	–	–	534,739	534,739
Other invested assets	–	223	1,841,392	1,841,615
Short-term investments	468,350	–	–	468,350
Other assets	–	5,871	–	5,871
Total financial assets	**517,986**	**38,707,512**	**2,536,549**	**41,762,047**
Other liabilities	–	26,353	30,042	56,395
Total financial liabilities	**–**	**26,353**	**30,042**	**56,395**

The following table provides a reconciliation of the fair values of financial assets and liabilities included in level 3 at the beginning of the financial year with the fair values as at 31 December of the financial year.

Movements in level 3 financial assets and liabilities N 35

	2020				
in EUR thousand	Equity securities	Other financial assets	Real estate funds	Other invested assets	Other liabilities
Net book value at 31 December of the previous year	**–**	**160,418**	**534,739**	**1,841,392**	**30,042**
Currency translation at 1 January	–	(14,376)	(23,583)	(109,090)	(2,693)
Net book value after currency translation	**–**	**146,042**	**511,156**	**1,732,302**	**27,349**
Income and expenses					
recognised in the statement of income	147	37,895	(12,936)	(53,155)	(6,563)
recognised directly in shareholders' equity	(147)	–	(2,934)	65,668	–
Purchases	–	56,397	135,059	416,927	5,154
Sales	–	90,714	45,170	165,302	425
Transfers to level 3	–	–	–	–	–
Transfers from level 3	–	–	–	–	–
Currency translation at 31 December	–	5,069	(2,879)	(13,848)	973
Net book value at 31 December of the year under review	**–**	**154,689**	**582,296**	**1,982,592**	**26,488**

Movements in level 3 financial assets and liabilities **N 36**

	2019				
in EUR thousand	Equity securities	Other financial assets	Real estate funds	Other invested assets	Other liabilities
Net book value at 31 December of the previous year	**–**	**132,339**	**433,899**	**1,647,992**	**24,548**
Currency translation at 1 January	–	3,093	55,561	25,487	574
Net book value after currency translation	**–**	**135,432**	**489,460**	**1,673,479**	**25,122**
Income and expenses					
recognised in the statement of income	–	38,369	(3,441)	(25,558)	(5,545)
recognised directly in shareholders' equity	–	–	(3,829)	6,219	–
Purchases	–	78,815	84,970	385,681	9,544
Sales	–	95,789	32,542	198,302	–
Transfers to level 3	–	–	–	–	–
Transfers from level 3	–	–	–	–	–
Currency translation at 31 December	–	3,591	121	(127)	921
Net book value at 31 December of the year under review	**–**	**160,418**	**534,739**	**1,841,392**	**30,042**

The breakdown of income and expenses recognised in the statement of income in the financial year in connection with financial assets and liabilities assigned to level 3 is as follows:

Income and expenses from level 3 financial assets and liabilities **N 37**

	2020				
in EUR thousand	Equity securities	Other financial assets	Real estate funds	Other invested assets	Other liabilities
Total in the financial year					
Ordinary investment income	–	–	–	9	–
Realised gains and losses on investments	147	–	–	(151)	(426)
Change in fair value of financial instruments	–	37,895	–	(289)	6,989
Total depreciation, impairments and appreciation of investments	–	–	(12,936)	(52,724)	–
Thereof attributable to financial instruments included in the portfolio at 31 December of the year under review					
Ordinary investment income	–	–	–	9	–
Change in fair value of financial instruments	–	37,895	–	(289)	6,989
Total depreciation, impairments and appreciation of investments	–	–	(12,936)	(52,724)	–

Income and expenses from level 3 financial assets and liabilities **N 38**

in EUR thousand	2019 Equity securities	Other financial assets	Real estate funds	Other invested assets	Other liabilities
Total in the financial year					
Ordinary investment income	–	–	–	(27)	–
Realised gains and losses on investments	–	–	–	272	–
Change in fair value of financial instruments	–	38,369	–	(1,884)	5,545
Total depreciation, impairments and appreciation of investments	–	–	(3,441)	(23,919)	–
Thereof attributable to financial instruments included in the portfolio at 31 December of the year under review					
Ordinary investment income	–	–	–	(27)	–
Change in fair value of financial instruments	–	38,369	–	330	5,545
Total depreciation, impairments and appreciation of investments	–	–	(3,441)	(23,919)	–

If models are used to measure financial assets and liabilities included in level 3 under which the adoption of alternative inputs leads to a material change in fair value, IFRS 13 requires disclosure of the effects of these alternative assumptions. Of the financial assets included in level 3 with fair values of altogether EUR 2,719.6 million (EUR 2,536.5 million) as at the balance sheet date, Hannover Re measures financial assets with a volume of EUR 2,450.0 million (EUR 2,237.4 million) using the net asset value method. These items consist principally of shares in private equity and real estate funds. Assuming that the present values of the assets and liabilities contained in the funds would be 10% lower than used for measurement as at the balance sheet date, the fair values for these items would amount to EUR 2,205.0 million. The remaining financial assets included in level 3 with a volume of EUR 269.6 million (EUR 299.1 million) relate to investments, the valuation of which is based inter alia on technical parameters. Derivative financial instruments in connection with the reinsurance business were recognised under the other liabilities included in level 3 in the year under review. Their performance is dependent upon lapse rates within an underlying primary insurance portfolio. The application of alternative inputs and assumptions has no material effect on the consolidated financial statement.

Fair value hierarchy of financial assets and liabilities measured at amortised cost **N 39**

in EUR thousand	2020 Level 1	Level 2	Level 3	Total
Fixed-income securities	–	2,685,767	248,694	2,934,461
Investment property	–	–	1,897,351	1,897,351
Other invested assets	–	87,260	725,062	812,322
Total financial assets	–	2,773,027	2,871,107	5,644,134
Financing liabilities	–	3,518,114	110,444	3,628,558
Total financial liabilities	–	3,518,114	110,444	3,628,558

Fair value hierarchy of financial assets and liabilities measured at amortised cost N 40

	2019			
in EUR thousand	Level 1	Level 2	Level 3	Total
Fixed-income securities	–	2,442,381	207,469	2,649,850
Investment property	–	–	2,003,910	2,003,910
Other invested assets	–	91,967	280,674	372,641
Total financial assets	**–**	**2,534,348**	**2,492,053**	**5,026,401**
Financing liabilities	–	3,594,309	–	3,594,309
Total financial liabilities	**–**	**3,594,309**	**–**	**3,594,309**

Disclosures relating to deferred adoption of IFRS 9

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

Fair value disclosures for financial assets N 41

	2020			
	Financial assets that give rise solely to payments of principal and interest		All other financial assets	
in EUR thousand	Fair value as at 31.12.	Fair value change in the financial year	Fair value as at 31.12.	Fair value change in the financial year
Fixed-income securities – held to maturity	191,475	(2,657)	–	–
Fixed-income securities – loans and receivables	2,741,926	(13,817)	1,061	(205)
Fixed-income securities – available for sale	38,300,963	281,845	550,760	(5,316)
Fixed-income securities – at fair value through profit or loss	–	–	105,711	22,782
Equity securities – available for sale	–	–	378,422	104,396
Other financial assets – at fair value through profit or loss	–	–	227,530	41,329
Real estate funds	–	–	582,296	16,107
Other invested assets	389,585	4,961	1,970,964	(14,830)
Short-term investments	–	–	327,426	(3,069)
Other assets	93,721	–	21,791	–
Total	**41,717,670**	**270,332**	**4,165,961**	**161,194**

Fair value disclosures for financial assets N 42

	2019			
	Financial assets that give rise solely to payments of principal and interest		All other financial assets	
in EUR thousand	Fair value as at 31.12.	Fair value change in the financial year	Fair value as at 31.12.	Fair value change in the financial year
Fixed-income securities – held to maturity	236,457	(6,566)	–	–
Fixed-income securities – loans and receivables	2,411,678	35,872	1,715	(1,332)
Fixed-income securities – available for sale	37,524,249	1,417,611	544,210	22,969
Fixed-income securities – at fair value through profit or loss	–	–	578,779	20,105
Equity securities – available for sale	–	–	29,215	2,092
Other financial assets – at fair value through profit or loss	–	–	228,803	28,075
Real estate funds	–	–	534,739	43,931
Other invested assets	115,985	2,320	1,818,407	(7,688)
Short-term investments	–	–	468,350	(356)
Other assets	96,561	929	6,829	–
Total	40,384,930	1,450,166	4,211,047	107,796

Rating structure of financial assets that give rise to solely payments of principal and interest N 43

in EUR thousand	2020	2019
AAA	18,731,863	17,847,042
AA	6,045,082	6,080,832
A	7,136,068	6,085,948
BBB	7,081,788	7,513,101
BB or lower	1,320,595	1,229,492
No rating		
low credit risk	727,536	1,011,199
more than a low credit risk	347,996	258,399
Total	41,390,928	40,026,013

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

6.2 Funds withheld (assets)

The funds withheld totalling EUR 9,659.8 million (EUR 10,948.5 million) represent the cash deposits furnished by our company to our cedants that do not trigger any cash flows and cannot be realised by cedants without our consent. The maturities of these deposits are matched to the corresponding provisions. In the event of default on such a deposit our reinsurance commitment is reduced to the same extent.

6.3 Contract deposits (assets)

The contract deposits on the assets side decreased by EUR 27.0 million in the year under review from EUR 325.3 million to EUR 298.3 million.

6.4 Technical assets

The retrocessionaires' portions of the technical provisions are based on the contractual agreements of the underlying reinsurance treaties. For further details please refer to our comments on the technical provisions in section 6.7 "Technical provisions". With regard to the nature and scope of risks arising out of insurance contracts we would also refer to the explanatory remarks on page 89 et seq. of the risk report.

SFAS 60 requires that acquisition costs be capitalised as assets and amortised in proportion to the earned premium.

In the case of reinsurance treaties for unit-linked life insurance policies classified as "universal life-type contracts" pursuant to SFAS 97, the capitalised acquisition costs are amortised on the basis of the estimated gross profit margins from the reinsurance treaties, making allowance for the period of the insurance contracts. A discount rate based on the interest for medium-term government bonds was applied to such contracts. In the case of annuity policies with a single premium payment, these values refer to the expected policy period or period of annuity payment.

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

In property and casualty reinsurance acquisition costs directly connected with the acquisition or renewal of contracts are deferred for the unearned portion of the premium.

Development of deferred acquisition costs **N 44**

in EUR thousand	2020	2019
Net book value at 31 December of the previous year	2,931,722	2,155,820
Currency translation at 1 January	(140,130)	56,945
Net book value after currency translation	**2,791,592**	**2,212,765**
Change in the consolidated group	–	146,068
Additions	1,283,648	1,455,795
Amortisations	1,198,387	887,700
Currency translation at 31 December	(19,782)	4,794
Net book value at 31 December of the year under review	**2,857,071**	**2,931,722**

For further explanatory remarks please see section 3.1 "Summary of major accounting policies".

The age structure of the accounts receivable which were unadjusted but classified as overdue at the balance sheet date is presented below.

Age structure of overdue accounts receivable **N 45**

	2020		2019	
in EUR thousand	Three months to one year	More than one year	Three months to one year	More than one year
Accounts receivable	339,613	174,921	219,279	144,022

Within the scope of our management of receivables we expect to receive payment of accounts receivable within three months of the date of creation of the debit entry unless otherwise agreed – a period for which we also make allowance in our risk analysis. Please see our comments on the counterparty default risk within the risk report on page 102 et seq.

The default risks associated with accounts receivable under reinsurance business are determined and recognised on the basis of case-by-case analyses.

The value adjustments on accounts receivable that we recognise in adjustment accounts changed as follows in the year under review:

Value adjustments on accounts receivable N 46

in EUR thousand	2020	2019
Cumulative value adjustments at 31 December of the previous year	33,840	29,503
Currency translation at 1 January	(1,516)	379
Cumulative value adjustments after currency translation	**32,324**	**29,882**
Value adjustments	7,580	15,912
Reversal	7,058	10,152
Utilisation	7,903	1,802
Cumulative value adjustments at 31 December of the year under review	**24,943**	**33,840**
Gross book value of accounts receivable at 31 December of the year under review	5,630,746	5,303,632
Cumulative value adjustments at 31 December of the year under review	24,943	33,840
Net book value of accounts receivable at 31 December of the year under review	**5,605,803**	**5,269,792**

In addition, we took specific value adjustments on reinsurance recoverables on unpaid claims in the year under review. We would refer the reader to the corresponding remarks on the loss and loss adjustment expense reserve in section 3.1 "Summary of major accounting policies". With regard to the credit risks resulting from technical assets we would also refer the reader to our comments on page 102 et seq. of the risk report.

6.5 Goodwill

In accordance with IFRS 3 "Business Combinations" amortisation is not taken on goodwill. Goodwill was subject to an impairment test.

Development of goodwill N 47

in EUR thousand	2020	2019
Net book value at 31 December of the previous year	88,303	85,588
Currency translation at 1 January	(3,645)	2,715
Net book value after currency translation	**84,658**	**88,303**
Value adjustments	3,935	–
Currency translation at 31 December	242	–
Net book value at 31 December of the year under review	**80,965**	**88,303**

This item principally includes the goodwill from the acquisitions of E+S Rückversicherung AG, Integra Insurance Solutions Limited and Argenta Holdings Limited.

For the purposes of the impairment test, the goodwill was allocated to the cash-generating units (CGUs) that represent the lowest level on which goodwill is monitored for internal management purposes. In the instances of goodwill recognised as at the balance sheet date, the CGUs are the respective legal entities. The recoverable amount is established on the basis of the value in use, which is calculated using the discounted cash flow method. In this context, the detailed planning phase draws on the planning calculations of the CGUs/companies covering the next five years. These planning calculations represent the outcome of a detailed planning process in which all responsible members of management are involved and where allowance is made for the latest market developments affecting the relevant entity (in relation to the sector and the economy as a whole). The subsequent perpetuity phase is guided by the profit margins and revenue growth rates that management believes can be sustainably generated. The capitalisation rate is based on the Capital Asset Pricing Model (CAPM) as well as growth rates that are considered realistic in light of the specific market environment. The risk-free basic interest rate is determined, where possible, using corresponding yield curve data from the respective national banks. If this data cannot be obtained or can only be obtained with a disproportionately high effort, reference is made to the yields of the respective 30-year government bonds. Both the yield curves and the government bonds reflect the current interest rate trend on financial markets. The selection of the market risk premium is guided by the current recommendations of the Institute of Public Auditors in Germany (IDW). The beta factor is calculated for Hannover Rück SE on the basis of publicly accessible capital market data. The foreign exchange rates used for currency translation correspond to the situation on the balance sheet date.

The following capitalisation rates and growth rates were recognised for the individual cash-generating units:

Capitalisation rates N 48

	Capitalisation rate	Growth rate
Argenta Holdings Limited	6.66%	1.00%
E+S Rückversicherung AG	5.38%	0.00%
Integra Insurance Solutions Limited	6.36%	1.00%

We would also refer to our basic remarks in section 3.1 "Summary of major accounting policies".

Based on the current financial planning, an impairment had to be taken on the goodwill allocated to the cash-generating unit Glencar Insurance Company because the recoverable amount fell short of the book value of the cash-generating unit. The value adjustment amounted to EUR 3.7 million and extends to the entire goodwill. The expense was recognised in the other income / expenses in property and casualty reinsurance segment.

In addition, an impairment of EUR 0.2 million was recognised on the goodwill of the cash-generating unit South Africa in the life and health reinsurance segment on account of the Covid-19 pandemic.

6.6 Other assets

Other assets N 49

in EUR thousand	2020	2019
Present value of future profits on acquired life reinsurance portfolios	25,807	33,815
Other intangible assets	131,695	134,092
Insurance for pension commitments	99,994	97,231
Own-use real estate	105,168	109,186
Tax refund claims	304,288	89,268
Fixtures, fittings and equipment	31,318	27,003
Receivables from advance payments and services	69,282	71,604
Sundry	90,618	78,757
Total	**858,170**	**640,956**

With regard to the right-of-use assets from lease contracts included in the items "Own-use real estate", "Fixtures, fittings and equipment" and "Sundry", please see section 8.8 "Leases".

The sundry assets include unadjusted other receivables of EUR 0.3 million (EUR 0.3 million) that were overdue by more than twelve months as at the balance sheet date.

Present value of future profits (PVFP) on acquired life reinsurance portfolios

Development of the present value of future profits (PVFP) on acquired life reinsurance portfolios N 50

in EUR thousand	2020	2019
Gross book value at 31 December of the previous year	129,150	126,578
Currency translation at 1 January	(9,300)	2,572
Gross book value at 31 December of the year under review	**119,850**	**129,150**
Cumulative depreciation at 31 December of the previous year	95,335	86,969
Currency translation at 1 January	(6,270)	1,647
Cumulative depreciation after currency translation	**89,065**	**88,616**
Amortisation	5,344	6,708
Currency translation at 31 December	(366)	11
Cumulative depreciation at 31 December of the year under review	**94,043**	**95,335**
Net book value at 31 December of the previous year	**33,815**	**39,609**
Net book value at 31 December of the year under review	25,807	33,815

This item comprises the present value of future cash flows recognised on business acquired in 2009 in the context of the acquisition of the ING life reinsurance portfolio. This intangible asset is amortised over the term of the underlying reinsurance contracts in proportion to the future premium income. The period of amortisation amounts to altogether 30 years. For further information please refer to our explanatory notes on intangible assets in section 3.1 “Summary of major accounting policies”.

Insurance for pension commitments

Effective 1 July 2003 Hannover Rück SE took out insurance for pension commitments. The commitments involve deferred annuities with regular premium payment under a group insurance policy. In accordance with IAS 19 “Employee Benefits” they were carried as a separate asset at fair value as at the balance sheet date in an amount of EUR 100.0 million (EUR 97.2 million).

Fixtures, fittings and equipment

Fixtures, fittings and equipment N 51

in EUR thousand	2020	2019
Gross book value at 31 December of the previous year	164,170	159,365
Currency translation at 1 January	(4,494)	1,439
Gross book value after currency translation	**159,676**	**160,804**
Additions	15,483	7,264
Disposals	21,583	3,758
Changes pursuant to IAS 8	–	672
Change in the consolidated group	2	(767)
Currency translation at 31 December	238	(45)
Gross book value at 31 December of the year under review	**153,816**	**164,170**
Cumulative depreciation at 31 December of the previous year	137,167	129,561
Currency translation at 1 January	(3,867)	1,066
Cumulative depreciation after currency translation	**133,300**	**130,627**
Disposals	21,259	3,397
Depreciation	10,311	10,085
Change in the consolidated group	1	(162)
Currency translation at 31 December	145	14
Cumulative depreciation at 31 December of the year under review	**122,498**	**137,167**
Net book value at 31 December of the previous year	**27,003**	**29,804**
Net book value at 31 December of the year under review	**31,318**	**27,003**

With regard to the measurement of fixtures, fittings and equipment, the reader is referred to our explanatory notes on the other assets in section 3.1 "Summary of major accounting policies".

With regard to the leased assets contained in this table we would refer to section 8.8 "Leases".

Other intangible assets

Development of other intangible assets **N 52**

in EUR thousand	2020	2019
Gross book value at 31 December of the previous year	394,088	370,192
Currency translation at 1 January	(6,897)	6,075
Gross book value after currency translation	**387,191**	**376,267**
Changes in the consolidated group	–	689
Additions	23,819	18,625
Disposals	17,008	1,413
Currency translation at 31 December	–	(80)
Gross book value at 31 December of the year under review	**394,002**	**394,088**
Cumulative depreciation at 31 December of the previous year	259,996	240,795
Currency translation at 1 January	(1,733)	993
Cumulative depreciation after currency translation	**258,263**	**241,788**
Disposals	16,094	947
Depreciation	20,198	19,114
Currency translation at 31 December	(60)	41
Cumulative depreciation at 31 December of the year under review	**262,307**	**259,996**
Net book value at 31 December of the previous year	**134,092**	**129,397**
Net book value at 31 December of the year under review	131,695	134,092

The item includes EUR 32.5 million (EUR 34.8 million) for purchased software as at the balance sheet date, on which depreciation is taken over useful lives of three to ten years. Of the additions, an amount of EUR 7.0 million (EUR 6.6 million) is attributable to purchased software.

The gross book values include rights from long-term reinsurance treaties still existing as at the balance sheet date. The intangible assets resulting from these rights were recognised in the context of business acquisitions in the years 1997 and 2002 and were written off in full as at the balance sheet date.

Credit risks may result from other financial assets that were not overdue or adjusted as at the balance sheet date. In this regard, the reader is referred in general to our comments on the credit risk contained in the risk report on page 81 et seq.

6.7 Technical provisions

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

Technical provisions **N 53**

	2020			2019		
in EUR thousand	gross	retro	net	gross	retro	net
Loss and loss adjustment expense reserve	33,929,230	1,883,270	32,045,960	32,996,231	2,050,114	30,946,117
Benefit reserve	7,217,988	192,135	7,025,853	9,028,000	852,598	8,175,402
Unearned premium reserve	5,070,009	165,916	4,904,093	4,391,848	116,176	4,275,672
Other technical provisions	701,577	1,106	700,471	673,221	9,355	663,866
Total	46,918,804	2,242,427	44,676,377	47,089,300	3,028,243	44,061,057

The loss and loss adjustment expense reserves are in principle calculated on the basis of the information supplied by ceding companies. Additional IBNR reserves are established for losses that have been incurred but not as yet reported. The development of the loss and loss adjustment expense reserve is shown in the following table. Commencing with the gross reserve, the change in the reserve after deduction of the reinsurers' portions is shown in the year under review and the previous year.

Loss and loss adjustment expense reserve N 54

	2020			2019		
in EUR thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	32,996,231	2,050,114	30,946,117	28,758,575	2,084,630	26,673,945
Currency translation at 1 January	(1,883,704)	(139,593)	(1,744,111)	614,450	39,753	574,697
Net book value after currency translation	**31,112,527**	**1,910,521**	**29,202,006**	**29,373,025**	**2,124,383**	**27,248,642**
Incurred claims and claims expenses (net)[1]						
Year under review	14,175,062	834,097	13,340,965	12,772,636	807,151	11,965,485
Previous years	4,620,133	1,178,440	3,441,693	3,571,258	887,687	2,683,571
	18,795,195	**2,012,537**	**16,782,658**	**16,343,894**	**1,694,838**	**14,649,056**
Less:						
Claims and claims expenses paid (net)[1]						
Year under review	(4,189,271)	(216,675)	(3,972,596)	(3,974,059)	(121,410)	(3,852,649)
Previous years	(11,759,665)	(1,829,034)	(9,930,631)	(10,159,143)	(1,651,853)	(8,507,290)
	(15,948,936)	**(2,045,709)**	**(13,903,227)**	**(14,133,202)**	**(1,773,263)**	**(12,359,939)**
Changes in the consolidated group	–	–	–	1,398,836	(2,871)	1,401,707
Specific value adjustment for retrocessions	–	637	(637)	–	5,351	(5,351)
Reversal of impairments	–	4,392	(4,392)	–	596	(596)
Portfolio entries/exits	(20,746)	(9,002)	(11,744)	(3,367)	1,464	(4,831)
Currency translation at 31 December	(8,810)	11,168	(19,978)	17,045	10,318	6,727
Net book value at 31 December of the year under review	**33,929,230**	**1,883,270**	**32,045,960**	**32,996,231**	**2,050,114**	**30,946,117**

[1] excluding effects from portfolio entries/exits recognised in income

On balance, cumulative specific value adjustments of EUR 52.0 million (EUR 60.6 million) were recognised in these reinsurance recoverables as at the balance sheet date. The total amount of the net reserve before specific value adjustments was EUR 31,994.0 million (EUR 30,885.5 million) as at the balance sheet date.

Run-off of the net loss reserve in the property and casualty reinsurance segment

To some extent the loss and loss adjustment expense reserves are inevitably based upon estimations that entail an element of uncertainty. The difference between the loss reserves constituted in the previous year and the losses paid out of these reserves is reflected in the net run-off result. In this regard, owing to the fact that the period of some reinsurance treaties is not the calendar year or because they are concluded on an underwriting-year basis, it is frequently impossible to make an exact allocation of claims expenditures to the current financial year or the previous year.

The run-off triangles provided by the reporting units are shown after adjustment for the currency effects arising out of translation of the respective transaction currency into the local reporting currency. The run-off triangles of the reporting units delivered in foreign currencies are translated to euro at the current rate on the balance sheet date in order to show run-off results after adjustment for currency effects. In cases where the originally estimated ultimate loss corresponds to the actual ultimate loss in the original currency, it is ensured that also after translation to the Group reporting currency (EUR) a run-off result induced purely by currency effects is not shown.

The run-off triangles show the run-off of the net loss reserve (loss and loss adjustment expense reserve) established as at each balance sheet date, this reserve comprising the provisions constituted in each case for the current and preceding occurrence years.

The following table shows the net loss reserve for the property and casualty reinsurance business group in the years 2010 to 2020 as well as the run-off of the reserve (so-called run-off triangle). The figures reported for the 2010 balance sheet year also include the amounts for previous years that are no longer shown separately in the run-off triangle. The run-off results shown reflect the changes in the ultimate loss arising in the 2020 financial year for the individual run-off years.

Net loss reserve and its run-off in the property and casualty reinsurance segment N 55

in EUR million	31.12. 2010	31.12. 2011	31.12. 2012	31.12. 2013	31.12. 2014	31.12. 2015	31.12. 2016	31.12. 2017	31.12. 2018	31.12. 2019	**31.12. 2020**
Loss and loss adjustment expense reserve (from balance sheet)											
	15,071.8	16,427.3	17,036.7	17,596.0	19,480.5	21,501.2	22,411.6	22,534.2	23,923.0	26,135.2	**27,463.8**
Cumulative payments for the year in question and previous years											
One year later	2,408.0	3,082.4	2,849.6	3,136.0	3,448.9	3,217.2	3,687.5	4,702.7	4,776.9	5,498.8	
Two years later	4,037.1	4,791.1	4,448.1	4,921.1	5,176.7	5,115.9	5,907.9	6,740.1	7,442.2		
Three years later	5,018.9	5,713.1	5,630.8	6,028.0	6,435.4	6,564.3	7,149.4	8,390.2			
Four years later	5,665.1	6,639.8	6,473.2	7,015.9	7,501.0	7,541.5	8,248.9				
Five years later	6,418.7	7,352.1	7,260.2	7,908.0	8,327.0	8,442.1					
Six years later	6,956.1	7,943.6	7,938.6	8,489.0	9,072.7						
Seven years later	7,392.4	8,446.3	8,405.1	9,071.2							
Eight years later	7,789.0	8,747.8	8,914.6								
Nine years later	8,026.8	9,177.7									
Ten years later	8,424.9										
Loss and loss adjustment expense reserve (net) for the year in question and previous years plus payments made to date on the original reserve											
End of year	**15,071.8**	**16,427.3**	**17,036.7**	**17,596.0**	**19,480.5**	**21,501.2**	**22,411.6**	**22,534.2**	**23,923.0**	**26,135.2**	**27,463.8**
One year later	14,476.9	16,137.8	16,557.6	17,402.8	18,980.0	20,607.0	21,284.2	21,791.5	23,131.5	25,544.6	
Two years later	13,880.5	15,748.2	16,204.4	16,777.2	17,881.2	19,220.0	20,299.9	20,537.0	22,234.5		
Three years later	13,435.0	15,299.9	15,685.0	15,742.7	16,935.3	18,224.0	19,248.5	19,786.3			
Four years later	12,977.4	14,678.5	14,978.9	14,891.6	16,050.5	17,262.2	18,503.5				
Five years later	12,411.7	14,005.1	14,277.7	14,125.8	15,224.4	16,595.4					
Six years later	11,873.5	13,362.6	13,592.5	13,339.1	14,585.7						
Seven years later	11,280.3	12,686.1	12,995.4	12,812.5							
Eight years later	10,885.2	12,162.1	12,582.8								
Nine years later	10,458.0	11,876.5									
Ten years later	10,279.0										
Change relative to previous year											
Net run-off result	179.0	106.5	127.0	114.0	112.2	28.0	78.2	5.8	146.3	(306.5)	
As percentage of original loss reserve	1.2	0.6	0.7	0.6	0.6	0.1	0.3	0.0	0.6	(1.2)	

The run-off profit of altogether EUR 590.5 million (EUR 833.8 million) in the 2020 financial year derives above all from positive run-offs of reserves in the areas of marine/aviation, motor, property as well as in credit business.

Maturities of the technical reserves

IFRS 4 "Insurance Contracts" requires information which helps to clarify the amount and timing of cash flows expected from reinsurance contracts. In the following tables we have shown the future maturities of the technical provisions broken down by the expected remaining times to maturity. As part of our maturity analysis we have immediately deducted the deposits put up as collateral for these reserves, since the cash inflows and outflows from these deposits are to be allocated directly to the ceding companies. For further explanation of the recognition and measurement of the reserves please see section 3.1 "Summary of major accounting policies".

Maturities of the technical reserves N 56

in EUR thousand	2020 Loss and loss adjustment expense reserves gross	retro	net	Benefit reserve gross	retro	net
Due in one year	9,630,992	403,350	9,227,642	916,023	1,126	914,897
Due after one through five years	13,080,012	973,471	12,106,541	668,698	5,832	662,866
Due after five through ten years	5,027,070	318,810	4,708,260	489,109	33,802	455,307
Due after ten through twenty years	2,887,331	144,737	2,742,594	326,997	1,993	325,004
Due after twenty years	1,090,257	48,143	1,042,114	1,240,193	2,665	1,237,528
	31,715,662	**1,888,511**	**29,827,151**	**3,641,020**	**45,418**	**3,595,602**
Deposits	2,213,568	46,719	2,166,849	3,576,968	146,717	3,430,251
Total	**33,929,230**	**1,935,230**	**31,994,000**	**7,217,988**	**192,135**	**7,025,853**

Maturities of the technical reserves N 57

in EUR thousand	2019 Loss and loss adjustment expense reserves gross	retro	net	Benefit reserve[1] gross	retro	net
Due in one year	9,136,467	459,123	8,677,344	1,308,234	609,292	698,942
Due after one through five years	12,155,030	1,032,938	11,122,092	892,949	33,728	859,221
Due after five through ten years	5,083,742	324,170	4,759,572	623,490	33,258	590,232
Due after ten through twenty years	3,204,969	174,164	3,030,805	434,620	1,853	432,767
Due after twenty years	1,251,761	66,641	1,185,120	1,345,825	2,502	1,343,323
	30,831,969	**2,057,036**	**28,774,933**	**4,605,118**	**680,633**	**3,924,485**
Deposits	2,164,262	53,680	2,110,582	4,422,882	171,965	4,250,917
Total	**32,996,231**	**2,110,716**	**30,885,515**	**9,028,000**	**852,598**	**8,175,402**

[1] restated pursuant to IAS 8 to include additionally identified allowable deposits

The average maturity of the loss and loss adjustment expense reserves was 4.6 years (4.9 years), or 4.6 years (5.0 years) after allowance for the corresponding retrocession shares. The benefit reserve had an average maturity of 13.1 years (11.9 years) – or 13.2 years (13.7 years) on a net basis.

The average maturity of the reserves is determined using actuarial projections of the expected future payments. A payment pattern is calculated for each homogenous category of our portfolio – making allowance for the business sector, geographical considerations, treaty type and the type of reinsurance – and applied to the outstanding liabilities for each underwriting year and run-off status.

The payment patterns are determined with the aid of actuarial estimation methods and adjusted to reflect changes in payment behaviour and outside influences. The calculations can also be distorted by major losses, and these are therefore considered separately using reference samples or similar losses. The payment patterns used can be compared year for year by contrasting the projected payments with the actual amounts realised. Liabilities in liability and motor reinsurance traditionally have long durations, sometimes in excess of 20 years, while liabilities in property business are settled within the first ten years.

A benefit reserve is established for life, annuity, personal accident and health reinsurance contracts. Based on the duration of these contracts, long-term reserves are constituted for life and annuity policies and predominantly short-term reserves are set aside for health and personal accident business.

The parameters used to calculate the benefit reserve are interest income, lapse rates and mortality/morbidity rates.

The values for the first two components (interest income and lapse rates) differ according to the country concerned, product type, investment year etc.

The mortality and morbidity rates used are chosen on the basis of national tables and the insurance industry standard. Empirical values for the reinsured portfolio, where available, are also taken into consideration. In this context insights into the gender, age and smoker structure are incorporated into the calculations, and allowance is also made for factors such as product type, sales channel and the frequency of premium payment by policyholders.

At the inception of every reinsurance contract, assumptions are made about the aforementioned three parameters and locked in for the purpose of calculating the benefit reserve. At the same time, safety/fluctuation loadings are built into each of these components. In order to ensure at all times that the originally chosen assumptions continue to be adequate throughout the contract, checks are made on a regular – normally annual – basis in order to determine whether these assumptions need to be adjusted ("unlocked").

The benefit reserve is established in accordance with the principles set out in SFAS 60. The provisions are based on the Group companies' information regarding mortality, interest and lapse rates.

Development of the benefit reserve N 58

	2020			2019		
in EUR thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	9,028,000	852,598	8,175,402	9,184,356	909,056	8,275,300
Currency translation at 1 January	(547,480)	(72,106)	(475,374)	340,541	21,712	318,829
Net book value after currency translation	**8,480,520**	**780,492**	**7,700,028**	**9,524,897**	**930,768**	**8,594,129**
Changes	(494,914)	(391,427)	(103,487)	(122,671)	(133,464)	10,793
Portfolio entries/exits	(826,518)	(238,945)	(587,573)	(380,167)	53,402	(433,569)
Currency translation at 31 December	58,900	42,015	16,885	5,941	1,892	4,049
Net book value at 31 December of the year under review	**7,217,988**	**192,135**	**7,025,853**	**9,028,000**	**852,598**	**8,175,402**

The development in the year under review was influenced by portfolio exits attributable principally to Chinese business and UK longevity business.

The unearned premium reserve derives from the deferral of ceded reinsurance premium. The unearned premium is determined by the period during which the risk is carried and established in accordance with the information supplied by ceding companies. In cases where no information was received, the unearned premium was estimated using suitable methods. Premium paid for periods subsequent to the date of the balance sheet was deferred from recognition within the statement of income.

Development of the unearned premium reserve N 59

	2020			2019		
in EUR thousand	gross	retro	net	gross	retro	net
Net book value at 31 December of the previous year	4,391,848	116,176	4,275,672	3,166,964	93,678	3,073,286
Currency translation at 1 January	(276,799)	(9,212)	(267,587)	90,519	1,762	88,757
Net book value after currency translation	**4,115,049**	**106,964**	**4,008,085**	**3,257,483**	**95,440**	**3,162,043**
Changes in the consolidated group	–	–	–	477,736	(948)	478,684
Changes	1,028,172	61,345	966,827	636,972	21,317	615,655
Currency translation at 31 December	(73,212)	(2,393)	(70,819)	19,657	367	19,290
Net book value at 31 December of the year under review	**5,070,009**	**165,916**	**4,904,093**	**4,391,848**	**116,176**	**4,275,672**

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

6.8 Funds withheld (liabilities)

The funds withheld under reinsurance treaties totalling EUR 582.3 million (EUR 1,157.8 million) represent the cash and securities deposits furnished to our company by our retrocessionaires that do not trigger any cash flows and cannot be realised without the consent of our retrocessionaires. The maturities of these deposits are matched to the corresponding shares of the reinsurers in the technical provisions. If such a share no longer exists the corresponding funds withheld are reduced to the same extent.

6.9 Contract deposits (liabilities)

The contract deposits on the liabilities side decreased by EUR 325.6 million in the year under review from EUR 3,581.1 million to EUR 3,255.5 million. The contract deposits item on the liabilities side essentially encompasses balances deriving from non-traditional life insurance contracts that are to be carried as liabilities.

6.10 Provisions for pensions and other post-employment benefit obligations

Pension commitments are given in accordance with the relevant version of the pension plan as amended. The 1968 pension plan provides for retirement, disability, widows' and orphans' benefits. The pension entitlement is dependent on length of service; entitlements under the statutory pension insurance scheme are taken into account. The pension plan was closed to new participants with effect from 31 January 1981.

On 1 April 1993 (1 June 1993 in the case of senior executives) the 1993 pension plan came into effect. This pension plan provides for retirement, disability and surviving dependants' benefits. The scheme is based upon annual determination of the pension contributions, which are calculated according to the pensionable employment income and the company's performance. The pension plan was closed to new participants with effect from 31 March 1999.

From 1997 onwards it has been possible to obtain pension commitments through deferred compensation. The employee-funded commitments included in the provisions for accrued pension rights are protected by an insurance contract with HDI Lebensversicherung AG, Cologne.

As at 1 July 2000 the 2000 pension plan came into force for the entire Group. Under this plan, new employees included in the group of beneficiaries are granted an indirect commitment from HDI Unterstützungskasse e. V. This pension plan provides for retirement, disability and surviving dependants' benefits. The provident fund takes out insurance coverage with HDI Lebensversicherung AG that maps the entire spectrum of benefits (matching coverage). These pension commitments are considered to be contribution-based pension benefits under German employment law, and for economic purposes the pension scheme is classified as a defined benefit plan. The relevant assets of the provident fund are recognised as plan assets.

Employees also have the option to accumulate additional, insurance-type retirement provision by way of deferred compensation. Pension provisions are not recognised in this regard.

In addition to these pension plans, senior executives and members of the Executive Board, in particular, enjoy individual commitments as well as commitments given under the benefits plan of the Bochumer Verband.

The commitments to employees in Germany predominantly comprise benefit obligations financed by the Group companies. The provisions for pensions in Germany and abroad were calculated on the basis of uniform standards according to prevailing economic circumstances.

Provisions for pensions are established in accordance with actuarial principles and are based upon the commitments made by the Hannover Re Group for retirement, disability and widows' benefits. The amount of the commitments is determined according to length of service and salary level.

The defined benefit plans expose Hannover Re to the following actuarial risks:

- longevity
- currency
- interest rate
- disablement
- pension progression
- rate of compensation increase

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

Disablement entails the risk that the assumed number of retirements from the subportfolio of eligible beneficiaries on grounds of disability does not correspond to the actual experience and for this reason increased benefit obligations have to be met.

The pension progression entails the risk that the anticipated development of the consumer price index factored into the trend assumptions was too low and that increased benefit obligations arise on account of pension indexation required by law.

The rate of compensation increase entails the risk that the increases in pensionable salaries factored into the trend assumptions on a parallel basis do not adequately reflect the actual developments. In addition, in the case of plans under which the determinative income components above and below the income threshold for contributions to the statutory pension insurance scheme are differently weighted for the purpose of calculating the benefit, there is a risk of a diverging trend in the future with respect to salary and income threshold.

The calculation of the provisions for pensions is based upon the following assumptions:

Measurement assumptions **N 60**

	2020			2019		
in %	Germany	Australia	United Kingdom	Germany	Australia	United Kingdom
Discount rate	0.49	1.37	1.45	1.10	2.87	2.10
Rate of compensation increase	2.50	2.00	2.50	2.50	3.00	2.15
Pension indexation	1.64	2.00	2.50	1.74	3.00	2.15

The movements in the net pension liability for the Group's various defined benefit plans were as follows:

Movements in net liability from defined benefit pension plans N 61

in EUR thousand	2020	2019	2020	2019	2020	2019
	Defined benefit obligation		Fair value of plan assets		Impact of minimum funding requirement/asset ceiling	
Position at 1 January of the financial year	249,636	223,604	47,759	39,989	–	41
Recognised in profit or loss						
Current service costs	5,502	5,412	–	–	–	–
Past service cost and plan curtailments	2,761	175	–	–	–	–
Net interest component	2,163	3,699	641	913	–	1
	10,426	**9,286**	**641**	**913**	**–**	**1**
Recognised in cumulative other comprehensive income						
Actuarial gain (–)/loss (+) from change in biometric assumptions	–	1,453	–	–	–	–
Actuarial gain (–)/loss (+) from change in financial assumptions	29,205	20,324	–	–	–	–
Experience gains (–)/losses (+)	3,117	2,985	–	–	–	–
Return on plan assets, excluding amounts included in interest income	–	–	3,931	3,561	–	–
Change in asset ceiling	–	–	–	–	–	(41)
Exchange differences	(872)	800	(832)	788	–	–
	31,450	**25,562**	**3,099**	**4,349**	**–**	**(41)**
Other changes						
Employer contributions	–	–	5,745	4,053	–	–
Employee contributions and deferred compensation	–	4	–	–	–	–
Benefit payments	(5,233)	(5,254)	(352)	(552)	–	–
Additions and disposals	(61)	(188)	(8)	(50)	–	–
Changes in the consolidated group	–	(2,655)	–	(943)	–	(1)
Effects of plan settlements	(56)	(723)	26	–	–	–
	(5,350)	**(8,816)**	**5,411**	**2,508**	**–**	**(1)**
Position at 31 December of the financial year	**286,162**	**249,636**	**56,910**	**47,759**	**–**	**–**

The plan assets consist exclusively of qualifying insurance policies as defined by IAS 19.

The reconciliation of the projected benefit obligations with the recognised provisions for pensions is as follows:

Provisions for pensions **N 62**

in EUR thousand	2020	2019
Projected benefit obligations at 31 December of the financial year	286,162	249,636
Fair value of plan assets at 31 December of the financial year	56,910	47,759
Effect of minimum funding requirement on asset ceiling	–	–
Recognised pension obligations at 31 December of the financial year	**229,252**	**201,877**
thereof: Capitalised assets	–	75
Provisions for pensions	229,252	201,952

In the current financial year Hannover Re anticipates contribution payments of EUR 5.4 million under the plans set out above. The weighted average duration of the defined benefit obligation is 18.7 (18.2) years.

Sensitivity analysis

An increase or decrease in the key actuarial assumptions would have the following effect on the present value of the defined benefit obligation as at the balance sheet date:

Effect on the defined benefit obligation **N 63**

in EUR thousand		Parameter increase	Parameter decrease
Discount rate	(+/– 0.5%)	(24,937)	28,403
Rate of compensation increase	(+/– 0.25%)	1,443	(1,433)
Pension indexation	(+/– 0.25%)	8,976	(8,575)

Furthermore, a change is possible with respect to the assumed mortality rates and lifespans. The underlying mortality tables were adjusted by reducing the mortalities by 10% in order to determine the longevity risk. Extending the lifespans in this way would have produced a EUR 10.1 million (EUR 7.7 million) higher pension commitment at the end of the financial year.

Defined contribution plans

In addition to the defined benefit plans, some Group companies have defined contribution plans that are based on length of service and the employee's income or level of contributions. The expense recognised for these obligations in the financial year in accordance with IAS 19 "Employee Benefits" was EUR 22.2 million (EUR 20.4 million), none of which (EUR 0 million) was attributable to commitments to employees in key positions. Of the expense for defined contribution plans, an amount of EUR 10.3 million (EUR 10.8 million) relates to state pension schemes, thereof EUR 8.0 million (EUR 8.3 million) to contributions to the statutory pension insurance scheme in Germany.

6.11 Other liabilities

Other liabilities N 64

in EUR thousand	2020	2019
Liabilities from derivatives	85,286	56,671
Interest	34,958	43,002
Deferred income and prepayments received	96,919	112,323
Sundry non-technical provisions	175,892	197,985
Sundry liabilities	148,052	213,094
Total	**541,107**	**623,075**

With regard to the liabilities from derivatives in an amount of EUR 85.3 million (EUR 56.7 million), please see our explanatory remarks on derivative financial instruments in section 8.1 "Derivative financial instruments and financial guarantees".

The sundry liabilities include, among other things, trade accounts payable and clearing balances. In addition, they include distributions within the year of EUR 2.3 million (EUR 5.3 million) from interests in private equity funds that had still to be recognised in income as at the balance sheet date.

We enter into term repurchase agreements (repos) as a supplementary liquidity management tool. The asset portfolios exchanged in this context are fully collateralised. As at the balance sheet date the liabilities from repos recognised in the sundry liabilities amounted to EUR 24.1 million (EUR 66.3 million).

Development of sundry non-technical provisions

in EUR thousand	Balance at 31 December 2019	Currency translation at 1 January	Balance at 1 January of the year under review
Provisions for			
Audits and costs of publishing the annual financial statements	7,550	(253)	7,297
Consultancy fees	4,002	(118)	3,884
Suppliers' invoices	6,457	(296)	6,161
Partial retirement arrangements and early retirement obligations	1,831	(11)	1,820
Holiday entitlements and overtime	10,154	(113)	10,041
Anniversary bonuses	5,109	(96)	5,013
Management and staff bonuses	86,948	(3,051)	83,897
Other	75,934	(1,346)	74,588
Total	**197,985**	**(5,284)**	**192,701**

The maturities of the sundry non-technical provisions as at the balance sheet date are shown in the following table:

Maturities of the sundry non-technical provisions N 66

in EUR thousand	2020	2019
Due in one year	99,441	110,111
Due after one through five years	70,198	83,519
Due after five years	6,253	4,355
Total	**175,892**	**197,985**

N 65

Additions	Utilisation	Release	Other changes	Currency translation at 31 December	Balance at 31 December 2020
6,192	6,363	356	–	5	6,775
2,879	2,822	928	–	25	3,038
9,288	10,107	829	–	25	4,538
83	5	–	–	2	1,900
9,050	5,902	–	–	8	13,197
587	15	–	–	(10)	5,575
31,309	43,693	4,872	–	362	67,003
24,002	19,145	5,701	(15)	137	73,866
83,390	**88,052**	**12,686**	**(15)**	**554**	**175,892**

6.12 Financing liabilities

On 8 July 2020 Hannover Rück SE placed subordinated debt in the amount of EUR 500.0 million on the European capital market. The bond has a total maturity of around 20 years with a first scheduled call option on 8 July 2030. It carries a fixed coupon of 1.75% p.a. in the first roughly ten years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +300 basis points.

On 9 October 2019 Hannover Rück SE placed subordinated debt in the amount of EUR 750 million on the European capital market. The bond has a total maturity of 20 years with a first scheduled call option on 9 July 2029. It carries a fixed coupon of 1.125% p.a. in the first ten years, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +238 basis points.

On 18 April 2018 Hannover Rück SE placed a senior bond with a volume of EUR 750.0 million on the European capital market. The bond has a maturity date of 18 April 2028 and may be redeemed at any time from 18 January 2028 onwards, although not later than 18 April 2028. It carries a fixed coupon of 1.125% p.a.

On 15 September 2014 Hannover Rück SE placed a EUR 500.0 million subordinated bond on the European capital market. The issue has a perpetual maturity with a first scheduled call option on 26 June 2025 and may be redeemed at each coupon date thereafter. It carries a fixed coupon of 3.375% p.a. until 26 June 2025, after which the interest rate basis changes to 3-month EURIBOR +325 basis points.

On 20 November 2012 Hannover Rück SE placed a EUR 500.0 million subordinated bond on the European capital market via its subsidiary Hannover Finance (Luxembourg) S.A. The bond has a maturity of approximately 30 years with a first scheduled call option on 30 June 2023 and may be redeemed at each coupon date thereafter. It carries a fixed coupon of 5.00% p.a. until this date, after which the interest rate basis changes to a floating rate of 3-month EURIBOR +430 basis points.

Altogether five (five) bonds were recognised as at the balance sheet date with an amortised cost of EUR 2,975.7 million (EUR 2,977.7 million).

Long-term debt and notes payable N 67

				2020			
in EUR thousand	Coupon	Maturity	Currency	Amortised cost	Fair value measurement	Accrued interest	Fair value
Notes payable							
Hannover Rück SE, 2020	1.75	2040	EUR	494,942	40,513	2,038	537,493
Hannover Rück SE, 2019	1.125	2039	EUR	740,973	26,427	1,919	769,319
Hannover Rück SE, 2018	1.125	2028	EUR	744,112	78,848	5,941	828,901
Hannover Rück SE, 2014	3.375	n/a	EUR	496,844	66,761	8,692	572,297
Hannover Finance (Luxembourg) S.A., 2012	5.00	2043	EUR	498,859	59,636	12,603	571,098
				2,975,730	**272,185**	**31,193**	**3,279,108**
Long-term debt				372,705	7,938	943	381,586
Total				**3,348,435**	**280,123**	**32,136**	**3,660,694**

Long-term debt and notes payable

N 68

in EUR thousand	Coupon	Maturity	Currency	2019 Amortised cost	Fair value measure-ment	Accrued interest	Fair value
Notes payable							
Hannover Rück SE, 2019	1.125	2039	EUR	739,982	(6,482)	1,913	735,413
Hannover Rück SE, 2018	1.125	2028	EUR	743,335	50,015	5,925	799,275
Hannover Rück SE, 2014	3.375	n/a	EUR	496,243	70,082	8,668	574,993
Hannover Finance (Luxembourg) S.A., 2012	5.00	2043	EUR	498,529	79,536	12,568	590,633
Hannover Finance (Luxembourg) S.A., 2010	5.75	2040	EUR	499,635	19,820	8,484	527,939
				2,977,724	**212,971**	**37,558**	**3,228,253**
Long-term debt				395,043	8,571	712	404,326
Total				**3,372,767**	**221,542**	**38,270**	**3,632,579**

The aggregated fair value of the extended subordinated loans is based on quoted, active market prices. If such price information was not available, fair value was determined on the basis of the recognised effective interest rate method or estimated using other financial assets with similar rating, duration and return characteristics. Under the effective interest rate method the current market interest rate levels in the relevant fixed interest periods are always taken as a basis.

Net gains and losses from long-term debt and notes payable

N 69

in EUR thousand	Ordinary income/expenses 2020	Ordinary income/expenses 2019	Amortisation 2020	Amortisation 2019	Net result 2020	Net result 2019
Long-term debt	(8,568)	(8,343)	(313)	(276)	(8,881)	(8,619)
Notes payable	(83,333)	(80,878)	(3,262)	(2,314)	(86,595)	(83,192)
Total	**(91,901)**	**(89,221)**	**(3,575)**	**(2,590)**	**(95,476)**	**(91,811)**

The ordinary expenses principally include interest expenses of nominally EUR 83.3 million (EUR 80.9 million) resulting from the issued subordinated and senior bonds.

Maturities of financial liabilities

N 70

in EUR thousand	2020 Less than three months	Three months to one year	One to five years	Five to ten years	Ten to twenty years	More than twenty years	No maturity
Other financial liabilities[1]	101,438	172,851	3,346	–	2,294	–	–
Long-term debt	–	–	273,039	99,666	–	–	–
Notes payable	–	–	–	744,112	1,235,915	498,859	496,844
Lease liabilities	2,690	4,250	29,757	13,578	–	32,566	–
Total	**104,128**	**177,101**	**306,142**	**857,356**	**1,238,209**	**531,425**	**496,844**

[1] Excluding sundry non-technical provisions and derivative financial instruments; the maturities of these items are broken down separately.

Maturities of financial liabilities N 71

in EUR thousand	2019 Less than three months	Three months to one year	One to five years	Five to ten years	Ten to twenty years	More than twenty years	No maturity
Other financial liabilities[1]	99,249	262,910	6,260	–	–	–	–
Long-term debt	–	34,444	304,738	55,861	–	–	–
Notes payable	–	–	–	743,335	739,982	998,164	496,243
Lease liabilities	1,814	3,340	31,906	16,380	287	35,474	–
Total	**101,063**	**300,694**	**342,904**	**815,576**	**740,269**	**1,033,638**	**496,243**

[1] Excluding sundry non-technical provisions and derivative financial instruments; the maturities of these items are broken down separately.

The following table shows the movements in long-term debt, notes payable and other long-term liabilities with respect to cash and non-cash changes.

Reconciliation of financing liabilities N 72

in EUR thousand	Balance at 31 December 2019	Cash flow	Non-cash items Currency translation	Other changes	Balance at 31 December 2020
Long-term debt	395,043	(278)	(22,373)	313	372,705
Notes payable	2,977,724	(5,256)	–	3,262	2,975,730
Lease liabilities	89,201	(12,177)	(5,091)	10,908	82,841
Total	**3,461,968**	**(17,711)**	**(27,464)**	**14,483**	**3,431,276**

Reconciliation of financing liabilities N 73

in EUR thousand	Balance at 31 December 2018	Cash flow	Non-cash items Currency translation	Other changes	Balance at 31 December 2019
Long-term debt	323,200	67,815	3,752	276	395,043
Notes payable	2,235,649	739,761	–	2,314	2,977,724
Other long-term liabilities	35	(36)	1	–	–
Lease liabilities	–	(13,074)	1,780	100,495	89,201
Total	**2,558,884**	**794,466**	**5,533**	**103,085**	**3,461,968**

6.13 Shareholders' equity and treasury shares

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

The common shares (share capital of Hannover Rück SE) amount to EUR 120,597,134.00. They are divided into 120,597,134 voting and dividend-bearing registered ordinary shares in the form of no-par-value shares. The shares are paid in full. Each share carries an equal voting right and an equal dividend entitlement.

Conditional capital of up to EUR 60,299 thousand is available; it can be used to grant shares to holders of bonds and/or profit-sharing rights with conversion rights and warrants. Authorised capital is also available in an amount of up to EUR 60,299 thousand. Both have a time limit of 9 May 2021; the subscription right of shareholders may be excluded with the consent of the Supervisory Board under certain conditions.

The Executive Board is authorised, with the consent of the Supervisory Board, to use an amount of up to EUR 1,000 thousand of the existing authorised capital to issue employee shares.

The Executive Board is further authorised, with the consent of the Supervisory Board, to acquire treasury shares – including through the use of derivatives – up to an amount of 10% of the share capital. The authorisation has a time limit of 5 May 2025.

The Annual General Meeting of Hannover Rück SE resolved on 6 May 2020 that a gross dividend of EUR 5.50 per share should be paid for the 2019 financial year. This corresponds to a total distribution of EUR 633.3 million (EUR 633.1 million). The distribution consists of a dividend of EUR 4.00 per share and a special dividend of EUR 1.50 per share.

The decrease in the other reserves arising out of currency translation, which is recognised in equity, was attributable in an amount of EUR 61.2 million (increase of EUR 27.3 million in the previous year) to the translation of long-term debt or loans with no maturity date extended to Group companies and branches abroad.

The disclosures on capital management arising out of IAS 1.134 – 136 "Presentation of Financial Statements" are provided in the "Financial position and net assets" subsection of the management report, to which the reader is referred. This includes both a presentation of our capital management objectives and procedures (page 57 et seq., subsection entitled "Investment policy") and a description of our policyholders' surplus (page 59 et seq., subsection entitled "Management of policyholders' surplus"), together with a summary of the diverse external capital requirements to which we are subject. The Solvency II regulatory framework, in particular, gives rise to capital requirements and consequences for capital management, which we discuss more closely on pages 82 et seq. of the risk report.

Treasury shares

IAS 1 requires separate disclosure of treasury shares in shareholders' equity. As part of this year's employee share option plan Hannover Rück SE acquired altogether 16,511 (16,467) treasury shares during the second quarter of 2020 on the legal basis of § 71 Para. 1 No. 2 Stock Corporation Act (AktG) and delivered them to eligible employees at preferential conditions. These shares are blocked until 31 May 2024. This transaction resulted in an expense of EUR 0.5 million (EUR 0.4 million), which was recognised under personnel expenditure, as well as a negligible change in retained earnings recognised in equity. The company was no longer in possession of treasury shares as at the balance sheet date.

6.14 Non-controlling interests

Non-controlling interests in the shareholders' equity of subsidiaries are reported separately within Group shareholders' equity in accordance with IAS 1 "Presentation of Financial Statements". They amounted to EUR 844.4 million (EUR 826.5 million) as at the balance sheet date.

Non-controlling interests in partnerships are reported in accordance with IAS 32 "Financial Instruments: Presentation" under long-term liabilities. The non-controlling interest in profit or loss, which forms part of net income and is shown separately after net income as a "thereof" note, amounted to EUR 35.7 million (EUR 89.2 million) in the year under review.

Subsidiaries with material non-controlling interests N 74

in EUR thousand	2020	2019
	E+S Rückversicherung AG, Hannover, Germany	
Participation of non-controlling interests	35.21%	35.21%
Voting rights of non-controlling interests	35.21%	35.21%
Net income	71,603	189,768
thereof attributable to non-controlling interests	25,210	66,814
Income/expense recognised directly in equity	93,955	71,985
Total recognised income and expense	165,558	261,753
Shareholders' equity	2,157,717	2,117,159
thereof attributable to non-controlling interests	759,698	745,418
Dividends paid	125,000	150,000
thereof attributable to non-controlling interests	44,011	52,813
Assets	10,644,455	10,460,993
Liabilities	8,486,738	8,343,834
Cash flow from operating activities	275,181	230,846
Cash flow from investing activities	(152,497)	(88,065)
Cash flow from financing activities	(125,000)	(150,000)

7. Notes on the individual items of the statement of income

7.1 Gross written premium

The following table shows the breakdown of the gross written premium according to regional origin.

Gross written premium N 75

in EUR thousand	2020	2019
Regional origin		
Germany	1,753,635	1,490,616
United Kingdom	3,406,117	3,017,091
France	1,099,165	954,044
Other	2,751,329	2,673,085
Europe	**9,010,246**	**8,134,836**
USA	7,059,536	6,863,194
Other	1,121,474	925,131
North America	**8,181,010**	**7,788,325**
Asia	4,340,543	3,793,197
Australia	1,653,305	1,245,897
Australasia	**5,993,848**	**5,039,094**
Africa	518,085	570,707
Other	1,062,273	1,064,678
Total	**24,765,462**	**22,597,640**

7.2 Investment income

Investment income **N 76**

in EUR thousand	2020	2019
Income from real estate	164,428	185,704
Dividends	4,532	5,309
Interest income	992,901	1,002,124
Other investment income	81,214	187,678
Ordinary investment income	**1,243,075**	**1,380,815**
Profit or loss on investments in associated companies	88,129	26,354
Realised gains on investments	399,832	353,007
Realised losses on investments	70,222	79,266
Change in fair value of financial instruments	63,971	72,855
Impairments on real estate	55,615	48,630
Impairments on fixed-income securities	11,772	129
Impairments on participating interests and other financial assets	62,006	31,887
Other investment expenses	129,034	122,491
Net income from assets under own management	**1,466,358**	**1,550,628**
Interest income on funds withheld and contract deposits	347,788	297,831
Interest expense on funds withheld and contract deposits	126,023	91,398
Total investment income	**1,688,123**	**1,757,061**

Of the impairments totalling EUR 92.8 million (EUR 44.0 million), an amount of EUR 32.3 million (EUR 21.6 million) was attributable to private equity, EUR 14.8 million (EUR 2.3 million) to funds with fixed-income features and EUR 5.6 million (EUR 6.9 million) to a long-term debt. An impairment loss of EUR 19.0 million (EUR 11.9 million) was recognised on real estate and real estate funds.

The impairments taken on fixed-income securities amounted to just EUR 11.8 million (EUR 0.1 million).

The effects of the Covid-19 pandemic resulted in a total charge to investment income of EUR 127.4 million in the year under review, of which EUR 50.0 million was attributable to fixed-income securities and EUR 77.4 million to other invested assets.

The portfolio did not contain any overdue, unadjusted assets as at the balance sheet date since overdue securities are written down immediately.

Interest income on investments **N 77**

in EUR thousand	2020	2019
Fixed-income securities – held to maturity	8,211	9,588
Fixed-income securities – loans and receivables	84,830	80,858
Fixed-income securities – available for sale	862,853	864,794
Financial assets – at fair value through profit or loss	13,275	12,669
Other	23,732	34,215
Total	**992,901**	**1,002,124**

The net gains and losses on investments held to maturity, loans and receivables and the available-for-sale portfolio shown in the following table are composed of interest income, realised gains and losses as well as impairments and appreciation. In the case of the fixed-income securities at fair value through profit or loss designated in this category and the other financial assets, which include the technical derivatives, income and expenses from changes in fair value are also recognised.

Making allowance for the other investment expenses of EUR 129.0 million (EUR 122.5 million), net income from assets under own management of altogether EUR 1,466.4 million (EUR 1,550.6 million) was recognised in the year under review.

Net gains and losses on investments N 78

in EUR thousand	2020				
	Ordinary investment income[1]	Realised gains and losses	Impairments/ appreciation	Change in fair value	Net income from assets under own management[2]
Held to maturity					
Fixed-income securities	7,863	(61)	–	–	7,802
Loans and receivables					
Fixed-income securities	80,433	4,003	–	–	84,436
Available for sale					
Fixed-income securities	789,598	293,281	11,772	–	1,071,107
Equity securities	1,393	6,736	–	–	8,129
Other invested assets	190,852	(65)	75,243	–	115,544
Short-term investments	19,321	105	129	–	19,297
At fair value through profit or loss					
Fixed-income securities	13,275	3,541	–	1,752	18,568
Other financial assets	–	–	–	65,461	65,461
Other invested assets	–	4,787	–	746	5,533
Other	228,469	17,283	42,249	(3,988)	199,515
Total	**1,331,204**	**329,610**	**129,393**	**63,971**	**1,595,392**

[1] Including income from associated companies, for reconciliation with the consolidated statement of income
[2] Excluding other investment expenses

Net gains and losses on investments N 79

in EUR thousand	2019				
	Ordinary investment income[1]	Realised gains and losses	Impairments/ appreciation	Change in fair value	Net income from assets under own management[2]
Held to maturity					
Fixed-income securities	8,877	(17)	–	–	8,860
Loans and receivables					
Fixed-income securities	75,548	14,540	–	–	90,088
Available for sale					
Fixed-income securities	878,374	81,015	129	–	959,260
Equity securities	944	1,217	–	–	2,161
Other invested assets	231,122	98,610	35,696	–	294,036
Short-term investments	26,796	120	70	–	26,846
At fair value through profit or loss					
Fixed-income securities	12,780	5,093	–	9,063	26,936
Other financial assets	–	–	–	63,453	63,453
Other invested assets	508	1,905	–	(787)	1,626
Other	172,220	71,258	44,751	1,126	199,853
Total	**1,407,169**	**273,741**	**80,646**	**72,855**	**1,673,119**

[1] Including income from associated companies, for reconciliation with the consolidated statement of income
[2] Excluding other investment expenses

7.3 Reinsurance result

Reinsurance result N 80

in EUR thousand	2020	2019
Gross written premium	24,765,462	22,597,640
Ceded written premium	2,442,720	2,252,259
Change in unearned premium	(1,028,172)	(636,972)
Change in ceded unearned premium	61,345	21,317
Net premium earned	**21,355,915**	**19,729,726**
Other technical income	15	3,458
Total net technical income	**21,355,930**	**19,733,184**
Claims and claims expenses paid	13,903,227	12,359,939
Change in loss and loss adjustment expense reserve	2,879,431	2,289,117
Claims and claims expenses	**16,782,658**	**14,649,056**
Change in benefit reserve	(103,487)	10,793
Net change in benefit reserve	**(103,487)**	**10,793**
Commissions	5,119,257	5,286,621
Change in deferred acquisition costs	85,261	568,095
Change in provision for contingent commissions	75,532	86,921
Other acquisition costs	4,466	3,956
Administrative expenses	478,182	480,084
Net technical result	**(915,417)**	**(216,152)**

With regard to the claims and claims expenses as well as the change in the benefit reserve, the reader is also referred to section 8.1 “Derivative financial instruments and financial guarantees”. The change in the benefit reserve relates exclusively to the life and health reinsurance segment. The administrative expenses amounted to altogether 2.2% (2.4%) of net premium earned.

The effects of the Covid-19 pandemic increased the losses in the year under review by altogether EUR 1,211.2 million. They are allocable in amounts of EUR 950.1 million to the property and casualty reinsurance segment and EUR 261.1 million to the life and health reinsurance segment.

Other technical income N 81

in EUR thousand	2020	2019
Other technical income (gross)	15	3,458
Reinsurance recoverables	–	–
Other technical income (net)	**15**	**3,458**

Commissions and brokerage, change in deferred acquisition costs **N 82**

in EUR thousand	2020	2019
Commissions paid (gross)	5,355,299	5,749,421
Reinsurance recoverables	236,042	462,800
Change in deferred acquisition costs (gross)	49,535	767,361
Reinsurance recoverables	(35,726)	199,266
Change in provision for contingent commissions (gross)	67,373	89,004
Reinsurance recoverables	(8,159)	2,083
Commissions and brokerage, change in deferred acquisition costs (net)	**5,109,528**	**4,805,447**

7.4 Other income/expenses

Other income/expenses **N 83**

in EUR thousand	2020	2019
Other income		
Exchange gains	280,300	105,167
Reversals of impairments on receivables	11,465	10,748
Income from contracts recognised in accordance with the deposit accounting method	344,592	297,411
Income from services	115,281	136,180
Deconsolidation	–	57,767
Other interest income	54,562	32,072
Sundry income	17,191	29,044
	823,391	**668,389**
Other expenses		
Other interest expenses	12,443	12,485
Exchange losses	131,165	95,990
Expenses from contracts recognised in accordance with the deposit accounting method	2,181	2,561
Separate value adjustments on receivables	18,952	20,076
Expenses for the company as a whole	89,666	86,321
Expenses for services	73,855	92,602
Sundry expenses	53,760	46,088
	382,022	**356,123**
Total	**441,369**	**312,266**

The sharp rise in exchange gains is essentially the result of the US dollar's devaluation against the euro. The sundry expenses include the amortisation of the PVFP in an amount of EUR 5.3 million (EUR 6.7 million). For details we would refer to section 6.6 "Other assets". Value adjustments on goodwill of EUR 3.9 million (none) are also included here. Please see section 6.5 "Goodwill" for further details.

The other income includes revenues from contracts with customers set out below in accordance with IFRS 15.

With regard to the fundamental approach adopted for application of IFRS 15 we would refer to the remarks in section 3.1 "Summary of major accounting policies".

Revenue categories **N 84**

in EUR thousand	2020	2019
Revenue realised at a point in time		
Brokerage commissions, performance fees and similar forms of remuneration	47,717	74,415
Other insurance-related services	6,934	10,398
Revenue realised over time		
Other insurance-related services	59,330	50,598
Total	**113,981**	**135,411**

The brokerage commissions, performance fees and similar forms of remuneration in an amount of EUR 47.7 million (EUR 74.4 million) were realised at a point in time. Of this amount, EUR 46.9 million (65.6 million) is attributable to brokerage commissions earned by Group-internal insurance intermediaries. A further EUR 7.8 million was earned in the previous year in the form of structuring revenues on the North American market.

An amount of EUR 59.3 million (EUR 50.6 million) was realised over time in the current financial year in connection with other insurance-related services.

This involves revenues from administrative services amounting to EUR 25.4 million (EUR 21.3 million) that were generated on the Lloyd's markets in the United Kingdom and in the Asia-Pacific region. The transaction prices are essentially calculated according to the underlying general fee scales as well as a percentage share of the gross premium. The revenues from the administrative services described here are largely earned over a period of three to four years and realised pro rata temporis in accordance with the contractual term.

In addition, other revenues known as "binder fees" were earned from administrative activities on the South African market in an amount of EUR 14.1 million (EUR 14.2 million). The transaction price is calculated from a percentage rate in relation to the gross premium of the underlying insurance contracts. Binding fees are earned over a period of time.

On the German market revenues of EUR 7.9 million (EUR 6.3 million) were generated. These relate in large part to transfers of use for IT. The underlying transaction prices are derived from the contractually agreed contract prices and are realised pro rata temporis as the customer makes use of the IT.

On the North American market revenues of EUR 3.8 million (EUR 3.9 million) were earned from the assumption of administrative tasks. The performance obligation is considered to have been fulfilled when the company has rendered the contractually agreed services. Further revenues as defined by IFRS 15 were generated from the transfer of use of application software used for the underwriting of insurance risks. These amounted to EUR 3.5 million (EUR 2.4 million) in the year under review and are deemed to be earned over a period of time when the customer makes use of the software. In both cases the transaction price is derived from the contractually agreed contract prices.

A further EUR 3.5 million (EUR 2.1 million) was earned on the UK and Swedish markets from the performance of management services. The performance obligation is considered to have been fulfilled when the administrative activities specified in the contract were carried out. The transaction prices in this regard are measured essentially by the underlying general fee scales.

In addition, revenues of EUR 6.9 million (EUR 10.4 million) were realised at a point in time in the year under review from other insurance-related services.

In this context revenues of EUR 5.7 million (EUR 7.0 million) were realised on the South African market which are connected with commission-based business but cannot be characterised as commissions. The transaction price is arrived at as a percentage of the underlying gross premium share. The performance obligation is deemed to be fulfilled at a point in time upon issuance of the insurance certificate for the end customer.

An amount of EUR 1.1 million (EUR 2.1 million) was also earned on the North American market from the performance of administrative activities. The transaction price corresponds to the agreed contract price. The performance obligation is deemed to be satisfied when the administrative activities specified in the contract were carried out.

7.5 Taxes on income

Actual taxes on income at the domestic companies, comparable actual taxes on income at foreign subsidiaries as well as deferred taxes in accordance with IAS 12 "Income Taxes" are recognised under this item.

The reader is referred to the remarks in section 3.1 "Summary of major accounting policies" regarding the basic approach to the recognition and measurement of deferred taxes.

An unchanged tax rate of 32.63% (rounded to 32.7%) was used to calculate the deferred taxes of the major domestic companies. It is arrived at from the corporate income tax rate of 15.0%, the German solidarity surcharge of 5.5% and a trade earnings tax rate of 16.8%. The Group tax rate consequently also amounts to 32.7% (32.7%). The deferred taxes at the companies abroad were calculated using the applicable country-specific tax rates.

Tax-relevant bookings on the Group level are made using the Group tax rate unless they refer specifically to individual companies.

Deferred tax liabilities on profit distributions of significant affiliated companies are established in the year when they are received.

Breakdown of taxes on income

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

Income tax N 85

in EUR thousand	2020	2019
Actual tax for the year under review	57,567	283,293
Actual tax for other periods	(72,172)	(59,880)
Deferred taxes due to temporary differences	218,875	(52,274)
Deferred taxes from loss carry-forwards	(27,436)	218,413
Change in deferred taxes due to changes in tax rates	8,601	100
Value adjustments on deferred taxes	19,651	3,079
Total	205,086	392,731

Domestic/foreign breakdown of recognised tax expenditure/income N 86

in EUR thousand	2020	2019
Actual taxes		
Germany	4,335	143,045
Abroad	(18,940)	80,368
Deferred taxes		
Germany	122,873	130,087
Abroad	96,818	39,231
Total	205,086	392,731

The following table presents a breakdown of the deferred tax assets and liabilities into the balance sheet items from which they are derived.

Deferred tax assets and deferred tax liabilities of all Group companies N 87

in EUR thousand	2020	2019
Deferred tax assets		
Tax loss carry-forwards	409,274	401,647
Loss and loss adjustment expense reserves	504,809	404,555
Benefit reserve	187,742	121,291
Other technical/non-technical provisions	70,567	60,166
Funds withheld	90,229	96,482
Deferred acquisition costs	11,462	7,308
Accounts receivable/reinsurance payable	505,768	590,152
Valuation differences relating to investments	57,395	48,302
Other valuation differences	50,843	12,488
Value adjustments[1]	(87,571)	(69,906)
Total	**1,800,518**	**1,672,485**
Deferred tax liabilities		
Loss and loss adjustment expense reserves	42,668	51,135
Benefit reserve	1,213,550	1,277,185
Other technical/non-technical provisions	27,958	22,534
Equalisation reserve	1,349,086	1,141,661
Funds withheld	983	14,260
Deferred acquisition costs	199,370	190,234
Accounts receivable/reinsurance payable	303,788	263,524
Valuation differences relating to investments	679,461	359,679
Other valuation differences	117,316	99,176
Total	**3,934,180**	**3,419,388**
Deferred tax liabilities	2,133,662	1,746,903

[1] Thereof on tax loss carry-forwards: EUR -79,543 thousand (EUR -69,906 thousand)

The deferred tax assets and deferred tax liabilities are shown according to their origin in the above table. Deferred taxes resulting from a single transaction and with respect to which the corresponding temporary valuation differences are simultaneously reversed were already netted on recognition. Further netting was made based on the timing of the reversal of temporary differences and other offsetting possibilities, ultimately resulting in the following disclosure of deferred tax assets and deferred tax liabilities in the balance sheet:

Netting of deferred tax assets and deferred tax liabilities N 88

in EUR thousand	2020	2019
Deferred tax assets	597,986	442,469
Deferred tax liabilities	2,731,648	2,189,372
Net deferred tax liabilities	**2,133,662**	**1,746,903**

In view of the unrealised components of profit and loss recognised directly in equity in the financial year, actual and deferred tax expenditure – including amounts attributable to non-controlling interests – of EUR -192.0 million (EUR -331.9 million) was also recognised directly in equity. The following table presents a reconciliation of the expected expense for income taxes with the actual expense for income taxes reported in the statement of income. The pre-tax result is multiplied by the Group tax rate in order to calculate the Group's expected expense for income taxes.

Reconciliation of the expected expense for income taxes with the actual expense **N 89**

in EUR thousand	2020	2019
Profit before taxes on income	1,123,871	1,766,097
Group tax rate	32.7%	32.7%
Expected expense for income taxes	367,506	577,514
Change in tax rates	8,601	100
Differences in tax rates affecting subsidiaries	(145,007)	(154,368)
Non-deductible expenses	74,471	127,257
Tax-exempt income	(61,789)	(81,961)
Tax expense/income not attributable to the reporting period	(41,633)	(57,237)
Value adjustments on deferred taxes/loss carry-forwards	19,651	3,079
Trade tax modifications	(17,713)	(26,312)
Other	999	4,659
Actual expense for income taxes	205,086	392,731

The expense for income taxes in the financial year was EUR 187.6 million lower than in the previous year at EUR 205.1 million (EUR 392.7 million). This development was driven largely by a significantly reduced pre-tax profit as well as by a lower effective tax rate than in the previous year of 18.2% (22.2%) due to decreased non-deductible expenses.

Availability of non-capitalised loss carry-forwards

Unused tax loss carry-forwards of EUR 1,828.2 million (EUR 1,899.4 million) existed as at the balance sheet date. Of existing tax loss carry-forwards, EUR 385.6 million (EUR 330.3 million) was not capitalised in consideration of local tax rates because their realisation is not sufficiently certain.

The assets-side unadjusted deferred taxes on loss carry-forwards and tax credits amounting to EUR 329.7 million (EUR 332.4 million) will probably be realised in an amount of EUR 67.7 million (EUR 15.2 million) within one year and in an amount of EUR 262.0 million (EUR 317.2 million) in the subsequent years.

In the year under review the actual taxes on income were reduced by EUR 2.3 million (EUR 0.1 million) because loss carry-forwards were used for which no deferred tax assets were established.

The write-down of deferred tax assets recognised in previous years resulted in a deferred tax expense of EUR 16.2 million (EUR 2.8 million) in the year under review. This is not opposed by any deferred tax income (previous year: EUR 6.3 million) from the reversal of earlier write-downs.

Excess deferred tax assets are recognised with respect to losses in the year under review or in the previous year only to the extent that, based on strong evidence, it is likely that the company concerned will generate sufficiently positive taxable results in the future. This evidence was provided for deferred tax assets of EUR 1.1 million (EUR 21.0 million).

No deferred taxes were established on liabilities-side taxable temporary differences amounting to EUR 50.4 million (EUR 43.5 million) in connection with interests in Group companies because the Hannover Re Group can control their reversal and will not reverse them in the foreseeable future.

Availability of loss carry-forwards that have not been capitalised:

Expiry of non-capitalised loss carry-forwards and temporary differences **N 90**

in EUR thousand	One to five years	Six to ten years	More than ten years	Unlimited	Total
Temporary differences	–	–	–	33,606	33,606
Loss carry-forwards	52,706	–	4,276	294,981	351,963
Total	52,706	–	4,276	328,587	385,569

8. Other notes

8.1 Derivative financial instruments and financial guarantees

Derivatives are financial instruments, the fair value of which is derived from an underlying trading instrument such as equities, bonds, indices or currencies. We use derivative financial instruments in order to hedge parts of our portfolio against interest rate and market price risks, optimise returns or realise intentions to buy/sell. In this context we take special care to limit the risks, select first-class counterparties and adhere strictly to the standards defined by investment guidelines.

The fair values of the derivative financial instruments were determined on the basis of the market information available at the balance sheet date. Please see section 3.1 "Summary of major accounting policies" with regard to the measurement models used.

Hannover Re holds derivative financial instruments to hedge interest rate risks from loans connected with the financing of real estate; these gave rise to recognition of other liabilities in an amount of EUR 4.2 million (EUR 1.5 million).

Hannover Re's portfolio contained derivative financial instruments as at the balance sheet date in the form of forward exchange transactions taken out to hedge currency risks. These transactions gave rise to recognition of other liabilities in an amount of EUR 46.5 million (EUR 15.9 million) and other financial assets at fair value through profit or loss in an amount of EUR 7.2 million (EUR 5.9 million). The decrease in equity from hedging instruments recognised directly in equity pursuant to IAS 39 in an amount of EUR 0.8 million (EUR 0.3 million) derived solely from the forward exchange transactions taken out to hedge currency risks from long-term investments in foreign operations. These hedging instruments resulted in the recognition of other financial assets at fair value through profit or loss in an amount of EUR 0.0 million (EUR 0.3 million) and other liabilities of EUR 1.0 million (EUR 0.3 million). Ineffective components of the hedge were recognised in profit or loss in a negligible amount under other investment income.

In order to hedge the risk of share price changes in connection with the stock appreciation rights granted under the share award plan, Hannover Re has taken out hedges since 2014 in the form of so-called equity swaps. The fair value of these instruments was recognised in a negligible amount under other liabilities (EUR 5.9 million recognised under other financial assets at fair value through profit or loss) as at the balance sheet date. The hedge gave rise to a decrease in equity from hedging instruments recognised directly in equity in an amount of EUR 10.0 million (increase of EUR 7.8 million recognised directly in equity). Ineffective components of the hedge were recognised in a negligible amount under other investment expenses.

The maturities of the fair values and notional values of the hedging instruments described above can be broken down as follows:

Maturity structure of derivative financial instruments **N 91**

	2020			
in EUR thousand	Less than one year	One to five years	Five to ten years	31.12.2020
Interest rate hedges				
Fair values	(841)	(3,359)	–	(4,200)
Notional values	3,183	95,880	–	99,063
Currency hedges				
Fair values	(9,724)	(20,492)	(10,033)	(40,249)
Notional values	1,141,322	598,729	173,105	1,913,156
Share price hedges				
Fair values	(11)	–	–	(11)
Notional values	22,943	–	–	22,943
Total hedging instruments				
Fair values	(10,576)	(23,851)	(10,033)	(44,460)
Notional values	1,167,448	694,609	173,105	2,035,162

Maturity structure of derivative financial instruments **N 92**

	2019			
in EUR thousand	Less than one year	One to five years	Five to ten years	31.12.2019
Interest rate hedges				
Fair values	(84)	(1,371)	–	(1,455)
Notional values	4,623	89,706	–	94,329
Currency hedges				
Fair values	(10,001)	221	(160)	(9,940)
Notional values	1,656,799	200,143	16,000	1,872,942
Share price hedges				
Fair values	5,871	–	–	5,871
Notional values	23,946	–	–	23,946
Total hedging instruments				
Fair values	(4,214)	(1,150)	(160)	(5,524)
Notional values	1,685,368	289,849	16,000	1,991,217

The net changes in the fair value of these instruments reduced the result of the financial year by EUR 12.3 million (EUR 0.7 million).

Hannover Re enters into derivative transactions on the basis of standardised master agreements that contain global netting agreements. The netting agreements set out below normally do not meet the criteria for netting in the balance sheet, since Hannover Re has no legal right whatsoever at the present moment in time to netting of the recognised amounts. The right to netting can, as a matter of principle, only be enforced upon occurrence of certain future defined events. Collateral furnished or received is recognised per counterparty up to at most the amount of the respective net liability or net asset.

Netting agreements N 93

in EUR thousand	2020				
	Fair value	Netting agreement	Cash collateral received/ furnished	Other collateral received/ furnished	Net amount
Derivative receivables	7,159	5,975	–	–	1,184
Derivative liabilities	46,468	5,975	18,625	17,620	4,248

Netting agreements N 94

in EUR thousand	2019				
	Fair value	Netting agreement	Cash collateral received/ furnished	Other collateral received/ furnished	Net amount
Derivative receivables	12,087	2,565	8,471	–	1,051
Derivative liabilities	15,879	2,565	4,040	8,262	1,012

Derivative financial instruments in connection with reinsurance

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

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

Hannover Re calculates the fair values of the embedded derivatives in ModCo treaties using the market information available on the valuation date on the basis of a credit spread method. Under this method the derivative has no value on the date when the contract commences and its value then fluctuates over time according to changes in the credit spreads of the securities. The derivative had a positive value of EUR 15.2 million (EUR 23.2 million) as at the balance sheet date and was recognised under other financial assets at fair value through profit or loss together with an amount of EUR 0.3 million (EUR 0.7 million) recognised under other liabilities. In total, the change in the fair value of the derivative over the course of the year gave rise to an expense of EUR 6.0 million before tax (income of EUR 8.1 million).

A derivative financial instrument was also unbundled from another similarly structured transaction in previous years. This gave rise to recognition of other financial assets at fair value through profit or loss in an amount of EUR 57.6 million (EUR 25.9 million). The performance of this derivative improved the result by EUR 33.9 million (EUR 20.2 million) in the financial year.

A number of transactions concluded in the Life & Health reinsurance business group in previous years, under which Hannover Re companies offer their contracting parties coverage for risks from possible future payment obligations arising out of hedging instruments, are also to be classified as derivative financial instruments. The payment obligations result from contractually defined events and relate to the development of an underlying group of primary insurance contracts with statutory reserving requirements. The contracts are to be categorised and recognised as stand-alone credit derivatives pursuant to IAS 39. These derivative financial instruments were carried in equity on initial recognition. Please see section 6.6 "Other assets". The fair value of these instruments was EUR 31.6 million (EUR 43.7 million) on the balance sheet date and was recognised under other financial assets at fair value through profit or loss. The change in value in subsequent periods is dependent upon the risk experience and led to an improvement in investment income of EUR 38.6 million (EUR 37.8 million) in the financial year.

A retrocession agreement in the area of life and health reinsurance under which the premiums were deposited with Hannover Re and invested in a structured bond was terminated as scheduled. The retrocessionaire furnished a guarantee for its fair value. In accordance with the requirements of IFRS 4 this guarantee was unbundled from the retrocession agreement and carried in the previous year as a derivative financial instrument at fair value. The derivative was recognised with a positive fair value of EUR 14.1 million as at the balance sheet date of the previous year under other financial assets at fair value through profit or loss. In the course of the previous year the change in the fair value of the derivative resulted in a charge of EUR 9.2 million. Conversely, the performance of the structured bond, which was also measured at fair value, gave rise to income in the same amount in the previous year.

In the area of life and health reinsurance a reinsurance treaty with a financing component was also written in the past under which the amount and timing of the return flows are dependent on lapse rates within an underlying primary insurance portfolio. This treaty and a corresponding retrocession agreement, which were classified as financial instruments pursuant to IAS 39, resulted in the recognition of other liabilities of EUR 26.5 million (EUR 30.0 million) and other financial assets at fair value through profit or loss in an amount of EUR 123.1 million (EUR 116.7 million). Altogether, these arrangements gave rise to an improvement in income of EUR 6.3 million (EUR 6.1 million) in the year under review.

At the end of the 2017 financial year an index-linked cover was written for longevity risks. The resulting derivative was recognised as at the balance sheet date with a negative fair value of EUR 2.2 million under other liabilities (EUR 5.2 million under other financial assets at fair value through profit or loss). The change in the fair value of the derivative gave rise to an expense of EUR 1.6 million (income of EUR 5.8 million) in the course of the year.

All in all, application of the standards governing the accounting for derivatives in connection with the technical account led to recognition of assets totalling EUR 227.5 million (EUR 228.8 million) as well as recognition of liabilities in an amount of EUR 33.7 million (EUR 39.1 million) from the derivatives resulting from technical items as at the balance sheet date. Improvements in investment income amounting to EUR 82.5 million (EUR 78.0 million) as well as charges to income of EUR 7.6 million (EUR 11.7 million) were recognised in the year under review from all separately measured derivatives in connection with the technical account.

Financial guarantees

Structured transactions were entered into in the life and health reinsurance business group in order to finance statutory reserves (so-called Triple-X or AXXX reserves) of US ceding companies. In each case such structures necessitated the involvement of a special purpose entity. The special purpose entities carry extreme mortality risks securitised by the cedants above a contractually defined retention and transfer these risks by way of a fixed/floating swap to a member company of the Hannover Re Group. The total amount of the contractually agreed capacities of the transactions is equivalent to EUR 2,447.3 million (EUR 3,345.1 million); an amount equivalent to EUR 1,901.8 million (EUR 2,742.3 million) had been taken up as at the balance sheet date. The variable payments to the special purpose entities that are guaranteed by the Hannover Re Group cover their payment obligations. Under some of the transactions the payments resulting from the swaps in the event of a claim are reimbursed by the parent companies of the cedants by way of compensation agreements. In this case the reimbursement claims from the compensation agreements are to be capitalised separately from and up to the amount of the provision.

Under IAS 39 these transactions are to be recognised at fair value as financial guarantees. To this end Hannover Re uses the net method, according to which the present value of the agreed fixed swap premiums is netted with the present value of the guarantee commitment. The fair value on initial recognition therefore amounted to zero. The higher of the fair value and the amount carried as a provision on the liabilities side pursuant to IAS 37 is recognised at the point in time when utilisation is considered probable. This was not the case as at the balance sheet date.

8.2 Related party disclosures

IAS 24 "Related Party Disclosures" defines related parties as group entities of a common parent, associated entities, legal entities under the influence of key management personnel and the key management personnel of the entity itself. Transactions between Hannover Rück SE and its subsidiaries, which are to be regarded as related parties, were eliminated through consolidation and are therefore not discussed in the notes to the consolidated financial statement. In the year under review the following significant business relations existed with related parties.

Talanx AG holds an unchanged majority interest of 50.22% in Hannover Rück SE. For its part, HDI Haftpflichtverband der Deutschen Industrie Versicherungsverein auf Gegenseitigkeit (HDI), Hannover, holds a stake of 79.0% in Talanx AG.

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

Companies belonging to the Talanx Group granted the Hannover Re Group insurance protection inter alia in the areas of public liability, building, contractors all risks, group accident and business travel insurance. Divisions of Talanx AG also performed services for the Hannover Re Group in the areas of taxes and general administration. Divisions of Hannover Rück SE performed services in connection with the insurance and reinsurance business of HDI Global Specialty SE, a joint venture of Hannover Rück SE and HDI Global SE.

Talanx Reinsurance Broker GmbH and Talanx AG grant Hannover Rück SE and E+S Rückversicherung AG a preferential position as reinsurers of cedants within the Talanx Group. In addition, Hannover Rück SE and E+S Rückversicherung AG are able to participate in the protection covers on the retention of Group cedants and share in the protection afforded by them. In certain circumstances Hannover Rück SE and E+S Rückversicherung AG are obliged to assume unplaced shares of the reinsurance of Group cedants from Talanx Reinsurance Broker GmbH or Talanx AG.

The Hannover Re Group provides reinsurance protection for the HDI Group. To this extent, numerous underwriting business relations exist with related parties in Germany and abroad that are not included in the Hannover Re Group's consolidation. This includes business both assumed and ceded at usual market conditions.

The reinsurance relationships with related parties in the year under review and the previous year are shown with their total amounts in the following table.

Business assumed and ceded in Germany and abroad N 95

	2020			2019		
in EUR thousand	Property and casualty reinsurance	Life and health reinsurance	Total	Property and casualty reinsurance	Life and health reinsurance	Total
Material items in the statement of income						
Business assumed						
Premium	1,673,324	134,007	1,807,331	1,369,966	143,521	1,513,487
Underwriting result	(105,557)	19,853	(85,704)	(175,536)	22,023	(153,513)
Business ceded						
Premium	15,720	(62,496)	(46,776)	(8,098)	(58,110)	(66,208)
Underwriting result	29,844	(9,417)	20,427	(5,057)	(10,303)	(15,360)
Total						
Premium	1,689,044	71,511	1,760,555	1,361,868	85,411	1,447,279
Underwriting result	(75,713)	10,436	(65,277)	(180,593)	11,720	(168,873)
Material items in the balance sheet						
Assets						
Funds withheld	51,966	784,123	836,089	75,033	920,458	995,491
Deferred acquisition costs	245,179	21,942	267,121	214,466	14,265	228,731
Accounts receivable	521,810	14,566	536,376	361,572	16,049	377,621
Liabilities						
Loss and loss adjustment expense reserve	2,801,376	46,269	2,847,645	2,770,357	47,002	2,817,359
Benefit reserve	–	95,746	95,746	–	104,905	104,905
Unearned premium reserve	828,114	98	828,212	713,091	148	713,239
Contract deposits	–	663,479	663,479	–	788,577	788,577
Reinsurance payable	24,367	18,676	43,043	8,007	4,756	12,763

In addition, other assets of EUR 3.0 million (EUR 3.4 million) as well as other liabilities of EUR 36.3 million (EUR 41.5 million) exist with respect to Talanx AG and its subsidiaries which are not part of the scope of consolidation of Hannover Re.

In the context of a bond issue by Talanx AG the Group companies Hannover Rück SE and E+S Rückversicherung AG invested in a nominal amount of EUR 47.0 million in the issued bearer debt, which has a coupon of 3.125%. The carrying amount of the instrument, which is recognised under fixed-income securities held to maturity, was EUR 48.3 million (EUR 48.3 million) including accrued interest of EUR 1.3 million (EUR 1.3 million).

HDI Lebensversicherung AG, Cologne, participated in a nominal amount of EUR 50.0 million in the subordinated bond issued by Hannover Rück SE in September 2014 with a coupon of 3.375%.

Within the contractually agreed framework Ampega Asset Management GmbH performs investment and asset management services for Hannover Rück SE and the vast majority of its subsidiaries. A total amount of EUR 48.7 million (EUR 43.9 million) was expensed for the rendering of these services in the financial year just ended. Assets in special funds are managed by Ampega Investment GmbH. Ampega Real Estate GmbH performs services for Hannover Re under a number of management contracts.

Hannover Rück SE has concluded agreements with Ampega Asset Management GmbH, HDI Global Specialty SE, Talanx Reinsurance Broker GmbH and Svedea AB that enable these companies to use software for screening sanctions lists.

Under long-term lease arrangements companies belonging to the Hannover Re Group rented out business premises in 2015 to HDI Service AG, Hannover.

Furthermore, IT and management services were performed for Talanx Reinsurance Broker GmbH, Hannover, under service contracts.

Actuarial opinions with respect to the pension commitments given to staff are drawn up for Hannover Rück SE and E+S Rückversicherung AG by HDI Pensionsmanagement AG and HDI Lebensversicherung AG under an actuarial service contract.

Talanx AG performs various services in the area of taxes for a number of investment vehicles of the Hannover Re Group in the asset classes of private equity and real estate. In this regard corresponding agreements have been concluded with altogether nine Hannover Re companies.

Since 2012 a service agreement has existed between Hannover Rück SE and Talanx AG regarding the use of data acquisition software for Group accounting purposes.

Hannover Rück SE has concluded a service contract with HDI Service AG in the area of flight services as well as a contract regarding the reciprocal provision of business continuity management services.

Since 2004 a service agreement has existed between Hannover Rück SE, E+S Rückversicherung AG and Talanx Reinsurance Broker GmbH regarding the use of market security services and access to the business partner information system of Hannover Rück SE.

Remuneration and shareholdings of the management boards of the parent company

The remuneration of the active members of the Executive Board of Hannover Re amounted to altogether EUR 8.6 million (EUR 10.9 million). The total remuneration of previous members of the Executive Board and their surviving dependants, for whom 17 (18) pension commitments existed, amounted to EUR 3.7 million (EUR 2.0 million) in the year under review. Of this, EUR 1.9 million was attributable to payments due to the termination of an employment relationship. Altogether, a provision of EUR 34.5 million (EUR 34.2 million) has been set aside for pension commitments.

The total remuneration of the Supervisory Board of Hannover Re amounted to EUR 0.9 million (EUR 0.9 million). There are no pension commitments to former members of the Supervisory Board or their surviving dependants.

The members of the governing bodies did not receive any advances or loans in the year under review. Nor were there any other material reportable circumstances or contractual relationships as defined by IAS 24 between companies of the Hannover Re Group and the members of the governing bodies or their related parties in the year under review. Furthermore, above and beyond the aforementioned remuneration as Supervisory Board members at Group companies, the members of the Supervisory Board were not in receipt of any remuneration or benefits for personally rendered services as defined by section 5.4.6 Para. 3 of the German Corporate Governance Code.

The information required pursuant to IAS 24.17 “Related Party Disclosures” as well as all other information on the remuneration of the governing bodies, directors’ dealings and shareholdings as well as the structure of the remuneration system for the Executive Board is contained in the remuneration report from page 119 onwards. With regard to the disclosures required by IAS 24.17 we would refer in particular to the tables M 79 (Total remuneration of the active members of the Executive Board), M 83 (Pension commitments) and M 84 (Individual remuneration received by the members of the Supervisory Board). The remuneration report is based on the recommendations of the German Corporate Governance Code and contains information which also forms part of the notes to the 2020 consolidated financial statement as required by IAS 24 "Related Party Disclosures". In addition, we took into account the more specific provisions of DRS 17 "Reporting on the Remuneration of Members of Governing Bodies". Under German commercial law, too, this information includes data specified as mandatory for the notes (§ 314 HGB) and the management report (§ 315 HGB). These details are discussed as a whole in the remuneration report. Consequently, we have not provided any further explanation in the notes.

8.3 Share-based payment

In the year under review the following share-based payment plans with cash settlement existed within the Hannover Re Group:

- Stock Appreciation Rights Plan (in effect since 2000, cancelled in stages from 2011 onwards and currently being wound up)
- Share Award Plan (valid since 2011)

Stock Appreciation Rights Plan

With effect from 1 January 2000 the Executive Board of Hannover Rück SE, with the consent of the Supervisory Board, introduced a virtual stock option plan that provides for the granting of stock appreciation rights to certain managerial staff. The content of the stock option plan is based solely on the Conditions for the Granting of Stock Appreciation Rights. All the members of the Group's management are eligible for the award of stock appreciation rights. Exercise of the stock appreciation rights does not give rise to any entitlement to the delivery of shares of Hannover Rück SE, but merely to payment of a cash amount linked to the performance of the Hannover Rück SE share.

The Conditions for the Granting of Stock Appreciation Rights were cancelled for all eligible recipients. Awarded stock appreciation rights continue to be exercisable until the end of their period of validity.

Stock appreciation rights were first granted for the 2000 financial year and were awarded separately for each subsequent financial year (allocation year) until cancellation of the plan, provided the performance criteria defined in the Conditions for the Granting of Stock Appreciation Rights were satisfied.

The term of the stock appreciation rights is ten years, commencing at the end of the year in which they are awarded. Stock appreciation rights which are not exercised by the end of the 10-year period lapse. Stock appreciation rights may only be exercised after a waiting period and then only within four exercise periods each year. Upon expiry of a four-year waiting period a maximum 60% of the stock appreciation rights awarded for an allocation year may be exercised. The waiting period for each additional 20% of the stock appreciation rights awarded for this allocation year to a member of the managerial staff is one further year. Each exercise period lasts for ten trading days, in each case commencing on the sixth trading day after the date of publication of the quarterly report of Hannover Rück SE.

Upon exercise of a stock appreciation right the amount paid out to the entitled party is the difference between the basic price and the current market price of the Hannover Rück SE share at the time of exercise. In this context, the basic price corresponds to the arithmetic mean of the closing prices of the Hannover Rück SE share on all trading days of the first full calendar month of the allocation year in question. The current market price of the Hannover Rück SE share at the time when stock appreciation rights are exercised is determined by the arithmetic mean of the closing prices of the Hannover Rück SE share on the last twenty trading days prior to the first day of the relevant exercise period.

The amount paid out is limited to a maximum calculated as a quotient of the total volume of compensation to be granted in the allocation year and the total number of stock appreciation rights awarded in the year in question. In the event of cancellation or termination of the employment relationship as a consequence of a termination agreement or a set time limit, a holder of stock appreciation rights is entitled to exercise all such rights in the first exercise period thereafter. Stock appreciation rights not exercised in this period and those in respect of which the waiting period has not yet expired shall lapse. Retirement, disability or death of the member of management shall not be deemed to be termination of the employment relationship for the purpose of exercising stock appreciation rights.

The allocations for the years 2010 to 2011 gave rise to commitments in the 2020 financial year shown in the following table. No commitments exist for years prior to 2010.

Stock appreciation rights of Hannover Rück SE N 96

	Allocation year	
	2011	2010
Award date	15 March 2012	8 March 2011
Period	10 years	10 years
Waiting period	4 years	4 years
Basic price (in EUR)	40.87	33.05
Participants in year of issue	143	129
Number of rights granted	263,515	1,681,205
Fair value at 31 December 2020 (in EUR)	32.21	8.92
Maximum value (in EUR)	32.21	8.92
Weighted exercise price	32.21	8.92
Number of rights existing at 31 December 2020	4,147	–
Provisions at 31 December 2020 (in EUR million)	0.13	–
Amounts paid out in the 2020 financial year (in EUR million)	0.09	0.21
Expense in the 2020 financial year (in EUR million)	–	–

In the 2020 financial year the waiting period expired for 100% of the stock appreciation rights awarded in 2010 and 2011. 23,601 stock appreciation rights from the 2010 allocation year and 2,660 stock appreciation rights from the 2011 allocation year were exercised. The total amount paid out stood at EUR 0.3 million.

On this basis the aggregate provisions – included in the sundry non-technical provisions – amounted to EUR 0.1 million (EUR 0.4 million) for the 2020 financial year. No expense (EUR 0 million) was recognised in the year under review.

Share Award Plan

With effect from the 2011 financial year the Supervisory Board of Hannover Rück SE implemented a Share Award Plan for the members of the Executive Board of Hannover Re; this provides for the granting of stock participation rights in the form of virtual shares (referred to as "share awards"). The Executive Board of Hannover Re decided to adopt a Share Award Plan for certain management levels at Hannover Re as well with effect from the 2012 financial year.

The Share Award Plan replaced the cancelled Stock Appreciation Rights Plan. The share awards do not establish any claim against Hannover Re to the delivery of stock, but merely to payment of a cash amount in accordance with the conditions set out below.

The members of the Executive Board and management of Hannover Re who are eligible recipients under the Share Award Plan are those who have been allowed a contractual claim to the granting of share awards and whose service/employment relationship exists at the time when the share awards are granted and does not end through cancellation or a termination agreement on an effective date prior to expiry of the vesting period.

Share awards were granted separately for the first time for the 2011 financial year and then for each financial year (allocation year) thereafter. The first payout of share awards took place in the 2016 financial year for those share awards that had been allocated in the 2011 financial year to the eligible members of the Executive Board. In the 2017 financial year the first payout was also made to the participating senior executives.

The total number of share awards granted is based on the value per share of Hannover Rück SE. The value per share is established according to the unweighted arithmetic mean of the Xetra closing prices of the Hannover Re share. In the conditions applicable to members of the Executive Board a period of five trading days before to five trading days after the meeting of the Supervisory Board that approves the consolidated financial statement for the financial year just-ended is envisaged for the calculation. For senior executives a period of twenty trading days before to ten trading days after the meeting of the Supervisory Board that approves the consolidated financial statement for the financial year just-ended has been agreed. The prices calculated in this way also determine the payout value of the share awards that have become payable. The total number of share awards granted is established by dividing the amount available for the granting of share awards to the respective eligible recipients by the value per share, rounded up to the next full share. For members of the Executive Board 20% and for senior executives 40% or 35% – according to management levels – of the defined variable remuneration shall be granted in the form of share awards.

The share awards are granted automatically without any requirement for a declaration. Following expiry of a vesting period of four years the value of one Hannover Re share calculated at the disbursement date is paid out for each share award. This value is calculated according to the provisions of the preceding paragraph.

The eligible recipient shall be paid an amount that corresponds to the sum total of the values of the share awards calculated at the disbursement date for which the vesting period of four years has expired. The amount is to be paid in the month after expiry of the determinative period for calculating the value per share according to the preceding paragraphs.

In addition, upon payment of the value of the share awards, a sum shall be paid out in the amount of the dividend insofar as dividends were distributed to shareholders. The amount of the dividend is the sum total of all dividends per share paid out during the term of the share awards multiplied by the number of share awards due for disbursement to the eligible recipient at the disbursement date. In the event of early disbursement of the share awards, the value of the dividends shall only be paid out for the period until occurrence of the event that triggers early disbursement. No pro rata allowance shall be made for dividends that have not yet been distributed.

In the event that the Board mandate or service relationship with the member of the Executive Board or the employment relationship with the manager ends, the eligible recipient shall retain his claims to payment of the value of already granted share awards after expiry of the applicable vesting period, unless such termination is based on resignation of office/voluntary termination on the part of the member of the Executive Board or voluntary termination on the part of the manager or dismissal by Hannover Re for a compelling reason. In the event of death the claims arising out of the already granted and/or still to be granted share awards pass to the heirs.

Any entitlement to the granting of share awards after leaving the company is excluded. This shall not apply with respect to claims to variable remuneration acquired (pro rata) in the last year of service of the eligible recipient in the event of exit from the company on account of non-reappointment, occurrence of the pensionable event or death.

The Share Award Plan of Hannover Rück SE gives rise to the amounts shown in the following table.

Share awards of Hannover Rück SE N 97

	Allocation year								
	2020	2019		2018		2017		2016	
	Anticipated allocation	Final allocation 2020 for 2019	Anticipated allocation	Final allocation 2019 for 2018	Anticipated allocation	Final allocation 2018 for 2017	Anticipated allocation	Final allocation 2017 for 2016	Anticipated allocation
Valuation date									
Executive Board	30.12.2020	18.3.2020	30.12.2019	14.3.2019	28.12.2018	16.3.2018	29.12.2017	16.3.2017	30.12.2016
Senior executives	30.12.2020	25.3.2020	30.12.2019	21.3.2019	28.12.2018	23.3.2018	29.12.2017	23.3.2017	30.12.2016
Value per share award in EUR									
Executive Board	130.30	139.04	172.30	129.60	117.70	111.65	104.90	107.15	102.80
Senior executives	130.30	156.39	172.30	129.38	117.70	111.32	104.90	107.03	102.80
Number of allocated share awards in the allocation year									
Executive Board	9,214	7,993	7,278	7,882	9,010	9,060	9,537	10,244	10,704
Senior executives	53,465	45,426	45,103	58,471	67,421	57,642	64,902	77,325	81,322
Other adjustments[1]	–	–	–	(837)	–	(3,281)	–	(6,439)	–
Total	62,679	53,419	52,381	65,516	76,431	63,421	74,439	81,130	92,026

[1] This figure results from originally granted share awards that have since lapsed.

Development of the provision for share awards of Hannover Rück SE N 98

in EUR thousand	Allocation year 2020	2019	2018	2017	2016	2015	2014	Total
Provision at 31 December 2018	**–**	**–**	**2,018**	**3,561**	**6,784**	**9,291**	**12,228**	**33,882**
Allocation 2019	–	1,895	2,963	3,832	5,628	6,664	1,097	22,079
Utilisation 2019	–	–	–	–	–	–	13,047	13,047
Release 2019	–	–	–	195	225	264	278	962
Provision at 31 December 2019	**–**	**1,895**	**4,981**	**7,198**	**12,187**	**15,691**	**–**	**41,952**
Allocation 2020	1,902	1,398	1,040	500	13	–	–	4,853
Utilisation 2020	–	–	–	–	–	14,747	–	14,747
Release 2020	–	–	70	90	105	944	–	1,209
Provision at 31 December 2020	**1,902**	**3,293**	**5,951**	**7,608**	**12,095**	**–**	**–**	**30,849**

The aggregate provision – recognised under the sundry non-technical provisions – amounted to EUR 30.9 million (EUR 42.0 million) as at the balance sheet date.

The personnel expense for share awards in the case of members of the Executive Board is spread on an accrual basis across the relevant term of the share awards or the shorter term of the service contracts; in the case of senior executives the personnel expense is spread across the relevant term of the share awards. The allocation of the financial year recognised in the expenditures on personnel totalled altogether EUR 4.9 million (EUR 22.1 million). This consists of the expense for share awards of the 2020 financial year as well as the dividend claim and the additionally earned portion of the share awards granted in earlier financial years. The value of the share awards finally granted is also influenced by movements in the share price. The sum total of the dividends included in the expenditures on personnel for earlier financial years amounted to EUR 1.4 million (EUR 1.6 million). The distributed dividend is recognised, with no allowance made for expected dividend payments. Dividend claims are recognised in the discounted amounts.

In the year under review the 10,185 share awards of the Executive Board finally allocated in 2015 with a value of EUR 139.04 each plus the dividend entitlement of EUR 20.00 were paid out to the eligible members of the Executive Board. The 74,436 share awards of the senior executives for the 2015 financial year were paid out in 2020 with a value of EUR 156.39 each plus the dividend entitlement of EUR 20.00.

With regard to the effects of the equity swaps taken out to hedge price risks, please see our explanatory remarks in section 8.1 "Derivative financial instruments and financial guarantees".

8.4 Staff and expenditures on personnel

Staff

The average number of staff at the companies included in the consolidated financial statement of the Hannover Re Group during the reporting period was 3,132 (3,151). As at the balance sheet date altogether 3,218 (3,083) staff were employed by the Hannover Re Group, with 1,407 (1,396) employed in Germany and 1,811 (1,687) working for the consolidated Group companies abroad.

Personnel information N 99

	2020					2019	
	31.3.	30.6.	30.9.	31.12.	Average	31.12.	Average
Number of employees (excluding Board members)	3,073	3,144	3,142	3,218	3,132	3,083	3,151

Expenditures on personnel

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

Personnel expenditures N 100

in EUR thousand	2020	2019
a) Wages and salaries	285,111	281,945
	285,111	**281,945**
b) Social security contributions and expenditure on provisions and assistance		
ba) Social security contributions	23,152	20,749
bb) Expenditures for pension provision	28,851	24,245
bc) Expenditures for assistance	4,792	4,281
	56,795	**49,275**
Total	**341,906**	**331,220**

8.5 Earnings per share and dividend proposal

Calculation of the earnings per share N 101

	2020	2019
Group net income in EUR thousand	883,073	1,284,167
Weighted average of issued shares	120,596,996	120,596,994
Basic earnings per share in EUR	7.32	10.65
Diluted earnings per share in EUR	7.32	10.65

The earnings per share is calculated by dividing the net income attributable to the shareholders of Hannover Rück SE by the weighted average number of shares outstanding within the period under review.

Neither in the year under review nor in the previous reporting period were there any dilutive effects. The weighted average of the issued shares was, as in the previous year, slightly lower than the value of the shares in circulation on the balance sheet date. In the context of the employee share option plan Hannover Re acquires treasury shares and sells them at a later date to eligible employees. The weighted average number of shares does not include 16,511 (16,467) treasury shares pro rata temporis for the duration of the holding period. For further details please see our comments in section 6.13 "Shareholders' equity and treasury shares".

There were no other extraordinary components of income which should have been recognised or disclosed separately in the calculation of the earnings per share.

The earnings per share could potentially be diluted in future through the issue of shares or subscription rights from the authorised or conditional capital.

Dividend per share

A dividend of EUR 663.3 million (EUR 633.1 million) was paid in the year under review for the 2019 financial year.

It will be proposed to the Annual General Meeting on 5 May 2021 that a dividend of EUR 4.50 per share should be paid for the 2020 financial year. This corresponds to a total distribution of EUR 542.7 million. The dividend proposal does not form part of this consolidated financial statement.

8.6 Lawsuits

Member companies of the Hannover Re Group are involved in judicial and supervisory procedures as well as in arbitration proceedings as part of the conduct of insurance and reinsurance business. Depending upon the subject matter of the procedure, the Hannover Re Group sets aside provisions for the amount in dispute in such proceedings – for the most part in the technical account and in exceptional cases as a charge to other income/expenses – if and to the extent that the resulting commitments are likely to materialise and their amount can be estimated with sufficient accuracy. The provision established in each case covers the expense that can be expected in our assessment as at the balance sheet date.

Neither the outcome nor the duration of pending procedures can be definitively foreseen at the time when provisions are established. The final liabilities of Hannover Re may diverge considerably from the constituted provisions because the assessment of probability and the quantification of these uncertain liabilities in large measure require estimates that may prove not to be accurate as the proceedings in question continue to progress. This is also true of procedures for which no provisions were established. Insofar as a commitment exists under such procedures as at the balance sheet date that may possibly but will probably not result in a loss, the Hannover Re Group estimates this potential loss – where practicable – and reports a contingent liability. For estimation purposes Hannover Re takes into account a number of factors. These include, among others, the nature of the claim, the status of the procedure concerned, decision of courts and arbitration bodies, prior settlement discussions, experience from comparable cases as well as expert opinions and the assessments of legal advisers and other experts. If a provision has been established for a particular procedure, a contingent liability is not recognised.

The lawsuits pending in the year under review and as at the balance sheet date were not material for the Hannover Re Group either individually or combined. Furthermore, there were no contingent liabilities from lawsuits to report as at the balance sheet date.

8.7 Contingent liabilities and commitments

Hannover Rück SE has secured by subordinated guarantee the subordinated debt issued by Hannover Finance (Luxembourg) S.A. in the 2012 financial year in an amount of EUR 500.0 million.

The guarantee given by Hannover Rück SE for the subordinated debt attaches if the issuer fails to render payments due under the bonds. The guarantee covers the nominal amount as well as interest due until the repayment dates. Given the fact that interest on the bond is partly dependent on the capital market rates applicable at the interest payment dates (floating rates), the maximum undiscounted amounts that can be called cannot be estimated with sufficient accuracy. Hannover Rück SE does not have any rights of recourse outside the Group with respect to the guarantee payments.

As security for technical liabilities to our US clients, we have established two trust accounts (master trust and supplemental trust) in the United States. They amounted to EUR 3,939.7 million (EUR 4,135.7 million) and EUR 208.6 million (EUR 172.4 million) respectively as at the balance sheet date. The securities held in the trust accounts are shown as available-for-sale investments. In addition, we furnished further collateral to ceding companies in an amount of EUR 2,814.5 million (EUR 3,155.7 million) in the form of so-called "single trust funds". This amount includes a sum equivalent to EUR 2,464.4 million (EUR 2,716.6 million) which was furnished by investors as security for potential reinsurance obligations from ILS transactions.

As part of our business activities we hold collateral available outside the United States in various blocked custody accounts and trust accounts, the total amount of which in relation to the Group's major companies was EUR 3,065.2 million (EUR 2,994.2 million) as at the balance sheet date.

The securities held in the blocked custody accounts and trust accounts are recognised predominantly as available-for-sale investments.

Letter of credit (LoC) facilities existed with a number of financial institutions as at the balance sheet date in a total volume equivalent to EUR 2,816.2 million (EUR 3,039.5 million) and with various terms maturing at the latest in 2026.

As security for our technical liabilities, various financial institutions have furnished sureties for our company in the form of letters of credit. The total amount as at the balance sheet date was EUR 1,448.4 million (EUR 1,568.1 million).

A number of LoC facilities include standard market contractual clauses that allow the banks rights of cancellation in the event of material changes in our shareholding structure or trigger a requirement on the part of Hannover Re to furnish collateral upon materialisation of major events, for example if our rating is significantly downgraded. Please see also our explanatory remarks in the "Financial position and net assets" subsection of the management report, page 63 et seq., on the information pursuant to § 315a Para. 1 German Commercial Code (HGB).

We put up own investments with a book value of EUR 37.3 million (EUR 12.9 million) as collateral for existing derivative transactions. We received collateral with a fair value of EUR 2.8 million (EUR 10.5 million) for existing derivative transactions.

As security for liabilities in connection with participating interests in real estate companies and real estate transactions the usual collateral under such transactions has been furnished to various banks, the amount of which totalled EUR 662.3 million (EUR 700.9 million) as at the balance sheet date.

Outstanding capital commitments with respect to alternative investments exist on the part of the Group in an amount of EUR 1,275.6 million (EUR 1,429.9 million). These primarily involve as yet unfulfilled payment obligations from investment commitments given to private equity funds and venture capital firms.

Group companies are members of the association for the reinsurance of pharmaceutical risks and several atomic and nuclear pools. The failure of one of the other pool members to meet its liabilities would result in an additional call according to the quota participation.

Hannover Rück SE has provided an open-ended guarantee limited to EUR 11.1 million in favour of the pension fund "The Congregational & General Insurance Plc Pension and Life Assurance Scheme" at usual market conditions.

The application of tax regulations may not have been resolved at the time when tax items are brought to account. The calculation of tax refund claims and tax liabilities is based on what we consider to be the regulations most likely to be applied in each case. The revenue authorities may, however, take a differing view, as a consequence of which additional tax liabilities could arise in the future.

Hannover Re enters into contingent liabilities as part of its normal business operations. A number of reinsurance treaties concluded by Group companies with outside third parties include letters of comfort, guarantees or novation agreements under which Hannover Rück SE guarantees the liabilities of the subsidiary in question or enters into the rights and obligations of the subsidiary under the treaties if particular constellations materialise.

8.8 Leases

Leased properties

Hannover Re leases various office premises, technical facilities, office equipment and vehicles. A long-term land lease agreement also exists in connection with investment property.

The following items were recognised in the balance sheet as at 31 December 2020 in connection with leases.

Leases in the balance sheet N 102

in EUR thousand	2020	2019
Investment property	31,215	34,727
Own-use property	42,821	47,390
Fixtures, fittings and equipment	54	158
Sundry assets	1,456	3,022
Lease liabilities	82,841	89,201

The allocation to the right-of-use assets amounted to EUR 9.2 million (EUR 10.0 million) in the financial year.

The following amounts were recognised in the statement of income in connection with leases.

Amortisation of right-of-use assets in connection with leases N 103

in EUR thousand	2020	2019
Investment property	429	438
Own-use real estate	10,966	11,291
Fixtures, fittings and equipment	80	200
Sundry assets	893	1,490
Total	12,368	13,419

The interest expenses for lease liabilities totalled EUR 3.6 million (EUR 3.9 million). Expenses in connection with short-term leases were recognised in an amount of EUR 0.3 million (EUR 1.2 million). The total amounts payable for leases came to EUR 12.2 million (EUR 12.4 million).

Rented properties

Future minimum lease payments receivable N 104

in EUR thousand	Amounts receivable
2021	96,245
2022	93,018
2023	82,739
2024	72,237
2025	66,274
Subsequent years	216,263

The rental payments receivable result from the long-term renting out of properties by the Group's real estate companies. The leases in question are operating leases. The rental income received in the financial year amounted to EUR 139.6 million (EUR 145.4 million).

8.9 Fee paid to the auditor

At its meeting on 8 March 2018 the Supervisory Board of Hannover Re appointed PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC GmbH) as the auditor of the consolidated financial statement of Hannover Re as defined by § 318 German Commercial Code (HGB). The expense recognised for the fees paid to PwC GmbH and worldwide member firms of PwC International Limited (PwC) in the year under review can be broken down as follows:

Fee paid to the auditor N 105

	2020		2019	
in EUR thousand	PwC worldwide	thereof PwC GmbH	PwC worldwide	thereof PwC GmbH
Services relating to auditing of the financial statements	9,029	2,469	8,345	2,430
Other assurance services	186	104	293	97
Tax consultancy services	–	–	74	65
Other services	391	325	85	82
Total	9,606	2,898	8,797	2,674

The fee for services relating to auditing of the financial statements performed by PwC GmbH includes above all the fees for the auditing of the consolidated financial statement including legally required extensions of the mandate, the review report on the interim report as well as audits of annual financial statements and audits of the Solvency II balance sheets of the subsidiaries included in the consolidated financial statement.

The fees for other assurance services relate to legally or contractually required reviews. A further distinction is made for fees for tax consultancy services. The fees for other services encompass, for example, consultancy services in connection with the adoption of IFRS 17.

The auditor responsible for performance of the audit engagement as defined by § 38 Para. 2 of the Professional Charter for Accountants/Certified Auditors (Berufssatzung WP/vBP) as amended on 21 June 2016 is Mr. Mathias Röcker. He first served as the engagement partner responsible for the audit of the annual and consolidated financial statements effective 31 December 2018.

8.10 Events after the balance sheet date

In the first quarter of 2021 a cedant of Hannover Rück SE disposed of parts of its life insurance portfolio. In this context it was possible to partially dissolve or reorganise the collateralisation structures that had been put in place by Hannover Rück SE in connection with the reinsurance of this portfolio. This restructuring gave rise to a positive profit contribution in the order of EUR 130 million before tax in the first quarter of 2021.

The protracted Covid-19 pandemic continues to adversely affect the profitability of Hannover Rück SE in the early months of 2021. Particularly in the United States, we anticipate negative impacts on the result for the first quarter in life and health reinsurance. Overall, the volume of losses caused by Covid-19 is difficult to forecast owing to the uncertainties surrounding the further course of the pandemic; it is, however, our expectation that the effect on earnings in the area of life reinsurance will be largely offset by the aforementioned positive contribution to the quarterly result.

Hannover, 8 March 2021

Executive Board

Henchoz Althoff Chèvre

Jungsthöfel Dr. Miller Dr. Pickel Sehm

The following copy of the auditor's report also includes a "Report on the audit of the electronic renderings of the financial statements and the management report prepared for disclosure purposes in accordance with § 317 Abs. 3b HGB" ("Separate report on ESEF conformity"). The subject matter (ESEF documents to be audited) to which the separate report on ESEF conformity relates is not attached. The audited ESEF documents can be inspected in or retrieved from the Federal Gazette.

Independent Auditor's Report

(Translation of the auditor's report issued in German language on the annual/consolidated financial statements prepared in German language by the management of Hannover Rück SE)

to Hannover Rück SE, Hannover

Report on the audit of the consolidated financial statements and of the Group management report

Audit Opinions

We have audited the consolidated financial statements of Hannover Rück SE, Hannover, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2020, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Hannover Rück SE, which is combined with the Company's management report, for the financial year from 1 January to 31 December 2020. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2020, and of its financial performance for the financial year from 1 January to 31 December 2020, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der

Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). 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 Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

(1) Fair value measurement of certain financial instruments
(2) Measurement of provisions for claims outstanding in the property reinsurance business segment
(3) Measurement of premium reserves
(4) Calculation of estimated gross premium

Our presentation of these key audit matters has been structured in each case as follows:

(a) Matter and issue
(b) Audit approach and findings
(c) Reference to further information

Hereinafter we present the key audit matters:

(1) Fair value measurement of certain financial instruments

(a) In the Company's consolidated financial statements financial instruments amounting to EUR 59,179.1 million (82.8% of total assets) are reported.

Of these financial instruments, financial assets amounting to EUR 42,462.9 million are measured at fair value. Of those financial instruments in turn, the fair value of EUR 41,734.7 million is calculated using valuation models or based on third-party value indicators. The measurement of financial instruments whose fair value must be determined based on valuation models and third-party value indicators is subject to uncertainty not only due to the impacts of the coronavirus pandemic but also because the most recent market data or comparable figures are not always available and therefore estimated values and parameters that cannot be currently observed on the market are also used.

Financial instruments measured using models are subject to an increased measurement risk due to their lower objectivity and the underlying judgments as well as due to the impacts of the coronavirus pandemic, estimates and assumptions of the executive directors. Since the estimates and assumptions, in particular with regard to interest rates and cash flows, and the valuation methods applied could materially affect the measurement of these financial instruments and the assets, liabilities and financial performance of the Group and also extensive disclosures in the note to the consolidated financial statements on measurement methods and scope of judgments are necessary, this matter was of particular significance in the context of our audit.

(b) During our audit, we analyzed the financial instruments based on valuation models and third-party value indicators, with the focus on measurement uncertainties. Thereby, we assessed the appropriateness and effectiveness of the relevant controls for the measurement of these financial instruments and the model validation. In that connection we also reviewed the executive directors' assessments with respect to the impacts of the coronavirus pandemic on recoverability. Therewith, we evaluated, among other things, the integrity of the underlying data and the process for at the determination of the assumptions and estimates used in the valuation.

With the help of our internal financial mathematics specialists, we also assessed the appropriateness of the methods applied by the executive directors to test the assets for impairment and the inputs used for that purpose. We have compared the methods and assumptions used to calculate valuation adjustments in the financial year with recognized practices and industry standards and ascertained to what extent these are suitable for determining an appropriate accounting treatment.

Based on our audit procedures performed, we were able to satisfy ourselves that the methods and assumptions used by the executive directors to measure certain financial instruments (valued based on models and third-party value indicators) are suitable overall and that the disclosures contained in the notes to the consolidated financial statements are appropriate.

(c) The Company's disclosures on the measurement of the financial instruments are contained in the sections Accounting policies and Notes to the individual items of the balance sheet, subsection Assets under own management of the notes to the consolidated financial statements.

(2) Measurement of provisions for claims outstanding in the property reinsurance business segment

(a) In the consolidated financial statements of the Company technical provisions ("claims provisions") amounting to EUR 33,929.2 million (47.5% of total assets) are reported under the "Provisions for unsettled claims" balance sheet item. Of that amount, EUR 29,194.4 million was attributable to the Property reinsurance segment.

The claims provisions under property reinsurance are estimated taking into account cedant information based on empirical values. The provision is measured based on actuarial methods, which require a sufficiently long data history and stability of the observed data. The mathematical methods use assumptions concerning premiums, ultimate loss ratios and run-off patterns, which are based on an expert estimate derived from past experience. This also included the expected impacts of the ongoing coronavirus pandemic on the recognition of claims provisions in respect of overall business. The executive di-rectors calculate the amount of the claims provisions taking into account.

The determination of the claims provision required the use of judgments, estimates and assumptions by the executive directors. Minor changes to those assumptions or to the methods used may have a material impact on the measurement of this provision.

Against this background and also due to the material significance of the amount of this provision for the assets, liabilities and financial performance of the Group, the measurement of this provision was of particular significance in the context of our audit.

(b) Given the significance of claims provisions, as part of our audit we assessed together with our actuaries the methods used by the Company and the assumptions made by the executive directors. The assessment was based on our industry expertise and experience, among other things. Among other things, we evaluated the appropriateness of the design of the process for recognizing reserves as well as carried out functional tests in order to assess the effectiveness of the internal controls. We focused in particular on controls designed to ensure that the data used are appropriate and complete and that the calculation process is subject to a sufficient form of quality assurance.

Based on the controls testing, we carried out additional analytical and substantive audit procedures relating to the measurement of the claims provision. In light of the significance of the claims provision for the overall business of the Company, our internal measurement specialists assessed the appropriateness of the methods used by the Company. Furthermore, our internal measurement specialists evaluated the models used by the Company and assumptions made by the executive directors based on industry expertise and experience with recognized actuarial practice and verified the valuation methods for consistency of use. In that connection, we also reviewed the executive directors' assessments with respect to the impacts of the coronavirus pandemic on the overall business.

Based on our audit procedures, we were able to satisfy ourselves that the estimates and assumptions made by the executive directors with respect to the claims provisions are appropriate overall.

(c) The Company's disclosures on the property reinsurance claims provisions are contained in the sections "Accounting policies" and "Notes to the individual items of the balance sheet", subsection "technical provisions" of the notes to the consolidated financial statements. Disclosures on risks are contained in the group management report in the section "Risk report", subsection "Technical risks of property reinsurance".

(3) Measurement of premium reserves

(a) In the consolidated financial statements technical provisions amounting to EUR 7,218.0 mil-lion (10.1% of total consolidated assets) are reported under the "Premium reserves" balance sheet item. The premium reserves were recognized primarily for the reinsurance activities in the life and health reinsurance segments.

The premium reserve is measured by using actuarial methods to derive the present value of future benefits to cedants, less the present value of premiums still to be paid by cedants in future. The respective policies are initially recognized in accordance with recognized accounting bases. Depending on the structure of the relevant policy and the regular business, the calculation is based either on a combination of available cedant settlements, where necessary adjusted to account for estimates of the course of the policy for settlement periods not yet settled or based on model-driven own calculations of the premium reserve. In so doing, actuarial assumptions must be made with respect to interest rates, investment yields, mortality, invalidity, longevity, costs and future behavior of policyholders.

Annual appropriateness tests are conducted to verify at the level of portfolios subject to standardized management whether the technical provisions calculated as of the reporting date in accordance with the accounting bases used upon initial recognition, and hence the premium reserve in particular, less existing deferred costs of concluding the policy, are sufficient to cover the present value of future benefits as best estimated at the balance sheet date, less the present value of contributions to be paid in connection with the standardized managed portfolios. This also included the expected impacts of the ongoing coronavirus pandemic on the premium reserve.

The estimate of the sufficiency of the reported premium reserves, the estimates made in the absence of cedant settlements as well as model-driven calculations of the premium reserve is subject to considerable scope for judgment on the part of the executive directors and the associated uncertainties in the estimations made.

Against this background and due to the material significance of the amount of the premium reserves for the assets, liabilities and financial performance of the Group as well as the complexity of the underlying calculations, this matter was of particular significance in the context of our audit.

(b) Given the significance of premium reserves, as part of our audit we assessed together with our actuaries the methods used by the Company and the assumptions made by the executive directors. The assessment was based on our industry expertise and experience, among other things.

For the purposes of the assessment, we also evaluated the design and effectiveness of the controls established by the Company for the purpose of calculating and recording the premium reserves. We focused in particular on controls designed to ensure that new products and policies are correctly classified and that changes in assumptions are correctly implemented in the systems.

Based on the controls testing, we carried out additional analytical and substantive audit procedures relating to the measurement of the premium reserves. With the help of our actuaries, we have compared the respective actuarial methods applied and the material assumptions with generally recognized actuarial practices and industry standards and ascertained to what extent these are appropriate for the valuation. In our tests of details procedures we evaluated the correct and proper use of the available cedant settlements for calculating the premium reserves. Thereby, we also assessed the appropriateness of the material assumptions by analyzing how the actuarial methods applied were derived.

Based on the tests of appropriateness conducted, we assessed whether the accounting bases and methods were appropriately applied. Where market rates of interest were used in the valuation, we verified the appropriateness of the discount rates used by comparing these with observable market parameters. Given the significance of the business for the Group, we focused in particular on the appropriateness test for the business of covering mortality risks in the USA in the Mortality Solutions division. Furthermore, we analyzed the development of premium reserves as compared to the previous year, particularly in light of the fact that the assumptions consistently correspond to the currently available cedant information, current business developments of the cedants and our expectations based on market observations. In that connection, we also reviewed the executive directors' assessments with respect to the impacts of the coronavirus pandemic.

Based on our audit procedures, we were able to satisfy ourselves that the methods and assumptions used by the executive directors for measuring the premium reserves are appropriate overall.

(c) The Company's disclosures on the premium reserve are contained in the sections "Accounting policies" and "Notes to the individual items of the balance sheet", subsection "technical provisions" of the notes to the consolidated financial statements. Disclosures on risks are contained in the group management report in the section "Risk report", subsection "Technical risks of personal reinsurance".

(4) Calculation of estimated gross premium

(a) In its consolidated financial statements, the Company reported gross premiums of EUR 24,765.5 million in the income statement.

Assumed reinsurance premiums are accounted for in accordance with the terms and conditions of the reinsurance policies. In the absence of settlements of cedants, the Company made supplementary or complete estimates of the contributions. The estimates were based on assumptions and are therefore subject to considerable uncertainties and scope of judgment, also in light of the impacts of the coronavirus pandemic.

Due to the material significance of the amount of the estimated premiums for the assets, liabilities and financial performance of the Group as well as the considerable scope for judgment on the part of the executive directors and the associated uncertainties in the estimations made, this matter was of particular significance in the context of our audit.

(b) For the assessment of the estimated gross premium, we first conducted a design testing of the contribution and estimation process. In that connection, we identified the material key controls and analyzed their design. Based on that analysis, we conducted a functional testing regarding the effectiveness of the key controls implemented in the process and assessed the appropriateness of the material assumptions by verifying and analyzing the calculating method for deriving the estimated gross premium. In that connection, we also reviewed the executive directors' assessments with respect to the impacts of the coronavirus pandemic.

In context of our tests of details procedures, we critically questioned the material assumptions underlying an estimate and had the Company explain to us the reasons for such estimates. Based on information on the contributions expected in the previous year, we reconciled the expectations against the actual results and thus were able to draw conclusions as to the quality of the estimates.

Based on our audit procedures, we were able to satisfy ourselves that the calculation procedures applied by the executive directors to derive the estimated gross premium are appropriate overall.

(c) The Company's disclosures on the recognized and estimated gross premiums are contained in the sections "Accounting policies" and "Notes to the individual items of the income statement" of the notes to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Enterprise management" of the group management report
- the non-financial statement pursuant to § 289b Abs. 1 HGB and § 315b Abs. 1 HGB included in section "Combined non-financial information statement" of the group management report
- the disclosures contained in the group management report and marked as unaudited regarding Solvency II reporting

The other information comprises further the remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal 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 group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, 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

Assurance Report in Accordance with § 317 Abs. 3b HGB on the Electronic Reproduction of the Consolidated Financial Statements and the Group Management Report Prepared for Publication Purposes

Reasonable Assurance Conclusion

We have performed an assurance engagement in accordance with § 317 Abs. 3b HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the attached electronic file HannoverRueckSE_KA_LB_2020-12-31.zip and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 1 HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance engagement only extends to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within this reproduction nor to any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 1 HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the above-mentioned electronic file beyond this reasonable assurance conclusion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January to 31 December 2020 contained in the "Report on the Audit of the Consolidated Financial Statements and on the Group Management Report" above.

Basis for the Reasonable Assurance Conclusion

We conducted our assurance engagement on the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file in accordance with § 317 Abs. 3b HGB and the Exposure Draft of IDW Assurance Standard: Assurance in Accordance with § 317 Abs. 3b HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410) and the International Standard on Assurance Engagements 3000 (Revised). Accordingly, our responsibilities are further described below in the "Group Auditor's Responsibilities for the Assurance Engagement on the ESEF Documents" section. Our audit firm has applied the IDW Standard on Quality Management: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the Executive Directors and the Supervisory Board for the ESEF Documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the group management report in accordance with § 328 Abs. 1 Satz 4 Nr. 1 HGB and for the tagging of the consolidated financial statements in accordance with § 328 Abs. 1 Satz 4 Nr. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of § 328 Abs. 1 HGB for the electronic reporting format, whether due to fraud or error.

The executive directors of the Company are also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited group management report as well as other documents to be published to the operator of the German Federal Gazette [Bundesanzeiger].

The supervisory board is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Group Auditor's Responsibilities for the Assurance Engagement on the ESEF Documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the assurance engagement. We also:

- Identify and assess the risks of material non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance conclusion.
- Obtain an understanding of internal control relevant to the assurance engagement 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 conclusion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the electronic file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815 in the version applicable as at the balance sheet date on the technical specification for this electronic file.
- Evaluate whether the ESEF documents enables a XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the supervisory board on 10 March 2020. We were engaged by the supervisory board on 18 June 2020. We have been the group auditor of the Hannover Rück SE, Hannover, without interruption since the financial year 2018.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Mathias Röcker.

Hannover, 9 March 2021

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

sgd. Mathias Röcker	sgd. ppa. Dennis Schnittger
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Independent Practitioner’s Report on a Limited Assurance Engagement on Non-financial Reporting

(PricewaterhouseCoopers GmbH WPG has performed a limited assurance engagement on the German version of the combined Non-financial Statement and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.)

To Hannover Rück SE, Hannover

We have performed a limited assurance engagement on the disclosures in the section “Combined Non-financial Statement” of the combined Non-financial Statement (hereinafter the “Non-financial Statement”) included in the combined management report pursuant to §§ (Articles) 341a Abs. (paragraph) 1a und 341j Abs. 4 in conjunction with 289b Abs. 1 and 315b Abs. 1 HGB (“Handelsgesetzbuch”: “German Commercial Code”) of Hannover Rück SE, Hannover, (hereinafter the “Company”) for the period from 1 January to 31 December 2020.

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Non-financial Statement in accordance with §§ 315c in conjunction with 289c to 289e HGB.

This responsibility of Company’s executive directors includes the selection and application of appropriate methods of non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Non-financial Statement that is free from material misstatement whether due to fraud or error.

Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors (“Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer“: “BS WP/vBP”) as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner´s Responsibility

Our responsibility is to express a limited assurance conclusion on the Non-financial Statement based on the assurance engagement we have performed.

Within the scope of our engagement, we did not perform an audit on external sources of information or expert opinions, referred to in the Non-financial Statement.

We conducted our assurance engagement in accordance with the 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 allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the Company’s Non-financial Statement for the period from 1 January to 31 December 2020 has not been prepared, in all material aspects, in accordance with §§ 315c in conjunction with 289c to 289e HGB.

In a limited assurance engagement, the assurance procedures are less in extent than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner’s judgment.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

- Obtaining an understanding of the structure of the sustainability organization and of the conducted materiality analyses
- Inquiries of management and personnel involved in the preparation of the Non-financial Statement regarding the preparation process, the internal control system relating to this process and selected disclosures in the Non-financial Statement
- Identification of the likely risks of material misstatement of the Non-financial Statement
- Analytical evaluation of selected disclosures in the Non-financial Statement
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the combined management report
- Evaluation of the presentation of the non-financial information

Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Company's Non-financial Statement for the period from 1 January to 31 December 2020 has not been prepared, in all material aspects, in accordance with §§ 315c in conjunction with 289c to 289e HGB.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement. The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Frankfurt am Main, 9 March 2021

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke Wirtschaftsprüferin (German Public Auditor)	ppa. Urata Biqkaj Wirtschaftsprüferin (German Public Auditor)

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Hannover, 8 March 2021

Executive Board

Henchoz   Althoff   Chèvre

Jungsthöfel   Dr. Miller   Dr. Pickel   Sehm

Supervisory Board

Report of the Supervisory Board

of Hannover Rück SE

In our function as the Supervisory Board we considered at length during the 2020 financial year the position and development of the company and its major subsidiaries. The implications of the Covid-19 crisis were a point of emphasis this year. We advised the Executive Board on the direction of the company and monitored the management of business on the basis of written and verbal reports. The Supervisory Board of Hannover Rück SE held four regular meetings in order to adopt the necessary resolutions after appropriate discussion. In addition, the Supervisory Board adopted two resolutions in the reporting period by a written procedure. In conformity with the applicable safeguards to reduce the risk of infection with Covid-19 the meetings were held in a hybrid format, i.e. with partially physical and partially virtual attendance. With the exception of the meeting in May, in which Dr. Lipowsky and Dr. Schipporeit were unable to participate, all the Supervisory Board members took part in the Supervisory Board meetings held in 2020. The meetings of the committees were duly attended in all cases by all the members of the respective bodies. In addition, two representatives of the Federal Financial Supervisory Authority attended two meetings of the Supervisory Board on a virtual basis. The individual participation in the meetings is shown in the following table:

	Participation rate	
	Number of meetings	in %
Participation in full meetings of the Supervisory Board		
Torsten Leue	4/4	100
Herbert K. Haas	4/4	100
Natalie Bani Ardalan	4/4	100
Frauke Heitmüller	4/4	100
Ilka Hundeshagen	4/4	100
Dr. Ursula Lipowsky	3/4	75
Dr. Michael Ollmann	4/4	100
Dr. Andrea Pollak	4/4	100
Dr. Erhard Schipporeit	3/4	75
Participation in meetings of the Finance and Audit Committee		
Torsten Leue	4/4	100
Herbert K. Haas	4/4	100
Dr. Ursula Lipowsky	4/4	100
Participation in meetings of the Standing Committee		
Torsten Leue	4/4	100
Herbert K. Haas	4/4	100
Dr. Erhard Schipporeit	4/4	100

We were informed by the Executive Board in writing and orally on the basis of the quarterly statements about the course of business as well as the position of the company and the Group. In the intervals between regular meetings we received inter alia written reports on material changes due to business impacts from Covid-19, the disclosure to the capital market regarding the communicated profit guidance for 2020 dated 21 April 2020 and on the company's position with respect to its dividend policy. With regard to reports on topics that fall under the responsibility of key functions, we had an opportunity to engage directly in a dialogue with the respective key function holders. The quarterly reports with the components of the financial statements and the key figures for the Hannover Re Group constituted an important source of information for the Supervisory Board. We also held discussions without the presence of the Executive Board, inter alia regarding personnel matters on the level of the Executive Board and regularly in relation to matters of the Supervisory Board's internal organisation.

We received an analysis of the 2019 results in property & casualty and life & health reinsurance as well as a presentation from the Executive Board covering the profit expectations for the 2020 financial year and the operational planning for the 2021 financial year. In addition, the Chairman of the Supervisory Board was constantly kept informed by the Chairman of the Executive Board of major developments and impending decisions as well as of the company's risk situation. All in all, we were involved in decisions taken by the Executive Board and assured ourselves of the lawfulness, regularity and efficiency of the company's management as required by our statutory responsibilities and those placed upon us by the company's Articles of Association.

No audit measures pursuant to § 111 Para. 2 Sentence 1 Stock Corporation Act (AktG) were required in the 2020 financial year.

Key points of deliberation in the full meetings of the Supervisory Board

At its meeting on 10 March 2020 the Supervisory Board discussed in detail the audited annual and consolidated financial statements as well as the Executive Board's proposal for the appropriation of the disposable profit for the 2019 financial year. In this regard, as in the previous year, the Executive Board described all material indicators from the technical and non-technical accounts as well as key data on the investment side. The independent auditors directly presented the results of the audit and elaborated on the audit procedure. The assurance report on the non-financial information statement was also discussed. The Executive Board outlined the prospects for the current 2020 financial year and we discussed the major insights from the compliance, audit and risk reports. Among the steps taken as part of the annual revision of the investment guidelines, they were specified in greater detail inter alia with respect to certain formal and procedural clarifications as well as adjustment of the rating limits for allocation of the credit risk. At the recommendation of the Finance and Audit Committee, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft – following its initial appointment for the audit of the 2018 financial year – was again awarded the mandate to audit the annual financial statements. In preparation for the Annual General Meeting on 6 May 2020, the agenda was discussed and approved. In addition, a resolution was adopted on updating of the Rules of Procedure for the Executive Board and for the Supervisory Board, which was essentially warranted by the growth of the company since the last revi-sions. The Rules of Procedure of the Supervisory Board were also subsequently published on the company's website (https://www.hannover-re.com/1535197/rules-of-procedure-for-the-supervisory-board-of-hannover-rueck-se.pdf). In addition, the variable remuneration of the members of the Executive Board was defined on the basis of the findings with respect to attainment of the respective targets for the 2019 financial year. In this context, as usual, we factored the findings of external remuneration surveys into our deliberations for the purpose of making a market comparison. We also considered in detail the findings of the market comparison that was commissioned regarding the occupational retirement provision for members of the Executive Board.

Following the meeting, the Supervisory Board resolved on 31 March 2020 by a written procedure that the Annual General Meeting on 6 May 2020 should be held virtually with no physical attendance in light of the pandemic situation and that corresponding use should be made of the formal special arrangements facilitated by the legislator for convening and holding the Annual General Meeting.

On 5 May 2020 our meeting was held for the first time in a hybrid format owing to the pandemic situation, i.e. with partially in-person and partially virtual participation as well as the resulting precautionary measures. Dr. Lipowsky and Dr. Schipporeit were unable to participate and cast their votes on the relevant resolutions in writing pursuant to § 12 (2) of the Articles of Association of Hannover Rück SE. The Executive Board reported to us on the first quarter of 2020, with additional detailed elaboration on the effects and measures associated with the Covid-19 pandemic. We explored the overall results of the previous year in greater detail; in this regard, the Executive Board presented relevant analyses regarding the quality of the loss reserves in property and casualty reinsurance and the intrinsic value creation (IVC). In addition to the outlook for the current financial year – which was similarly shaped by the uncertainties around the Covid-19 crisis –, the examination of the Own Risk and Solvency Assessment (ORSA) and the capitalisation under Solvency II constituted further key points of deliberation. Following up on this, the structure of the Regular Supervisory Report (RSR) and its differences and overlaps relative to the ORSA were explained. In addition to the Covid-19 crisis, the discussion of the principles underlying the strategy for the upcoming cycle 2021–2023 and adoption of a corresponding resolution were a focus of the meeting. Picking up on the strategy 2018–2020, the Executive Board presented to us in this context the company's strengths that are to be cultivated and carried forward, specific areas where opportunities are seen and investments planned as well as the objectives for the next cycle. In part owing to the uncertainties surrounding the further course of the pandemic and what its long-term business repercussions might be, we invited the Executive Board to give us another report on the status of strategy development at the November meeting. In addition, we were provided with a peer comparison of the return on investment and a detailed report on how profitability is safeguarded in life and health reinsurance business. Lastly, the Executive Board looked ahead to the internal preparations being made for potential issuance of additional hybrid capital in an amount of EUR 500 million in the current year.

The issuance of additional hybrid capital in an amount of EUR 500 million announced at the May meeting was approved by the Supervisory Board and its Finance and Audit Committee by a written procedure in June 2020.

On 4 August 2020 the Executive Board reported at an all-day meeting again conducted in a hybrid format on the first half of 2020; in this context, as usual, it described the material indicators from the technical and non-technical accounts and outlined the attainment status of the strategic objectives. The outlook for the current financial year was followed by more concrete analyses of possible effects of the Covid-19 pandemic on the reinsurance and investment performance. We were informed about the key insights from the risk report and the Executive Board reported – in response to a prior request from the Supervisory Board – on the development of the company's costs in a peer comparison. Another key topic at the August meeting was the sustainability of the income generated from the highly profitable Life & Health financial solutions business. We also deliberated on a restructuring activity within the Group, which went hand-in-hand with a capital increase through a non-cash contribution that had to be approved by the Supervisory Board. We received the audit report on the solvency balance sheet. The Supervisory Board was additionally required to approve fulfilment of the requirements of the Act Implementing the Second Shareholders' Rights Directive (ARUG II) in internal processes with an eye to the monitoring and potential approval of related party transactions. As far as personnel matters were concerned, we considered in depth the personnel change on the Executive Board in autumn 2020. Mr. Jungsthöfel made himself available to the Supervisory Board for part of the discussions for purposes of a personal introduction and to answer any questions and he was then appointed by us as a member of the Executive Board and as the new Chief Financial Officer effective 1 September 2020. At the same time, we parted with Mr. Vogel, who had served as an exceptionally reliable partner for the Supervisory Board over a long period of time with his expertise and his trusted leadership of his area of responsibility. Secondly, we discussed the remuneration scheme for the Executive Board in the context of personnel issues. The current scheme was in some respects no longer compatible with the new requirements arising out of the ARUG II amendments as well as the recommendations of the German Corporate Governance Code, and we therefore developed a new adequate scheme based on externally commissioned advice and approved it after in-depth consultation. Subject to the consent of the individual Executive Board members to the corresponding contractual changes and provided the Annual General Meeting approves the scheme as adequate, the specifics will in future be provided in detail in the remuneration report. With an eye to the self-assessment of the Supervisory Board's areas of expertise that had once more been carried out, the Supervisory Board decided that the present extensive list of topics which goes beyond the regulatory requirements will be used again in 2021. During the afternoon we listened to presentations given by company experts on a number of key topics in the field of (group) tax law in reinsurance business as well as IFRS 9 and 17. In addition to the informative content of the presentations, this gave us an opportunity to inquire directly with the function holders about the current status of the relevant topics as well as the actions taken within the company and the concrete challenges.

At the last meeting of the year held on 4 November 2020, we deliberated at length on the key preliminary results in the business performance together with the outlook for the current financial year. The effects of the Covid-19 pandemic were again a focus of the reporting. Mr. Jungsthöfel attended the meeting for the first time in his new role as Chief Financial Officer. We were provided with the report on employee capacities. The Executive Board also presented to us the operational planning for 2021; we considered this in detail and subsequently approved the annual and results planning submitted to us. We discussed the latest insights from the risk report and were informed of the status of major pending legal proceedings. The supplementary report on the ongoing development of business and the status of the strategy for the cycle 2021–2023 was another particular focal point of our deliberations. The Supervisory Board exchanged views with the Executive Board on specific questions relating to the individual strategic business initiatives. Furthermore, we agreed that the internal Group restructuring which we had previously approved in August should already be implemented in the current year. Based on the findings of the "Fit & Proper" self-assessment that had been conducted among the Supervisory Board members, the Supervisory Board engaged in an extensive exchange of views on a development plan for the entire Supervisory Board. It was again the case this year that the individual members of the Supervisory Board attended numerous advanced training measures in relation to various core topics; the costs incurred in this connection were paid by the company. Topics covered in 2020 included, among others, ARUG II, risk management and reporting as well as liability aspects. The presentations on taxes and accounting issues given to the full Supervisory Board at the August meeting were very well received and are planned again for 2021 in a similar form. A significant amount of our discussion time at the meeting was also devoted to corporate governance issues and we approved the amended Declaration of Conformity accordingly (for further information see below and the Declaration on Corporate Governance on page 112 et seq. of the Annual Report). We received the yearly report of the Executive Board pursuant to § 3 Para. 5 of the Regulation on the Supervisory Law Requirements for Remuneration Schemes in the Insurance Sector (VersVergV) and exchanged opinions on the necessary changes to the Supervisory Board remuneration, which are to be submitted to the Annual General Meeting in May 2021 for adoption of a resolution. As part of implementing the process behind the Executive Board remuneration that had been newly approved in August, it was also necessary for the first time to decide in the full Supervisory Board on the target criteria for members of the Executive Board for the year 2021. The focus of our deliberations in this respect was on this year's findings from the Organisational Health Check, sustainability and the new strategic objectives.

As in every year, we were regularly briefed on the work of the Supervisory Board committees.

Committees of the Supervisory Board

Of the committees formed by the Supervisory Board within the meaning of § 107 Para. 3 Stock Corporation Act (AktG), the Finance and Audit Committee met on four occasions, with two resolutions additionally adopted by a written procedure – in the first place, regarding the aforementioned issuance of additional subordinated debt and, secondly, regarding mandating of the independent auditor to conduct a limited assurance review of the non-financial information statement. The Standing Committee similarly met four times in 2020. The Chairman of the Supervisory Board updated the full Supervisory Board on the major deliberations of the committee meetings at its next meeting and provided an opportunity for further questions.

The Finance and Audit Committee considered inter alia the consolidated financial statement and the quarterly reports drawn up in accordance with IFRS and the individual financial statement of Hannover Rück SE drawn up in accordance with the German Commercial Code (HGB), and it discussed with the independent auditors their reports on these financial statements. As in the previous years, an expert opinion on the adequacy of the loss reserves in property and casualty reinsurance was noted, the retrocession structure of the Hannover Re Group, the risk reports and the compliance report were discussed, and reports on the major subsidiaries were received and considered. In addition, the Committee examined the investment structure and investment income – including the stress tests with regard to the investments and their implications for net income and the equity base. The audit concentrations of the independent auditors for the 2020 financial year were defined. In order to review the quality of the auditing a system was developed this year that will be used by the Committee in future as the basis for its assessment. The Committee continued to be provided with ongoing detailed reports on the recognition and measurement of the risk-oriented book of US life reinsurance business acquired in 2009 from Scottish Re as well as on the rate increases that had been initiated and/or implemented. The measures for safeguarding profitability in Life & Health business – which were also subsequently reported to the full Supervisory Board – were discussed in detail and the Committee was able to obtain a good understanding of the sustainability of the financial solutions portfolio after receiving an additional report from the division. Furthermore, the Committee examined in detail the functioning of the volatility adjustment in the internal model and its effect on the solvency ratio. The Committee also had an opportunity to engage with the Executive Board in an advisory capacity regarding the strategy 2021 – 2023.

As in the previous years, among other things, the Standing Committee reviewed the adequacy of the remuneration scheme for the members of the Executive Board, determined the variable remuneration of the members of the Executive Board for the 2019 financial year based on the findings pertaining to attainment of their respective targets and examined the remuneration for the Board members who were due for review. More specific consideration was also given to the occupational pension commitments in the adequacy review. In the summer the Standing Committee also considered the appointment of Mr. Clemens Jungsthöfel as a member of the Executive Board, in which regard Mr. Jungsthöfel – who already worked for the Group as a member of the Executive Board of HDI Global SE – attended part of the meeting as a guest. With regard to all these matters the Committee drew up corresponding recommendations for the full Supervisory Board. In addition, it was necessary to bring the Executive Board remuneration scheme into line with the requirements of ARUG II and the more extensive recommendations of the German Corporate Governance Code. Taking into account external consulting support, a new scheme was developed for this purpose after extensive adequacy analyses and submitted to the full Supervisory Board for adoption of a resolution. The Committee again deliberated at length on the medium- and long-time succession arrangements for the Executive Board. Furthermore, the individual objectives of the members of the Executive Board for 2021 were defined on the basis of the new remuneration scheme and prepared for adoption of a resolution by the full Supervisory Board.

Corporate Governance

The Government Commission on the German Corporate Governance Code (DCKG) elaborated an extensive revision of the German Corporate Governance Code, which on publication in the Federal Gazette by the Federal Ministry of Justice and Consumer Protection on 20 March 2020 formed the basis for the most recent Declaration of Conformity published by the company. Based on the review and discussion of the new recommendations in the previous year and the already implemented measures, we therefore devoted considerable attention to the topic of corporate governance. The remuneration scheme for the Executive Board was adjusted according to the requirements and will be submitted to the Annual General Meeting on 5 May 2021. Changes to the remuneration scheme for the Supervisory Board were also discussed. In the summer we also explored the process for monitoring and, as appropriate, submission and disclosure of so-called related party transactions. The Rules of Procedure for our bodies were revised and updated, including explicit stipulation of certain already practised procedures that are now recommended in the Code. The evaluation of the quality of the auditing is now performed by the Finance and Audit Committee according to a systematically defined process. Some of the recommendations specified in relation to disclosure are now fulfilled in the context of the Declaration on Corporate Governance.

We considered the report by the Executive Board on non-financial matters (cf. page 70 et seq. of the combined management report in the present Annual Report) and examined it. PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft also reviewed the information statement with limited assurance in accordance with the audit standard ISAE 3000 (Revised) (see here the Independent Auditor’s Report on page 260 et seq.).

In addition, the Supervisory Board received a report on the design of the remuneration schemes as well as the compliance, internal audit and risk reports. It remains the assessment that at least three members of the Supervisory Board – namely Dr. Andrea Pollak, Dr. Ursula Lipowsky and Dr. Michael Ollmann – are to be considered independent members.

Notwithstanding the high importance that the Supervisory Board attaches to the standards of good and responsible enterprise management defined in the German Corporate Governance Code as amended on 16 December 2019, the Supervisory Board decided not to fully comply with Recommendation C. 10 in conjunction with Recommendation C. 7 regarding the independence of the Chair of the Audit Committee from the company and the management board. Justification for these divergences is provided in the Declaration of Conformity pursuant to § 161 Stock Corporation Act (AktG) regarding compliance with the German Corporate Governance Code, which is reproduced both on the company's website and in the present Annual Report as part of the Declaration on Corporate Governance (cf. page 112 et seq.). The other divergences indicated therein from the recommendations of the Code as amended on 16 December 2019 are of a purely temporary nature and can be attributed to this year's changeover from the previous version to the newly valid Code. They were therefore disclosed and justified as a precautionary measure. Further information on the topic of corporate governance is available on the website of Hannover Rück SE.

Audit of the annual financial statements and consolidated financial statements

The accounting, annual financial statements, consolidated financial statements and the combined management report were audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. The Supervisory Board chose the auditor and the Chairman of the Supervisory Board awarded the audit mandate. The auditor's independence declaration was received. Along with the audit concentrations of the German Financial Reporting Enforcement Panel (DPR) and the additional audit concentrations defined by the European Securities and Markets Authority (ESMA), activities relating to the implementation of IFRS 17 and credit risks on the assets side were also included in the scope of the audit as points of emphasis. The mandate for the review report by the independent auditors on the Half-yearly Financial Report and the solvency balance sheet was also awarded again. The special challenges associated with the international aspects of the audits were met without reservation. Since the audits did not give rise to any objections, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft issued unqualified audit certificates. It was also determined that the annual financial statement contains the information pursuant to § 289f German Commercial Code (HGB). The Finance and Audit Committee discussed the financial statements and the combined management report with the participation of the auditors and in light of the audit reports, and it informed the Supervisory Board of the outcome of its reviews. The audit reports were distributed to all the members of the Supervisory Board and explored in detail – with the participation of the auditors – at the Supervisory Board meeting held to consider the annual results. The auditors will also be present at the Annual General Meeting.

The report on the company's relations with affiliated companies drawn up by the Executive Board has likewise been examined by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft and given the following unqualified audit certificate:

"Having audited the report in accordance with our professional duties, we confirm that

1. the factual details of the report are correct;
2. in the case of the transactions detailed in the report, the expenditure of the company was not unreasonably high."

We have examined

a. the annual financial statements of the company, the financial statements of the Hannover Re Group and the combined management report prepared by the Executive Board for the company and the Group, and
b. the report of the Executive Board pursuant to § 312 Stock Corporation Act (AktG) (Report on relations with affiliated companies)

– in each case drawn up as at 31 December 2020 – and have no objections in this regard; nor do we have any objections to the statement made by the Executive Board at the end of the report on relations with affiliated companies.

The Supervisory Board concurred with the opinions of the auditors and approved the annual financial statements and the consolidated financial statements; the annual financial statements are thereby adopted. Our proposal regarding the appropriation of the disposable profit for 2020 is in accordance with that of the Executive Board.

Changes on the Supervisory Board and the Executive Board

There were no changes in the composition of the Supervisory Board or its committees in the year under review. The term of office of the company's Supervisory Board ends pursuant to § 10 (3) of the Articles of Association of Hannover Rück SE at the end of the General Meeting that ratifies the acts of management for the 2023 financial year.

Effective 1 September 2020 we appointed Mr. Clemens Jungsthöfel to the Executive Board so that he could take over as Chief Financial Officer from Mr. Roland Vogel on 30 September, following the latter's retirement. We are most grateful to Mr. Vogel for his many years of service to the Group and the unfailingly open and constructive dialogue. He made himself available in an advisory capacity during and after the familiarisation phase, which in the eyes of the Supervisory Board ensured the smoothest possible transition. Mr. Jungsthöfel had already served on the Executive Board of HDI Global SE since 2018 and he impressed us not only from a technical standpoint but also on the personal level. We look forward to further successful cooperation with the new Chief Financial Officer and with the entire Executive Board.

Word of thanks to the Executive Board and members of staff

Thanks to the extraordinary performance and prudent management of the Executive Board in this and past years and despite the enormous challenges in the 2020 financial year, Hannover Rück SE generated a good result. A great debt of gratitude is owed in particular to the employees of the company and the Group for their dedication and their considerable flexibility.

The Supervisory Board would like to express its recognition and special appreciation to the Executive Board and above all to the employees for their efforts.

Hannover, 10 March 2021

The Supervisory Board

Leue Haas Bani Ardalan Heitmüller Hundeshagen

Dr. Lipowsky Dr. Ollmann Dr. Pollak Dr. Schipporeit

Supervisory Board of Hannover Rück SE

Torsten Leue [1,2,3]
Hannover
(since 7 May 2018) [5]
Chairman
Chief Executive Officer of HDI Haftpflichtverband der Deutschen Industrie V.a.G., Hannover
Chief Executive Officer of Talanx AG, Hannover

Herbert K. Haas [1,2,3]
Burgwedel
(since 24 May 2002) [5]
Deputy Chairman
Former Chief Executive Officer of Talanx AG and HDI Haftpflichtverband der Deutschen Industrie V.a.G., Hannover

Natalie Bani Ardalan [4]
Springe
(since 8 May 2019) [5]
Employee

Frauke Heitmüller [4]
Hannover
(since 3 May 2012) [5]
Employee

Ilka Hundeshagen [4]
Hannover
(since 8 May 2019) [5]
Employee

Dr. Ursula Lipowsky [2]
Munich
(since 7 May 2018) [5]
Member of the Supervisory Board of the Association, Association of German Dioceses (VDD), Corporation under Public Law, Bonn

Dr. Michael Ollmann
Hamburg
(since 8 May 2019) [5]
Member of various supervisory boards

Dr. Andrea Pollak [3]
Vienna, Austria
(since 3 May 2011) [5]
Independent management consultant

Dr. Erhard Schipporeit [1]
Hannover
(since 3 May 2007) [5]
Member of various supervisory boards

1 Member of the Standing Committee
2 Member of the Finance and Audit Committee
3 Member of the Nomination Committee
4 Staff representative
5 Date when member was first appointed/elected to the company's Supervisory Board, current term of office for the entire Supervisory Board commenced at the end of the Annual General Meeting on 8 May 2019

Details of memberships of legally required supervisory boards and comparable control boards at other domestic and foreign business enterprises are contained in the Annual Report of Hannover Rück SE.

Further information

Branch offices and subsidiaries of the Hannover Re Group abroad

Australia

Hannover Life Re of Australasia Ltd
Tower 1, Level 33
100 Barangaroo Avenue
Sydney NSW 2000
Tel. +61 2 9251-6911
Fax +61 2 9251-6862
CEO:
Gerd Obertopp

Hannover Rueck SE Australian Branch
Tower 1, Level 33
100 Barangaroo Avenue
Sydney NSW 2000
Tel. +61 2 8373-7580
Fax +61 2 9274-3033
Managing Director:
Michael Eberhardt
Agent:
Ross Littlewood

Bahrain

Hannover ReTakaful B.S.C. (c)
Al Zamil Tower
17th Floor
Government Avenue
Manama Center 305
Manama
Tel. +973 1757-4766
Fax +973 1757-4667
Managing Director:
Adham El-Muezzin

Hannover Rueck SE Bahrain Branch
Al Zamil Tower
17th Floor
Government Avenue
Manama Center 305
Manama
Tel. +973 1757-4766
Fax +973 1757-4667
Managing Director:
Adham El-Muezzin

Bermuda

Hannover Life Reassurance Company of America (Bermuda) Ltd.
Purvis House, First Floor
29 Victoria Street
Hamilton, HM 10
Tel. +1 441 294-3240
President & CEO:
Peter R. Schaefer

Hannover Re (Bermuda) Ltd.
Victoria Place, 2nd Floor,
31 Victoria Street
Hamilton, HM 10
Tel. +1 441 294-3110
Fax +1 441 296-7568
CEO:
Chantal Cardinez

Brazil

Hannover Rück SE Escritório de Representação no Brasil Ltda.
Praça Floriano, 19 salas 1701/02
CEP 20 031 050
Rio de Janeiro
Tel. +55 21 2217-9500
Fax +55 21 2217-9515
Representative:
Joao Caproni

China

Hannover Rück SE Hong Kong Branch
2008 Sun Hung Kai Centre
20th Floor
30 Harbour Road
Wanchai, Hong Kong
Tel. +852 2519-3208
Fax +852 2588-1136
General Manager (Acting):
Marian Leung

Hannover Rück SE Shanghai Branch
6th Floor, KAISA Finance Center
1188 Minsheng Road, Pudong New Area
200135 Shanghai
Tel. +86 21 2035-8999
Fax +86 21 5820-9396
Director:
Fook-Kong Lye

France

Hannover Rück SE Succursale Française
33 Avenue de Wagram
75017 Paris
Tel. Life & Health
+33 1 4561-7300
Tel. Property & Casualty
+33 1 4561-7340
Fax +33 1 4006-0225
General Manager:
Raphaël Rimelin

United Kingdom

Argenta Holdings Limited
5th Floor
70 Gracechurch Street
London EC3V OXL
Tel. +44 20 7825-7200
Fax +44 20 7825-7212
CEO:
Andrew J. Annandale

Hannover Re UK Life Branch
10 Fenchurch Street
London EC3M 3BE
Tel. +44 20 3206-1700
Fax +44 20 3206-1701
Managing Director:
Debbie O’Hare

Hannover Services (UK) Limited
10 Fenchurch Street
London EC3M 3BE
Tel. +44 20 7015-4290
Fax +44 20 7015-4001
Managing Director:
Nicholas J. Parr

India

Hannover Rück SE – India Branch
Unit 604, 6th Floor B Wing, Fulcrum
Sahar Road
Andheri (East)
Mumbai 400 099
Tel. +91 22 6138-0808
Fax +91 22 6138-0810
General Manager:
GLN Sarma

Ireland

Hannover Re (Ireland) Designated Activity Company
No. 4 Custom House Plaza, IFSC
Dublin 1
Tel. +353 1 633-8800
Fax +353 1 633-8806
CEO:
Kathrin Scherff

Italy

Hannover Re Services Italy S.r.l.
Via Dogana, 1
20123 Milan
Tel. +39 02 8068-1311
Fax +39 02 8068-1349
Head of Administration:
Giorgio Zandonella-Golin

Japan

Hannover Re Services Japan
Hakuyo Building, 7th Floor
3–10 Nibancho
Chiyoda-ku
Tokyo 102-0084
Tel. +81 3 5214-1101
Fax +81 3 5214-1105
General Manager:
Takayuki Ohtomo

Canada

Hannover Re (Ireland) DAC Canadian Life Branch
220 Bay Street, Suite 400
Toronto, Ontario M5J 2W4
Tel. +1 416 607-7824
Fax +1 416 867-9728
General Manager:
Louis Kerba

Hannover Rück SE Canadian Branch
220 Bay Street, Suite 400
Toronto, Ontario M5J 2W4
Tel. +1 416 867-9712
Fax +1 416 867-9728
General Manager:
Paul Carragher
Chief Agent:
Laurel E. Grant

Colombia

Hannover Rück SE Bogotá Oficina de Representación
Carrera 9 No. 77–67
Floor 5
Bogotá
Tel. +57 1 642-0066
Fax +57 1 642-0273
General Manager:
Miguel Guarín

Korea

Hannover Rück SE Korea Branch
Room 414, 4th Floor
Gwanghwamun Officia Building
92, Saemunan-ro, Jongno-gu
Seoul 03186
Tel. +82 2 3700-0600
Fax +82 2 3700-0699
General Manager:
Simon Jun Chong

Malaysia

Hannover Rueck SE Malaysian Branch
Level 32, Mercu 2
No. 3, Jalan Bangsar
KL Eco City
59200 Kuala Lumpur
Tel. +60 3 2687-3600
Fax +60 3 2687-3760
Managing Director:
Daniel Gunawan

Mexico

Hannover Services (México) S.A. de C.V.
German Centre
Oficina 4-4-28
Av. Santa Fé No. 170
Col. Lomas de Santa Fé
C.P. 01219 México, D.F.
Tel. +52 55 9140-0800
Fax +52 55 9140-0815
General Manager:
Alejandra Bautista

Sweden

Hannover Rück SE, Tyskland Filial
Hantverkargatan 25
P.O. Box 22085
10422 Stockholm
Tel. +46 8 617-5400
Fax Life & Health
+46 8 617-5597
Fax Property & Casualty
+46 8 617-5593
Managing Director:
Thomas Barenthein

Spain

HR Hannover Re, Correduría de Reaseguros, S. A.
Paseo del General Martínez
Campos 46
28010 Madrid
Tel. +34 91 319-0049
Fax +34 91 319-9378
General Manager:
Eduardo Molinari

South Africa

Compass Insurance Company Limited
5th floor, 90 Rivonia Rd.
Sandton
Johannesburg 2196
P.O. Box 37226
Birnam Park 2015
Tel. +27 11 745-8333
Fax +27 11 745-8444
www.compass.co.za
Managing Director:
Ismail E. Ismail

Hannover Life Reassurance Africa Limited[1]
Rosebank Towers
Office Level 3
15 Biermann Ave
Rosebank, Johannesburg 2196
P.O. Box 85321
Emmarentia 2029
Tel. +27 11 481-6500
Fax +27 11 484-3330/32
Managing Director:
Wesley Clay

Hannover Reinsurance Africa Limited
Rosebank Towers
Office Level 3
15 Biermann Ave
Rosebank, Johannesburg 2196
P.O. Box 85321
Emmarentia 2029
Tel. +27 11 481-6500
Fax +27 11 484-3330/32
Managing Director:
Randolph Moses

Hannover Reinsurance Group Africa (Pty) Ltd.
Rosebank Towers
Office Level 3
15 Biermann Ave
Rosebank, Johannesburg 2196
P.O. Box 85321
Emmarentia 2029
Tel. +27 11 481-6500
Fax +27 11 484-3330/32
CEO:
Achim Klennert

Taiwan

Hannover Rück SE Taipei Representative Office
Rm. 902, 9F, No. 129, Sec. 3
Minsheng E. Road
Taipei
Tel. +886 2 8770-7792
Fax +886 2 8770-7735
Representative:
Ryan Chou

USA

Glencar Insurance Company
500 Park Blvd., Suite 805
Itasca, Illinois 60143
Tel. +1 630 250-5528
Fax +1 630 250-5527
President:
Patrick Fee

Hannover Life Reassurance Company of America
200 South Orange Avenue
Suite 1900
Orlando, Florida 32801
Tel. +1 407 649-8411
Fax +1 407 649-8322
President & CEO:
Peter R. Schaefer

Office Charlotte
13840 Ballantyne Corporate Place,
Suite 400
Charlotte, North Carolina 28277
Tel. +1 704 731-6300
Fax +1 704 542-2757
President & CEO:
Peter R. Schaefer

Office Denver
4500 Cherry Creek Drive South,
Suite 1100
Glendale, Colorado 80246
Tel. +1 303 860-6011
Fax +1 303 860-6032
President & CEO:
Peter R. Schaefer

Office New York
112 Main Street
East Rockaway, New York 11518
Tel. +1 516 593-9733
Fax +1 516 596-0303
President & CEO:
Peter R. Schaefer

Hannover Re Services USA, Inc.
500 Park Blvd., Suite 805
Itasca, Illinois 60143
Tel. +1 630 250-5529
Fax +1 630 250-5527
General Manager:
Eric Arnst

[1] Hannover Life Reassurance Africa Limited is expected to be renamed Hannover Re South Africa Ltd. in the course of the year.

Glossary

Accumulation loss: sum of several individual losses incurred by various policyholders as a result of the same loss event (e. g. windstorm, earthquake). This may lead to a higher loss for the direct insurer or reinsurer if several affected policyholders are insured by the said company.

Acquisition cost, deferred (DAC): cost of an insurance company that arises from the acquisition or the renewal of an insurance contract (e. g. commission for the closing, costs of proposal assessment and underwriting etc.). Capitalisation results in a distribution of the cost over the duration of the contract.

Aggregate excess of loss treaty: the reinsurance treaty attaches if a ceding insurer incurs losses on a particular line of business during a specific period (usually twelve months) in excess of a stated amount.

Allocated capital: cf. → capital allocation

Alternative risk financing: use of the capacity available on the capital markets to cover insurance risks, e. g. through the securitisation of natural catastrophe risks.

American Depositary Receipt (ADR): share certificates written by US banks on foreign shares deposited there. The ADRs are traded instead of the foreign shares. In the United States Hannover Re has enabled trading on the OTC (over-the-counter) market through an ADR Level 1 program. New capital cannot be raised and the ADR is not listed on a US exchange under a Level 1 program. The main advantage of an ADR Level 1 program compared to higher-level programs is that there is no requirement for accounting or financial reporting in accordance with US GAAP.

Asset/liability management: matching of the invested assets with the liabilities arising out of the reinsurance business.

BaFin: Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)

Benefit reserves: value arrived at using mathematical methods for future liabilities (usually prospectively as present value of future liabilities minus present value of future incoming premiums), primarily in life and health insurance (that is transacted in a similar way to life insurance).

Book value per share: shareholders' equity divided by the number of shares outstanding

Business continuity management: integrated set of processes to maintain business operations

Capital adequacy ratio: the adequacy ratio is derived from the ratio of the available capital (or own funds) to the required capital – the solvency capital requirement (SCR).

Capital allocation: risk-appropriate allocation of the economic capital to the business segments of property & casualty reinsurance and life & health reinsurance as well as the investments on the basis of the respective economic risk content. Our internal capital model supplies key parameters such as the volatility of the covered business/investments and the contribution to diversification.

Capital asset pricing model (CAPM): model used to explain the materialisation of prices/returns on the capital market based on investor expectations regarding the future probability distribution of returns. Under this method, the opportunity cost rate for the shareholders' equity consists of three components – a risk-averse interest rate, a market-specific risk loading and an enterprise-specific risk assessment, the beta coefficient. The cost of shareholders' equity is therefore defined as follows: risk-averse interest rate + beta * enterprise-specific risk assessment.

Cash flow statement: statement on the origin and utilisation of cash and cash equivalents during the accounting period. It shows the changes in liquid funds separated into cash flows from operating, investing and financing activities.

Cat. bonds: securitised (re)insurance risks in respect of which the payment of interest and/or repayment of capital is dependent on the occurrence and severity of a predefined insured event. Purchasers of a catastrophe bond assume the risk carried by the (re)insurer upon occurrence of the catastrophic event. Catastrophe bonds are part of the insurance-linked securities market. Cf. securitisation instruments

Cedant: direct insurer or reinsurer which passes on (also: cedes) shares of its insured or reinsured risks to a reinsurer in exchange for premium.

Cession: transfer of a risk from the direct insurer to the reinsurer.

Claims and claims expenses: sum total of paid claims and provisions for loss events that occurred in the business year; this item also includes the result of the run-off of the provisions for loss events from previous years, in each case after the deduction of own reinsurance cessions.

Coinsurance Funds Withheld (CFW) Treaty: reinsurance treaty under which the ceding company retains a portion of the original premium at least equal to the ceded reserves.

Combined ratio: sum of the loss ratio and expense ratio.

Compliance: compliance by an enterprise with legal requirements.

Confidence (also: probability) level: the confidence level defines the probability with which the defined amount of risk will not be exceeded.

Corporate Governance: serves to ensure responsible management and supervision of enterprises and is intended to foster the trust of investors, clients, employees and the general public in companies.

Corporate Social Responsibility: the voluntary contribution made by a company to sustainable development

Credit spread: Mark-up between a risky and a risk-free interest-bearing security with the same maturity, as a risk premium for the credit risk entered into by the investor.

Critical illness cover: personal rider on the basis of which typically a lump-sum cash payment is made in the event of previously defined severe illnesses

Deposit accounting: an accounting method originating in US GAAP for the recognition of short-term and multi-year insurance and reinsurance contracts with no significant underwriting risk transfer. The standard includes inter alia provisions relating to the classification of corresponding contract types as well as the recognition and measurement of a deposit asset or liability upon inception of such contracts.

Deposits with ceding companies/deposits received from retrocessionaires (also: funds held by ceding companies/funds held under reinsurance treaties): collateral provided to cover insurance liabilities that a (re-)insurer retains from the liquid funds which it is to pay to a reinsurer under a reinsurance treaty. In this case, the retaining company shows a deposit received, while the company furnishing the collateral shows a deposit with a ceding company.

Derivatives, derivative financial instruments: financial products derived from underlying primary instruments such as equities, fixed-income securities and foreign exchange instruments, the price of which is determined on the basis of an underlying security or other reference asset. Notable types of derivatives include swaps, options and futures.

Direct (also: primary) insurer: company which accepts risks in exchange for payment of an insurance premium and pays indemnification for the insured loss in the event of a claim. A direct insurer has a direct contractual relationship with the policyholder (private individual, company, organisation).

Discounting of loss reserves: determination of the present value of future profits through multiplication by the corresponding discount factor. In the case of the loss reserves this is necessary because of the new profit calculation methods for tax purposes applicable to German joint-stock corporations.

Diversification: orientation of business policy towards various revenue streams in order to mitigate the effects of e.g. economic fluctuations or natural catastrophes and thereby minimise the volatility of results. Diversification is an instrument of growth policy and risk policy for a company.

Dynamic volatility adjustment: long-term insurance guarantees can be dynamically adjusted due to potentially increased volatility in valuations on capital markets

Earnings per share, diluted: ratio calculated by dividing the consolidated net income (loss) by the weighted average number of shares outstanding. The calculation of the diluted earnings per share is based on the number of shares including subscription rights already exercised or those that can still be exercised.

Earnings retention: non-distribution of a company's profits leading to a different treatment for tax purposes than if profits were distributed.

Economic capital model: cf. → internal model

Excess capital: the amount of available capital in excess of the required capital

Excess of loss treaty: cf. → non-proportional reinsurance

Excess return on capital allocated (xRoCA): indicator which describes the IVC in relation to the allocated capital and shows the relative excess return generated above and beyond the weighted cost of capital.

Expense ratio: administrative expenses (gross or net) in relation to the (gross or net) premium earned.

Exposure: level of danger inherent in a risk or portfolio of risks; this constitutes the basis for premium calculations in reinsurance.

Facultative reinsurance: participation on the part of the reinsurer in a particular individual risk assumed by the direct insurer. This is in contrast to obligatory (also: treaty) reinsurance.

Fair value: price at which a financial instrument is freely traded between two parties.

Financial Solutions: reinsurance transactions which – in addition to the transfer of biometric risks – also include financing components such as financing arrangements for new and existing business, reserve relief, smoothing of volatility in results, optimisation of the solvency position.

Frequency losses: losses that occur frequently in a foreseeable amount, i. e. where the underlying risks are associated with relatively high probabilities of occurrence and usually low loss amounts.

Funds held by ceding companies/funds held under reinsurance treaties: cf. deposits with ceding companies/deposits received from retrocessionaires

Goodwill: the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.

Gross/Retro/Net: gross items constitute the relevant sum total deriving from the acceptance of direct insurance policies or reinsurance treaties; retro items constitute the relevant sum total deriving from own reinsurance cessions. The difference is the corresponding net item (gross – retro = net, also: for own account).

Group net income: Group net income under IFRS corresponds to the profit for the year available to the shareholders of Hannover Re.

Hybrid capital: debt structure which because of its subordination bears the character of both debt and equity.

IBNR (Incurred but not reported) reserve: provision for claims which have already occurred but which have not yet been reported.

Impairment: extraordinary amortisation taken when the present value of the estimated future cash flow of an asset is less than its book value.

Insurance-linked securities (ILS): securitised insurance risks, such as catastrophe bonds, derivatives or collateralised reinsurance.

Insurance pool: a risk-sharing partnership under civil law formed by legally and economically independent insurers and reinsurers in order to create a broader underwriting base for particularly large or unbalanced risks. The members undertake to write certain risks only within the scope of the insurance pool. They include such risks – while maintaining their commercial independence – in the insurance pool against a commission fee. Each insurer participates in the profit or loss of the insurance pool according to its proportionate interest. Reinsurance is often ceded or accepted in order to further diversify the risk. Pools can be divided into two types: coinsurance pools, in which all members take the role of primary insurers according to their interests, and reinsurance pools, in which a primary insurer writes the risks and then spreads them among the participating insurers by way of reinsurance.

Insurtech: term referring to new business models/companies in the insurance industry that focus primarily on the use of new technologies.

Internal model: economic capital model verified and approved by the Federal Financial Supervisory Authority that better reflects the company's risk profile than the standard formula under Solvency II.

International Securities Identification Number (ISIN): ten-character universal code used to identify securities internationally. It is prefixed by a country code that specifies the country where the issuer entity is legally registered or in which it has legal domicile, e. g. DE = Germany.

Intrinsic value creation (IVC): the IVC is calculated according to the following formula: real operating value creation = adjusted operating profit (EBIT) – (capital allocated x weighted cost of capital). IVC is a tool of value-based enterprise management used to measure the accomplishment of long-term targets on the level of the Group, the individual business groups and the operating units (profit centres).

Investment grade: investment grade ratings are awarded to companies and assigned to securities that have a low risk profile. They contrast with non-investment-grade ratings, which by definition include speculative elements and therefore entail a significantly higher risk.

IVC: cf. → Intrinsic value creation

Issuer: private enterprise or public entity that issues securities, e. g. the federal government in the case of German Treasury Bonds and a joint-stock corporation in the case of shares.

Leader: if several (re-)insurers participate in a contract, one company assumes the role of leader. The policyholder deals exclusively with this lead company. The lead (re-)insurer normally carries a higher percentage of the risk for own account.

Letter of credit (LOC): bank guarantee under which, at the request of the guaranteed party, the bank undertakes to render payment to the said party up to the amount specified in the LOC. This method of providing collateral in reinsurance business is typically found in the USA.

Life and health (re-)insurance: collective term for the lines of business concerned with the insurance of persons, i. e. life, pension, health and personal accident insurance, insofar as the latter was written by life insurers.

Longevity risk: in general terms, the actuarial risk that a person receiving regular living benefits – such as annuities or pensions – lives longer than expected.

Loss, economic: total loss incurred by the affected economy as a whole following the occurrence of a loss. The economic loss must be distinguished from the insured loss.

Loss, insured: the insured loss reflects the total amount of losses covered by the insurance industry (insurers and reinsurers).

Loss ratio: proportion of loss expenditure in the retention relative to the (gross or net) premium earned.

Major loss: loss which has special significance for the direct insurer or reinsurer due to the amount involved; it is defined as a major loss in accordance with a fixed loss amount or other criteria (in the case of Hannover Re more than EUR 10 million gross).

Major loss budget: annual budget for major losses determined from the modelled loss expectancy for business with natural perils exposure as well as for man-made net losses larger than EUR 10 million.

Mark-to-market valuation: the evaluation of financial instruments to reflect current market value or fair value.

Matching currency cover: coverage of technical liabilities in foreign currencies by means of corresponding investments in the same currency in order to avoid exchange-rate risks.

Modified Coinsurance (ModCo) treaty: type of reinsurance treaty where the ceding company retains the assets with respect to all the policies reinsured and also establishes and retains the total reserves on the policies, thereby creating an obligation to render payments to the reinsurer at a later date. Such payments include a proportional share of the gross premium plus a return on the assets.

Morbidity risk: in general terms, the actuarial risk that the state of health of a person is adversely impacted by illness, malfunctioning of organs or other body parts (functional disability), injury or frailty and that higher costs are triggered by medical treatment, long-term care or protracted periods of disability.

Mortality risk: in general terms, the actuarial risk that a person upon whose death a benefit is payable lives shorter than expected. From a (re)insurer's perspective, this is the risk that the observed mortality experience in an underlying portfolio deviates from what had previously been calculated on the basis of actuarial assumptions.

Net: cf. → Gross / Retro / Net

Non-proportional reinsurance: reinsurance treaty under which the reinsurer assumes the loss expenditure in excess of a particular amount (priority) (e.g. under an excess of loss treaty). This is in contrast to proportional reinsurance.

Obligatory (also: treaty) reinsurance: reinsurance treaty under which the reinsurer participates in a cedant's total, precisely defined insurance portfolio. This is in contrast to facultative reinsurance.

Other securities, available-for-sale: securities that cannot be clearly allocated to the "trading" or "held-to-maturity" portfolios; these securities can be disposed of at any time and are reported at their fair value at the balance sheet date. Changes in fair value are not recognised in the statement of income.

Other securities, held-to-maturity: investments in debt securities that can and are intended to be held to maturity. They are measured at amortised cost.

Other securities, trading: securities that are held principally for short-term trading purposes. They are measured at their fair value at the balance sheet date.

Parametric cover: index-based type of insurance, e.g. to protect against weather risks

Portfolio: a) all risks assumed by an insurer or reinsurer in a defined sub-segment (e.g. line of business, country) or in their entirety; b) group of investments defined according to specific criteria.

Premium: remuneration for the risks accepted from an insurance company. Unlike the earned premiums, the written premiums are not deferred.

Present value of future profits (PVFP): intangible asset primarily arising from the purchase of life and health insurance companies or portfolios. The present value of expected future profits from the portfolio assumed is capitalised and amortised according to schedule.

Price / earnings ratio (PER): a valuation ratio of a company's share price compared to its per-share earnings.

Primary insurer: cf. → direct insurer

Priority: direct insurer's loss amount stipulated under non-proportional reinsurance treaties; if this amount is exceeded, the reinsurer becomes liable to pay. The priority may refer to an individual loss, an accumulation loss or the total of all annual losses.

Probability level: cf. → confidence level

Property and casualty (re-)insurance: collective term for the lines of business concerned with the insurance of property, including for example liability, fire, hail or marine insurance.

Proportional reinsurance: reinsurance treaties on the basis of which shares in a risk or portfolio are reinsured under the relevant direct insurer's conditions. Premiums and losses are shared proportionately on a pro-rata basis. This is in contrast to non-proportional reinsurance.

Protection cover: protection of segments of an insurer's portfolio against major losses (per risk/per event), primarily on a non-proportional basis.

Provision: liability item as at the balance sheet date to discharge obligations which exist but whose extent and/or due date is/are not known. Technical provisions, for example, are for claims which have already occurred but which have not yet been settled, or have only been partially settled (= provision for outstanding claims, abbreviated to: claims provision).

Provision for unearned premiums (also: unearned premium reserve): premiums written in a financial year which are to be allocated to the following period on an accrual basis. This item is used to defer written premiums.

Purchase cost, amortised: the cost of acquiring an asset item including all ancillary and incidental purchasing costs; in the case of wasting assets less scheduled and/or special amortisation.

Quota share reinsurance: form of proportional reinsurance under which the reinsurer assumes a contractually set percentage share of the written risk. Since the insurer is responsible for acquisition, pricing, policy administration and claims handling, the administrative expenditure for the reinsurer is very low. The latter therefore participates in the aforementioned expenses mostly through payment of a reinsurance commission.

Rate: percentage rate (usually of the premium income) of the reinsured portfolio which is to be paid to the reinsurer as reinsurance premium under a non-proportional reinsurance treaty.

Reinsurance: passing on of a primary insurer's or reinsurer's risks to a reinsurer.

Reinsurer: company which accepts risks or portfolio segments from a direct insurer or another reinsurer in exchange for an agreed premium.

Reserve ratio: ratio of (gross or net) technical provisions to the (gross or net) premiums.

Retakaful: reinsurance in accordance with Islamic law (Sharia-compliant). The business model is similar in form to that of mutual insurance and addresses, among other things, the prohibition of interest in Islam.

Retention: the part of the accepted risks which an insurer/reinsurer does not reinsure, i. e. shows as net (retention ratio: percentage share of the retention relative to the gross written premiums).

Retrocession (also: Retro): ceding of risks or shares in risks which have been reinsured. Retrocessions are ceded to other risk carriers (retrocessionaires) in exchange for a pro-rata or separately calculated premium (cf. → Gross/Retro/Net).

Risk, insured: risk that can lead to the occurrence of a loss. The insured risk is the subject of the insurance contract.

Risk capital: the capital at risk notionally allocated to a risk category

Securitisation instruments: instruments for transferring reinsurance business to the capital markets with the goal of refinancing or placing insurance risks.

Segment reporting: presentation of items in the balance sheet and income statement split according to functional criteria such as business sectors and regions.

Silent cyber: unintended coverage of cyber-related losses in traditional reinsurance treaties

Solvency II: European directive for the insurance industry. The new European regulatory regime for (re)insurers that entered into force on 1 January 2016 on the basis of the Solvency II Directive (Directive 2009/138/EC) is comprised of risk-based capital requirements and imposes quantitative, qualitative and reporting-related requirements in three main areas known as pillars.

Solvency capital ratio (SCR): percentage coverage of the supervisory capital requirement (target solvency capital) under Solvency II by eligible own funds.

Spread loss treaty: treaty between an insurer and a reinsurer that covers risks of a defined portfolio over a multi-year period.

Static volatility adjustment: a volatility adjustment – in this case in its static form – is intended to prevent increased volatility on capital markets being reflected in the valuation of long-term insurance guarantees.

Structured entity: entity with specific characteristics not bound to a particular legal form that is used to conduct closely defined activities or to hold assets and for which the traditional concept of consolidation – based on voting rights – is often inadequate for determining who exercises control over the entity.

Structured reinsurance: reinsurance with limited potential for profits and losses. In most cases customers strive for risk equalisation over time or solvency relief, both of which have a stabilising effect on the ceding company's balance sheet.

Surplus reinsurance: form of proportional reinsurance under which the risk is not spread between the insurer and reinsurer on the basis of a previously agreed, set quota share. Instead, the insurer determines a maximum sum insured per risk up to which it is prepared to be liable. Risks that exceed the ceding company's retention (surpluses) are borne by the reinsurer. The reinsurer's lines thus vary according to the level of the retention and the sum insured of the reinsured contract. The reinsurer's liability is generally limited to a multiple of the ceding company's retention.

Surplus relief treaty: reinsurance contract under which an admitted reinsurer assumes (part of) a ceding company's portfolio to relieve stress on the cedant's policyholders' surplus.

Survival ratio: ratio of loss reserves to paid losses under a specific contract or several contracts in a balance sheet year.

Target solvency capital: regulatory solvency capital requirement in accordance with Solvency II standards. At Hannover Re this is calculated using an internal model.

Technical result: balance of income and expenditure allocated to the insurance business and shown in the technical statement of income.

Treaty reinsurance: cf. → obligatory reinsurance

Underwriting: process of examining, accepting or rejecting (re-)insurance risks and classifying those selected in order to charge the proper premium for each. The purpose of underwriting is to spread the risk among a pool of (re-)insureds in a manner that is equitable for the (re-)insureds and profitable for the (re-)insurer.

Unearned premium reserve: cf. → provision for unearned premiums

Value-at-Risk: the measure of risk for a company's risk position

Volatility adjustment: addition to the risk-free curve used under Solvency II to calculate technical provisions. Its use must be approved by the responsible supervisory authority and is intended to smooth volatility in the measurement of bonds due to changes in credit spreads.

xRoCA: cf. → Excess Return on Capital Allocated

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Contact information

Corporate Communications

Karl Steinle
Tel. +49 511 5604-1500
Fax +49 511 5604-1648
karl.steinle@hannover-re.com

Media Relations

Oliver Süß
Tel. +49 511 5604-1502
Fax +49 511 5604-1648
oliver.suess@hannover-re.com

Investor Relations

Axel Bock
Tel. +49 511 5604-1736
Fax +49 511 5604-1648
axel.bock@hannover-re.com

A printed version of the Hannover Re Group's Annual Report is also available in German. The report can additionally be accessed online in English and German as an HTML version and downloaded in PDF format:

www.hannover-re.com

This is a translation of the original German text; the German version shall be authoritative in case of any discrepancies in the translation.

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Tel. +49 511 5604-2343
Fax +49 511 5604-1648 or order them online at
www.hannover-re.com under
"Investors/Results and reports"

Financial calendar 2021/2022

11 March 2021
Publication of the annual financial statements 2020
Annual Results Press Conference
Analysts' Meeting

5 May 2021
Quarterly Statement as at 31 March 2021

5 May 2021
Annual General Meeting

5 August 2021
Half-yearly Financial Report 2021

13 October 2021
24th International Investors' Day

4 November 2021
Quarterly Statement as at 30 September 2021

3 February 2022
Results of treaty renewals as at 1 January

10 March 2022
Publication of the annual financial statements 2021
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www.hannover-re.com

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Published by

Hannover Rück SE
Karl-Wiechert-Allee 50
30625 Hannover, Germany
Tel. +49 511 5604-0
Fax +49 511 5604-1188

Credits

Werner Bartsch
page 2, 3, 14, 18/19
Martin Barraud/KOTO/Adobe Stock
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Yuri_Arcurs/Getty Images
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opolja/Adobe Stock
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