



somewhat
different

Hannover Re: the somewhat different reinsurer

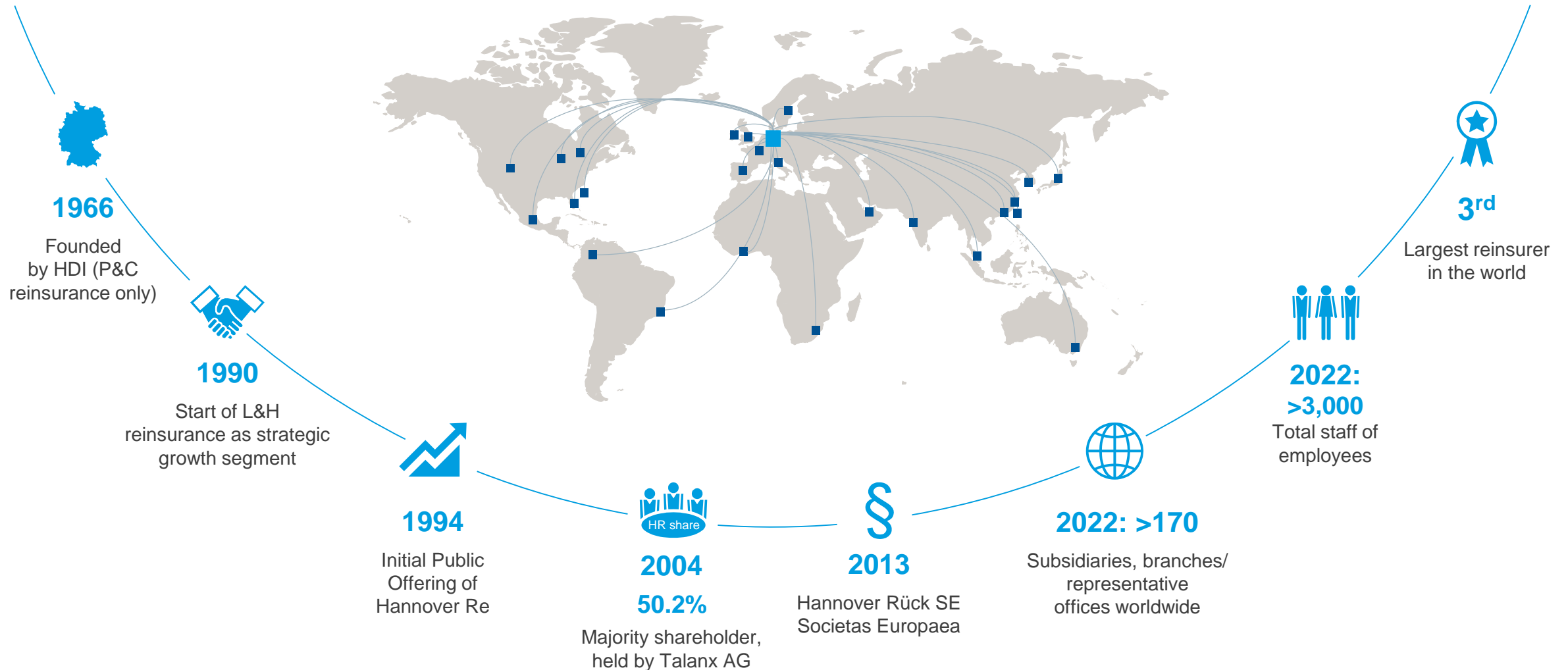
August 2023

hannover **re**[®]

Agenda

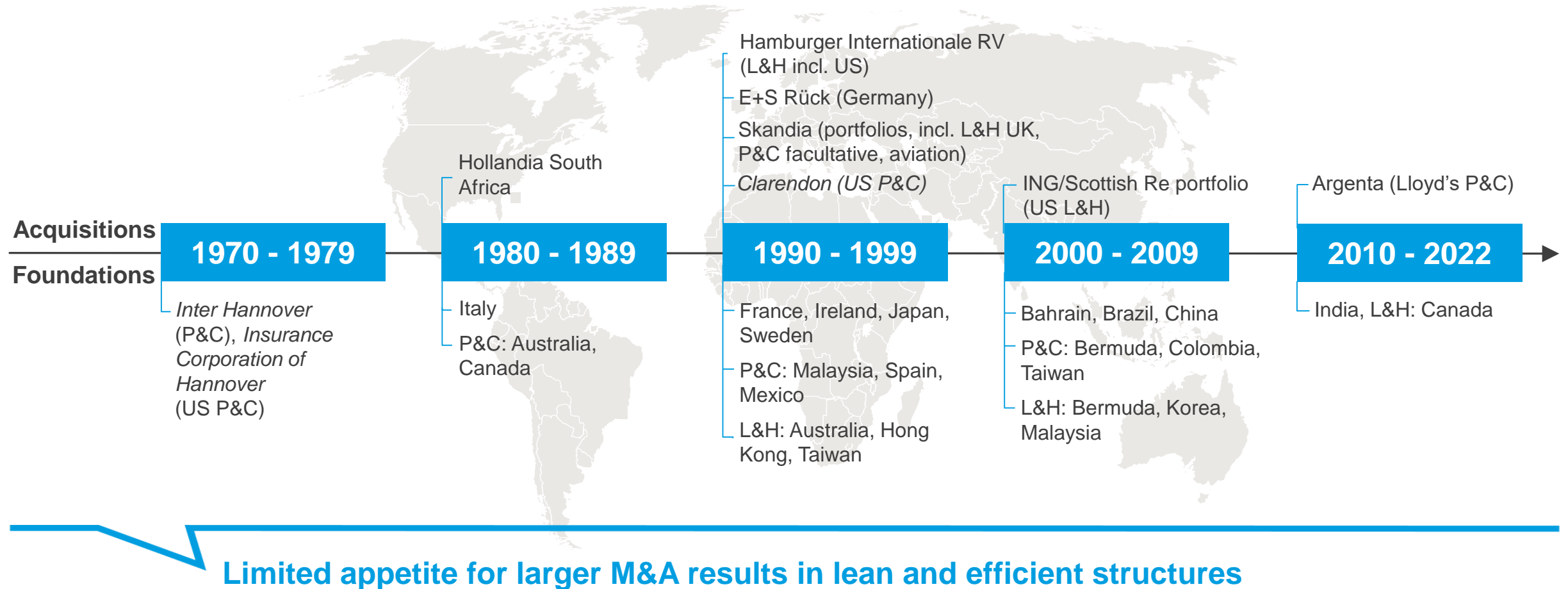
1	Hannover Re Group	2
2	Property & Casualty reinsurance	31
3	Life & Health reinsurance	44
4	Investment management	58
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6	IFRS 17	76
7	Interim results 1H/2023	90
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Key facts about Hannover Re



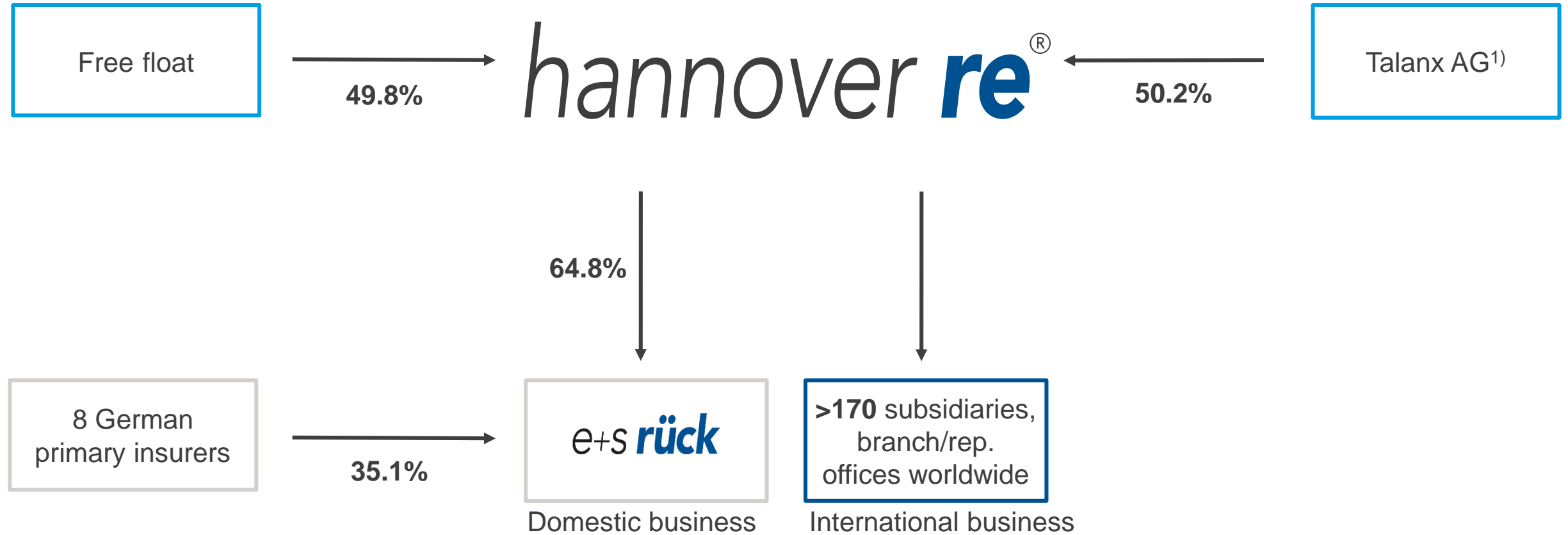
Growth and international expansion mainly organically driven

M&A activity not accompanied by high integration cost and complexity



Overview of main/material transactions (and main parts of acquisitions) without e.g. minority shareholdings
 All lines of business except those stated separately
italic = (at least in part) sold

Group structure supports our business model



1) Majority shareholder HDI V.a.G.

Executive Board of Hannover Rück SE



Jean-Jacques Henchoz

Chief Executive Officer

Group Operations and Strategy, Information Technology, Facility Management, Human Resources Management, Corporate Communications, Group Audit, Group Risk Management, Compliance



Clemens Jungsthöfel

Chief Financial Officer

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

Life & Health R/I



Claude Chèvre

Life & Health Reinsurance

Africa, Middle East, Asia, Australia, Latin America, Western and Southern Europe, Longevity Solutions



Dr. Klaus Miller

Life & Health Reinsurance

North America, United Kingdom/Ireland, Northern, Eastern and Central Europe



Sven Althoff

Property & Casualty Reinsurance

North America, Aviation and Marine, Credit, Surety and Political Risks, UK, Ireland and London Market, Facultative R/I, Coordination of Property & Casualty Business Group, Quotations



Sharon Ooi

Property & Casualty Reinsurance

Asia-Pacific



Silke Sehm

Property & Casualty Reinsurance

Continental Europe and Africa, Catastrophe XL (Cat XL), Structured R/I and ILS, Retrocessions



Dr. Michael Pickel

Property & Casualty Reinsurance

Middle East, Germany, Switzerland, Austria, Italy, Latin America, Iberian Peninsula and Agricultural Risks, Group Legal Services, Run Off Solutions

We are among the top reinsurers in the world

Premium ranking 2021 in m. USD

Rank	Group	Country	GWP	NPW
1	Munich Re	DE	46,836	44,417
2	Swiss Re	CH	39,202	36,965
3	Hannover Re ¹⁾	DE	31,443	27,344
4	Canada Life Re	CA	23,547	23,514
5	SCOR	FR	19,933	16,242
6	Berkshire Hathaway Inc.	US	19,906	19,906
7	Lloyd's ²⁾	UK	19,343	14,263
8	China Re	CN	17,808	16,181
9	RGA	US	13,348	12,513
10	Everest Re	BM	9,067	8,536
11	Partner Re	BM	8,204	7,134
12	RenaissanceRe	BM	7,834	5,939
13	Korean Re	KR	7,145	5,102
14	Transatlantic Holdings	US	6,034	5,387
15	General Insurance Corporation of India ³⁾	IN	5,821	5,172

For further information please see A.M. Best "Market Segment Report" August 2022 (© A.M. Best Europe - Information Services Ltd. - used by permission)

1) Net premium written data not reported; net premium earned substituted

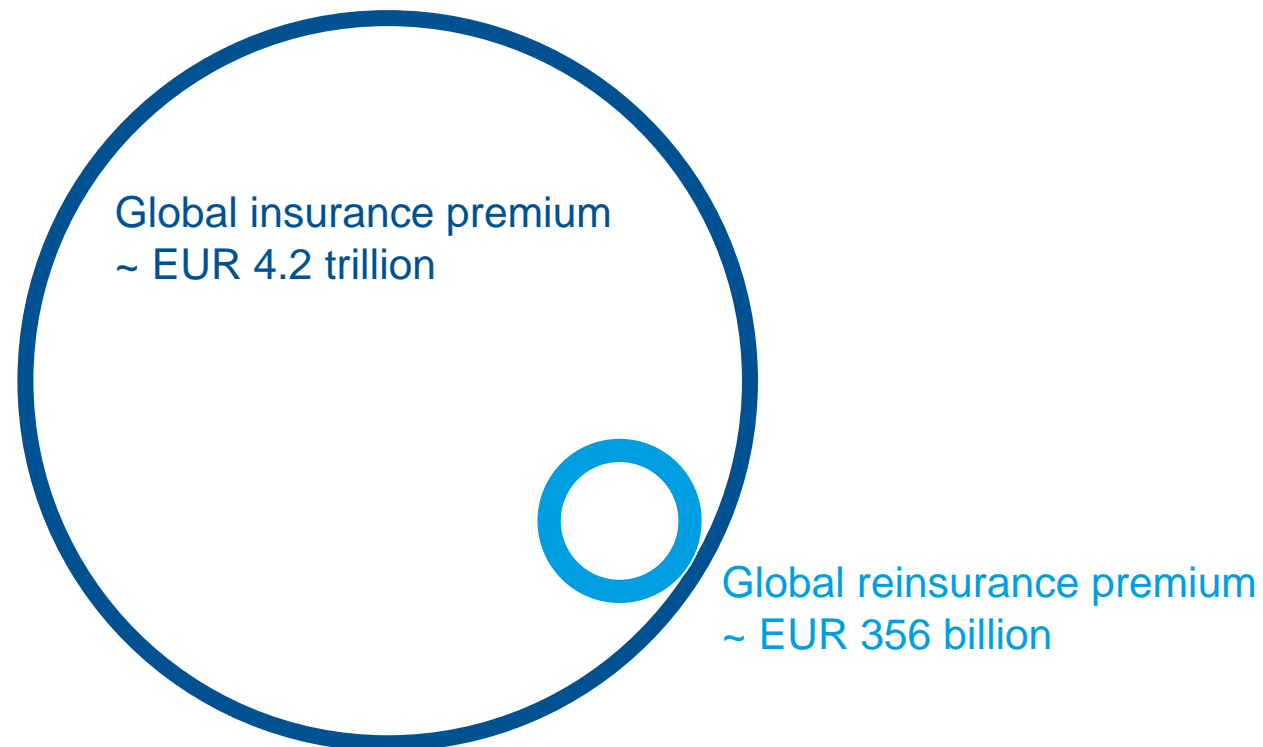
2) Reinsurance only

3) Fiscal year-end 31 March 2022

Reinsurance has the character of a specialty market

With a share of 8% of the overall insurance market

Market size primary insurance vs. reinsurance

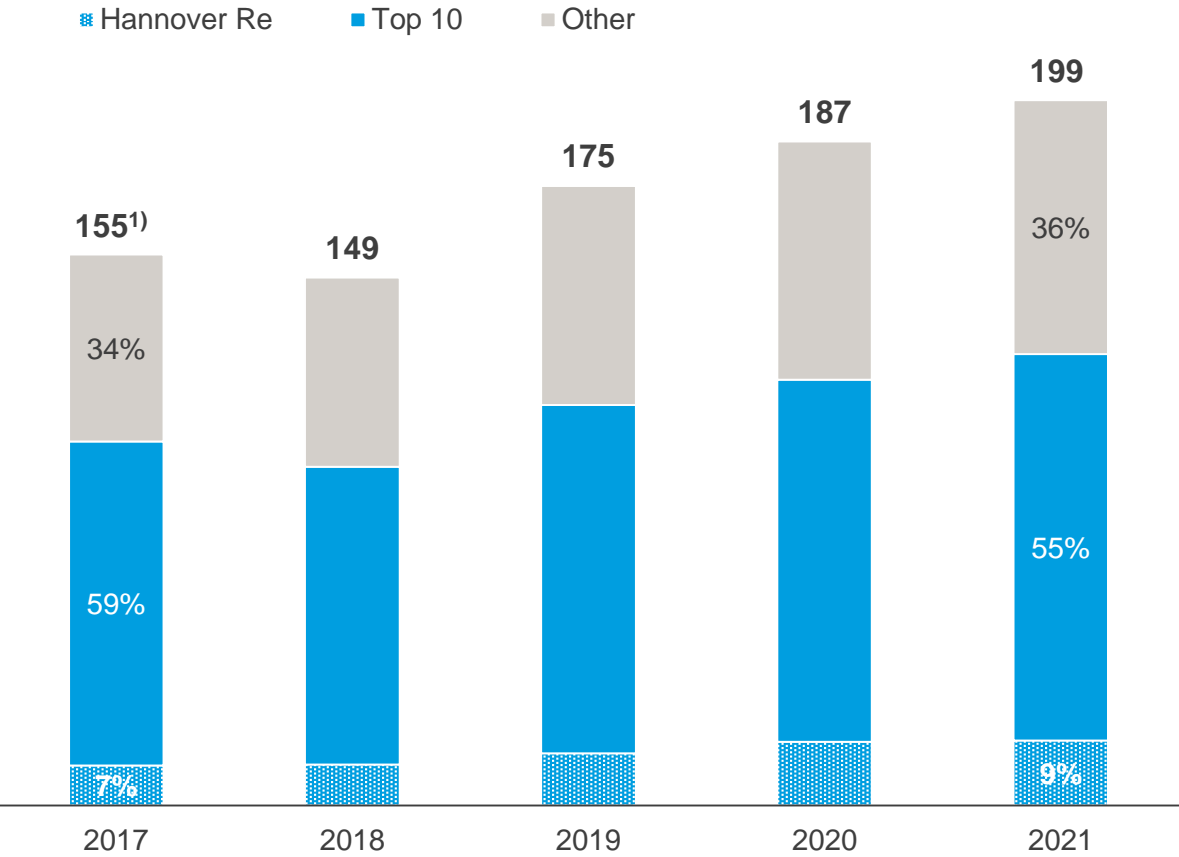


2021 or latest. Global reinsurance premium: gross written premium of the Top 50 Global Reinsurance Groups according to A.M. Best "Segment Report" (August 2022)
Source: © A.M. Best Europe - Information Services Ltd. - used by permission, own research

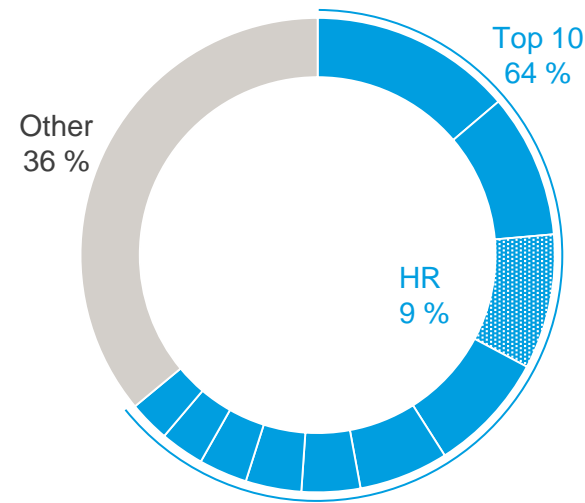
Growing Property and Casualty reinsurance market

Hannover Re outperforms the market

Market size and concentration 2021



Market share 2021



- Low market entry barriers lead to high fragmentation

4-year CAGR

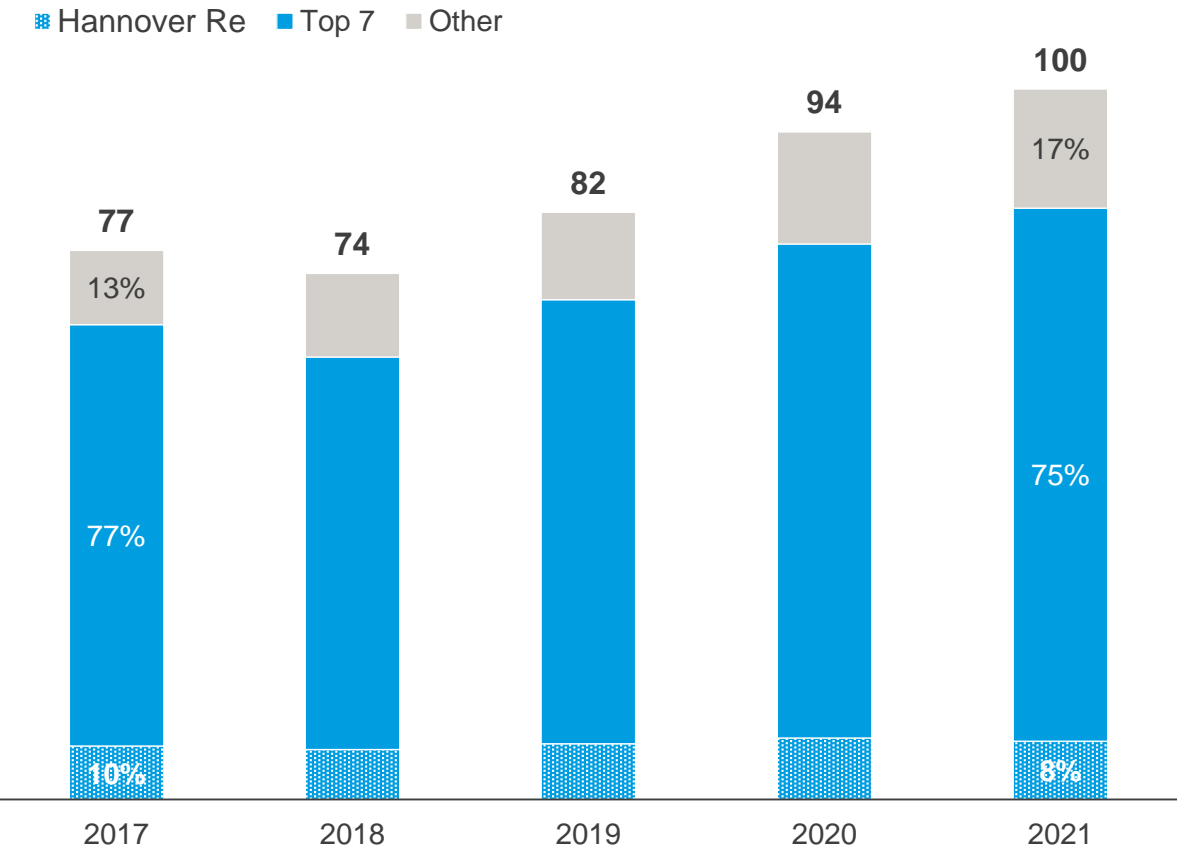
Market	+6.4%	Top 10	+5.5%
Other	+7.9%	HR	+12.8%

Market: Sum of Non-life GWP of Top 50 Global Reinsurance Groups according to A.M. Best "Segment Report" (August 2022)
Top 10 in 2021: Munich Re, Swiss Re, Hannover Re, Lloyd's, Berkshire Hathaway, SCOR, Everest Re, Renaissance Re, China Re, Partner Re
Source: © A.M. Best Europe - Information Services Ltd. - used by permission
1) Includes one-off Berkshire Hathaway AIG transaction

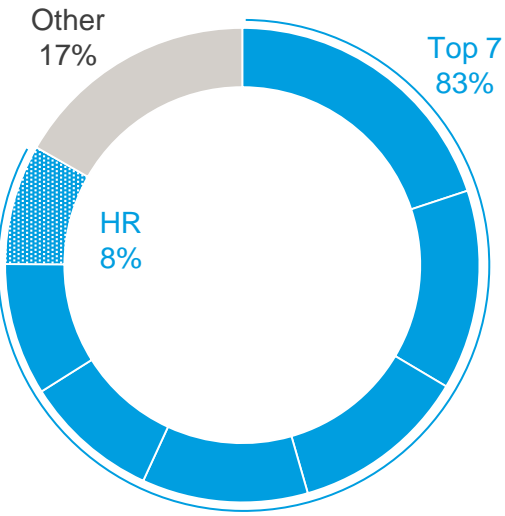
Life and Health reinsurance in a global perspective

Concentrated market due to high entry barriers

Market size and concentration 2021



Market share 2021



- High market entry barriers lead to a highly concentrated market

4-year CAGR

Market	+6.6%	Top 7	+5.7%
Other	+12.4%	HR	+2.1%

Market: Sum of Life GWP of Top 50 Global Reinsurance Groups according to A.M. Best "Segment Report" (August 2022)
Top 7 in 2021: Canada Life Re, Swiss Re, Munich Re, RGA, China Re, SCOR, Hannover Re
Source: © A.M. Best Europe - Information Services Ltd. - used by permission

Reinsurance is and will be an attractive product

Drivers for reinsurance demand

Trends, conditions and expectations



Global trends

Protection gap
Demographic change
Climate change



New products/markets

Emerging markets
Cyber
Emerging risks



Capital requirement

Regulatory changes
Capital models
Local GAAP, IFRS



Volatile earnings

Expectation of regulators, shareholders and rating agencies

Impact on primary insurance ...

- Increasing demand for insurance of non-diversifying risk
- New risks lead to higher volatility and need for additional know-how
- High cost of capital/need for capital management

... **drives demand for reinsurance!**

Value Proposition R/I

Strong capital base

Diversification



Expertise/support in...

...risk management
...product development and pricing
...distributing products in new markets



Reducing cost of capital

Managing earnings volatility

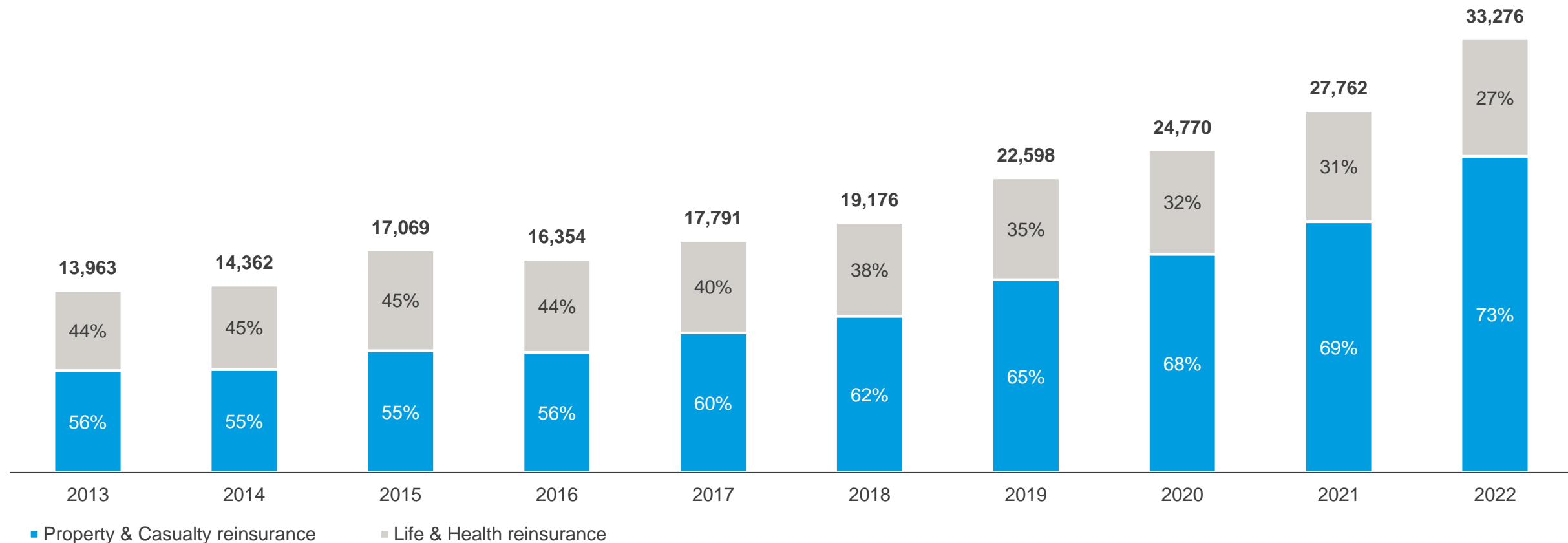


Favourable premium growth accelerates in last 5 years

10-year CAGR: +9.2%

Gross written premium

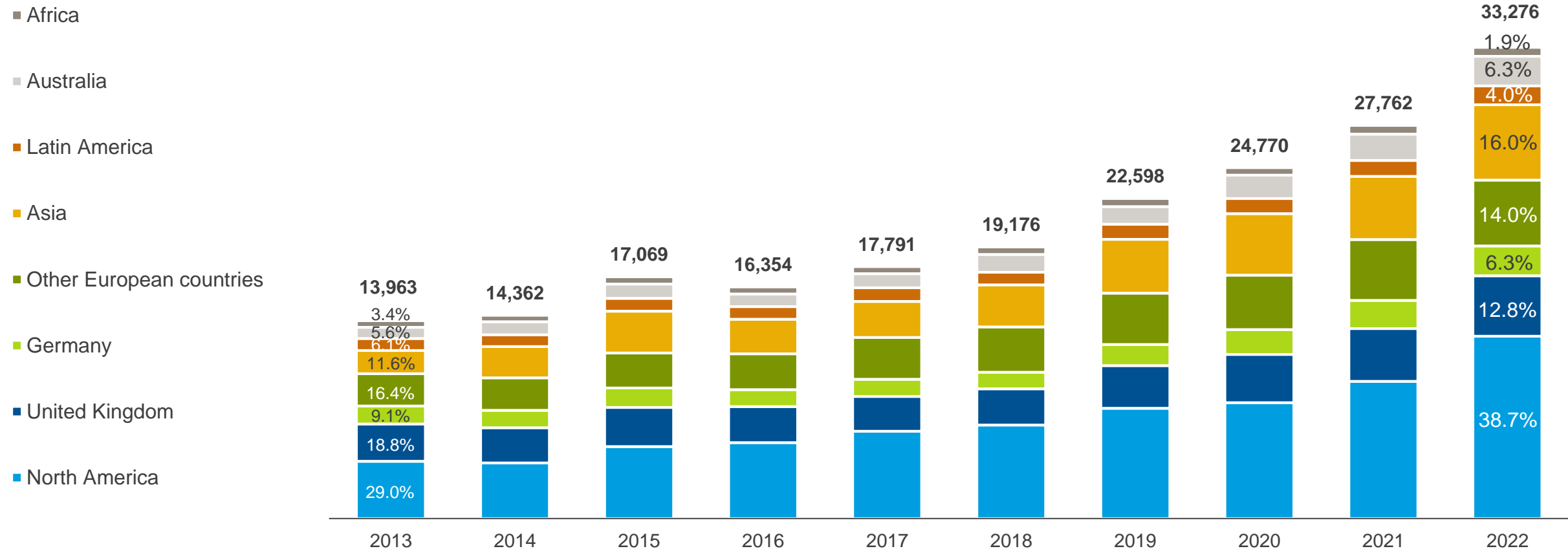
in m. EUR



Well-balanced international portfolio growth

Gross written premium

in m. EUR



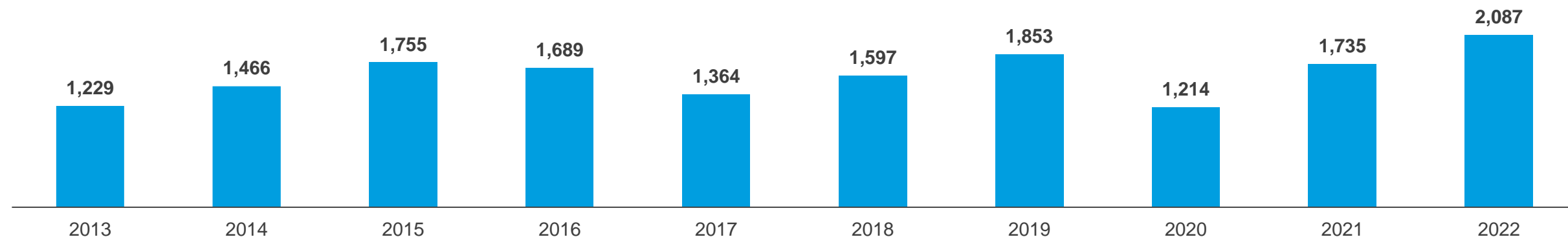
2020 restated pursuant to IAS 8

Strong earnings track record

2022: net income target achieved in a challenging market environment

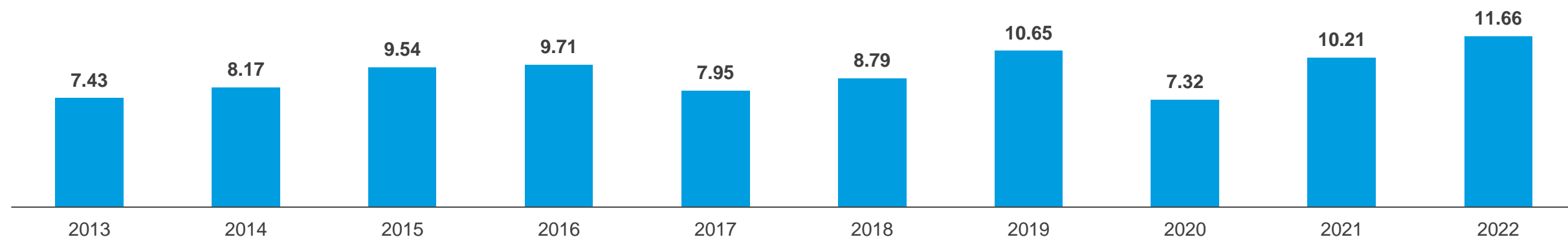
Operating profit (EBIT)

in m. EUR



Earnings per share (EPS)

in EUR



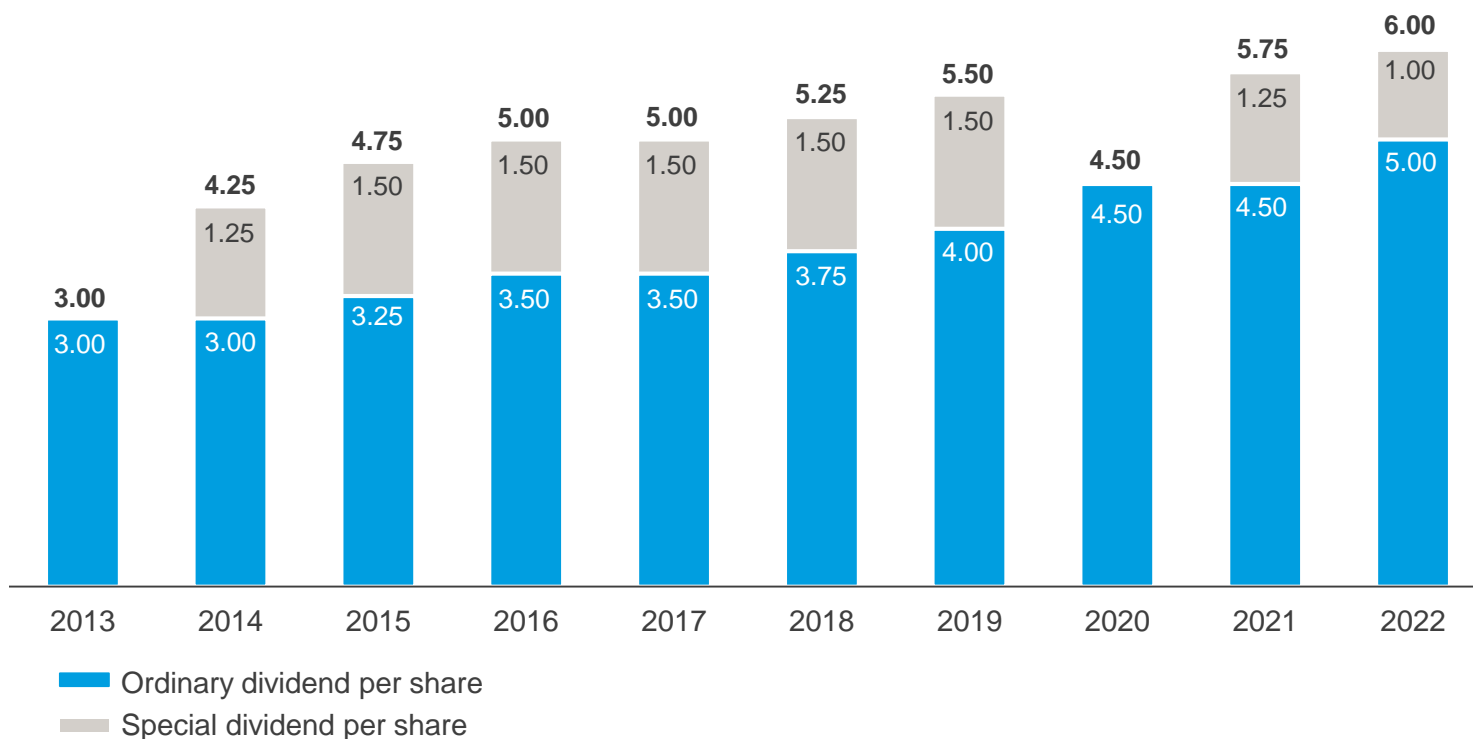
Dividend strategy emphasizes continuity of ordinary dividend

2022: increased ordinary dividend reflects positive earnings trend

Dividend per share

in EUR

Dividend strategy



Ordinary DPS \geq prior year

+

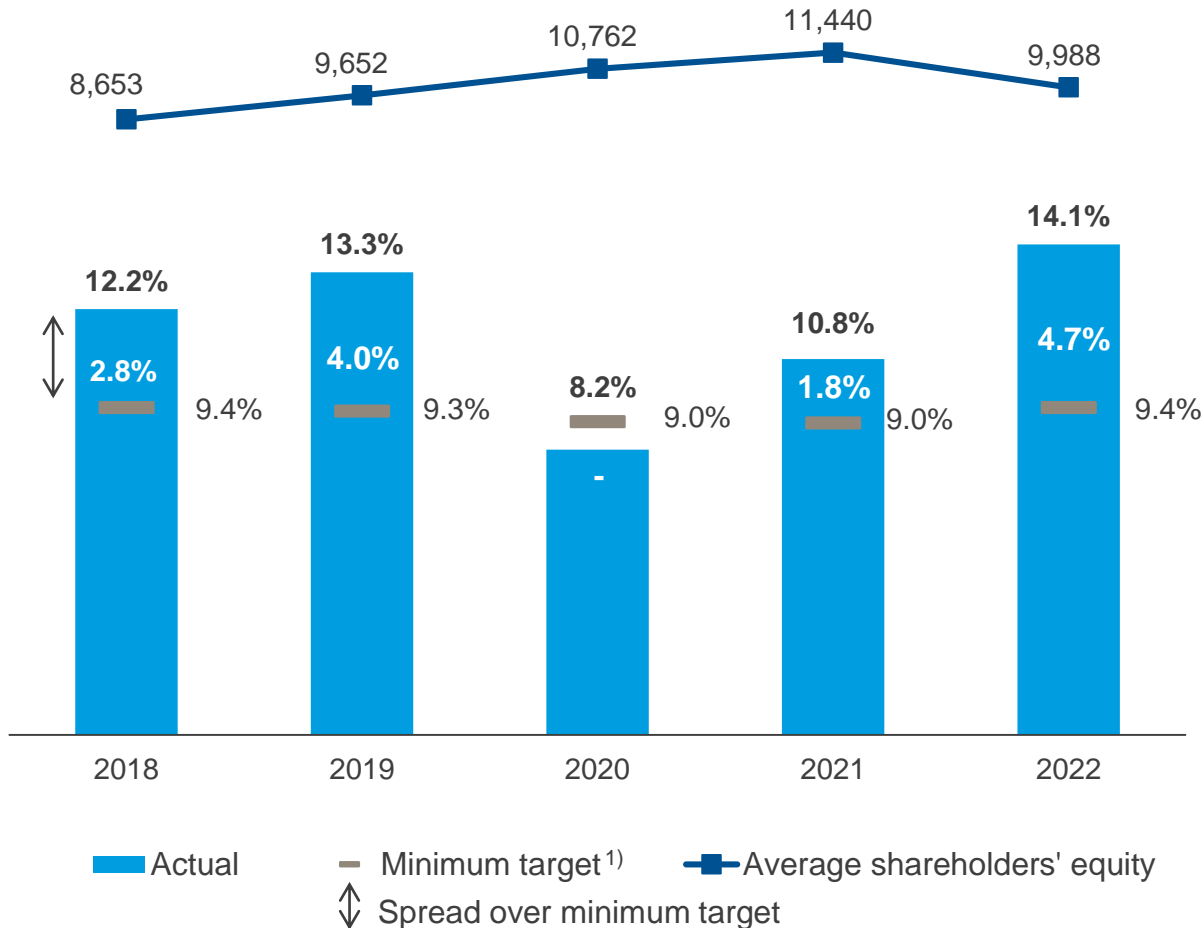
Special dividend

if capitalisation exceeds capital requirements for future growth
and profit targets are achieved

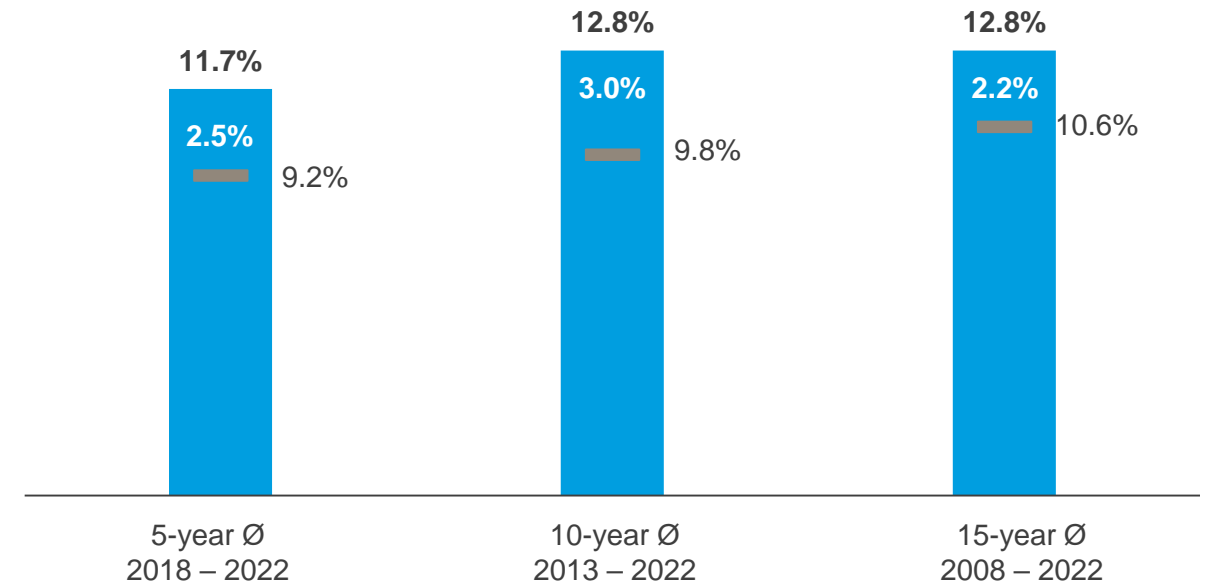
RoE of 14.1% well above target for 2022

5-year average RoE of 11.7% is highly satisfactory despite exceptional loss burden

Return on Equity: yearly



Return on Equity: average



1) After tax; target: 900 bps above 5-year rolling average of 10-year German government bond rate ("risk free")

Hannover Re remains one of the most profitable reinsurers

No. 1 position on 5-year average RoE – significantly above peer average

	2018		2019		2020		2021		2022		2018 - 2022	
Company	RoE	Rank	RoE	Rank	RoE	Rank	RoE	Rank	RoE	Rank	avg. RoE	Rank
Hannover Re	12.2%	1	13.3%	1	8.2%	2	10.8%	2	14.1%	1	11.7%	1
Peer	7.9%	3	8.7%	6	3.2%	8	4.5%	8	7.3%	3	5.3%	6
Peer	1.3%	9	11.9%	3	5.5%	5	13.9%	1	6.4%	4	6.5%	3
Peer	8.5%	2	9.6%	5	4.0%	6	9.7%	3	13.2%	2	9.0%	2
Peer	4.7%	6	8.0%	7	5.8%	4	6.2%	6	5.9%	5	6.1%	4
Peer	5.4%	4	6.9%	9	3.7%	7	7.3%	4	-5.3%	8	3.6%	7
Peer	4.2%	7	12.9%	2	10.8%	1	-1.0%	9	-18.4%	9	1.7%	9
Peer	1.4%	8	2.5%	10	-3.1%	10	5.7%	7	2.6%	6	1.8%	8
Peer	4.9%	5	7.3%	8	6.3%	3	6.4%	5	2.1%	7	5.4%	5
Average	5.6%		9.0%		4.9%		7.1%		3.1%		5.7%	

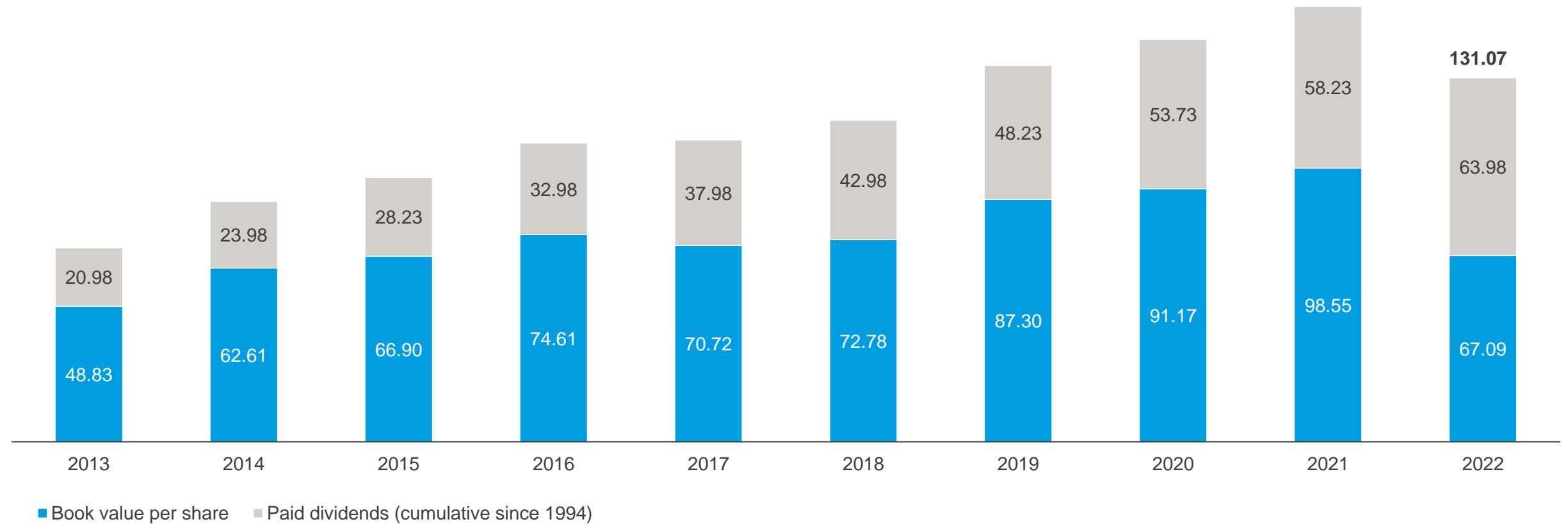
RoE based on company data, own calculation
 Peers: China Re, Everest Re, Korean Re, Munich Re, Renaissance Re, RGA, SCOR, Swiss Re

Long-term value creation for shareholders

2022: book value per share decreased mainly due to rising interest rates

Book value and accumulated paid dividends

in EUR



Shareholders' equity decreased mainly due to rising interest rates

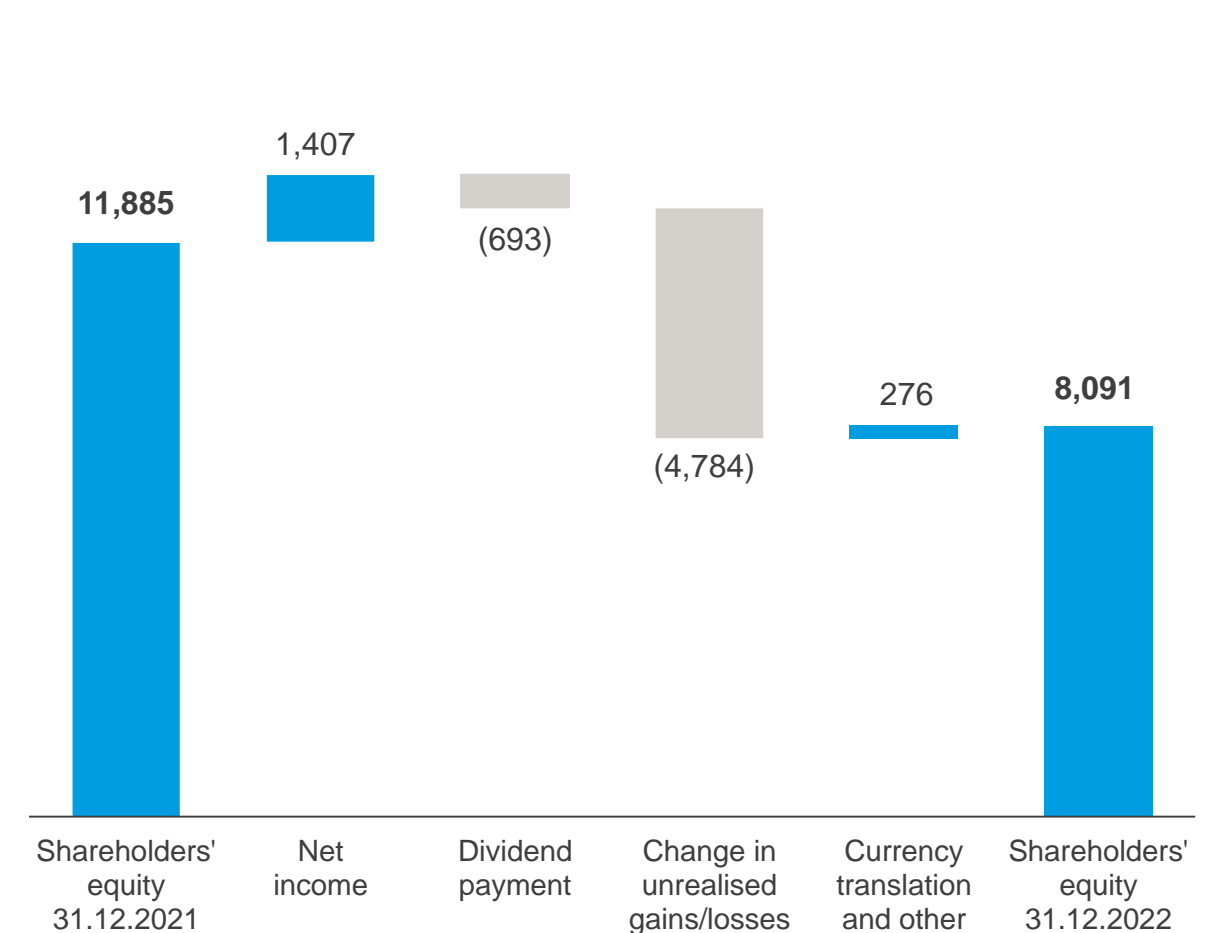
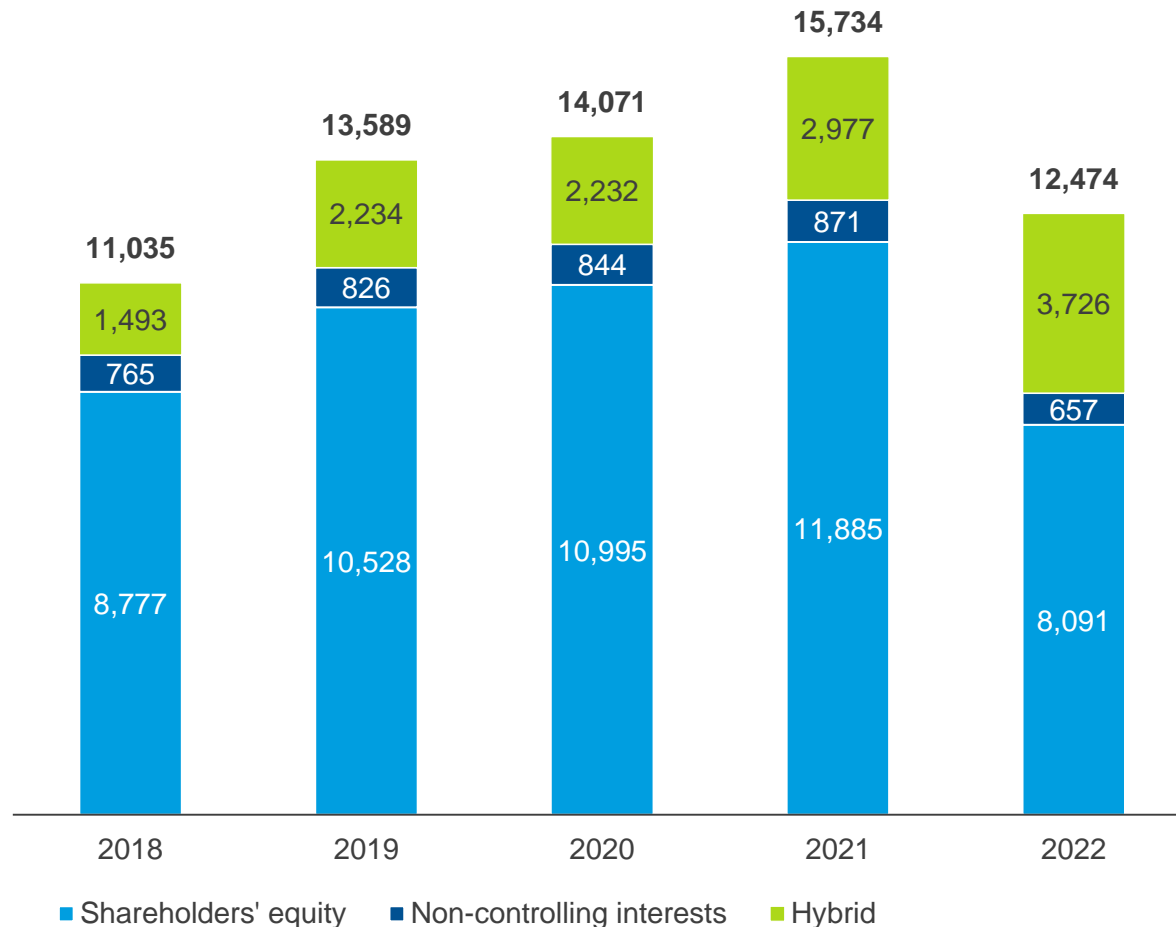
From an economic view, impact on capitalisation is moderate due to strict ALM

Policyholders' surplus

in m. EUR

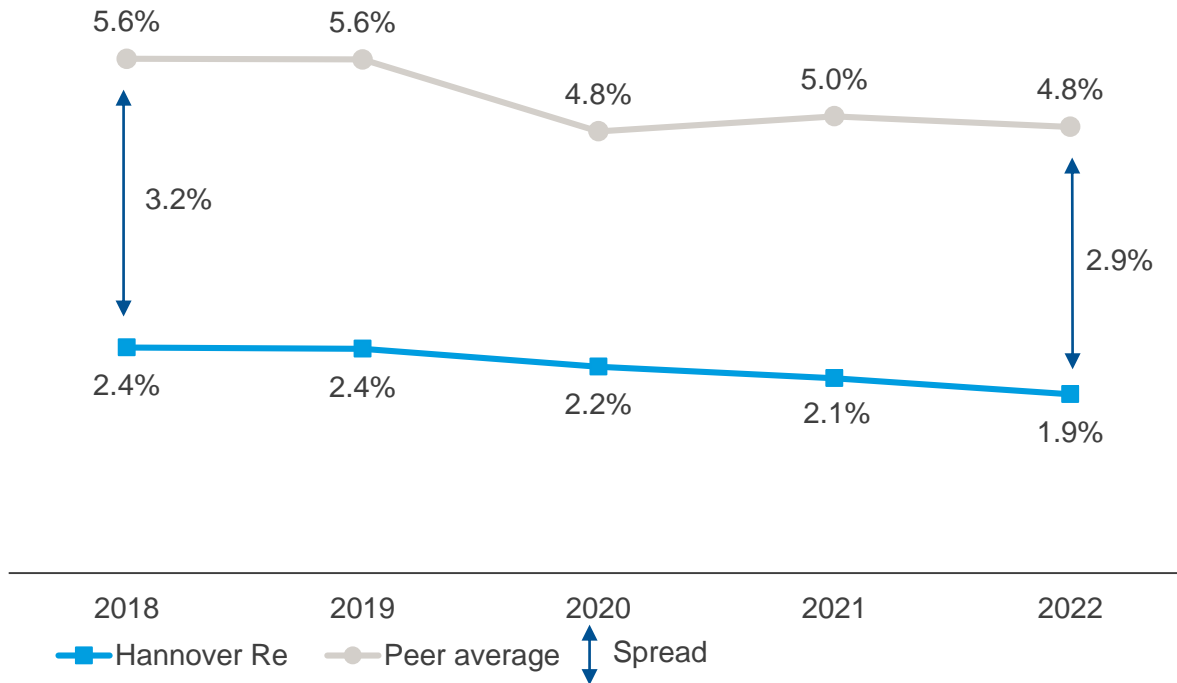
Change in shareholders' equity

in m. EUR



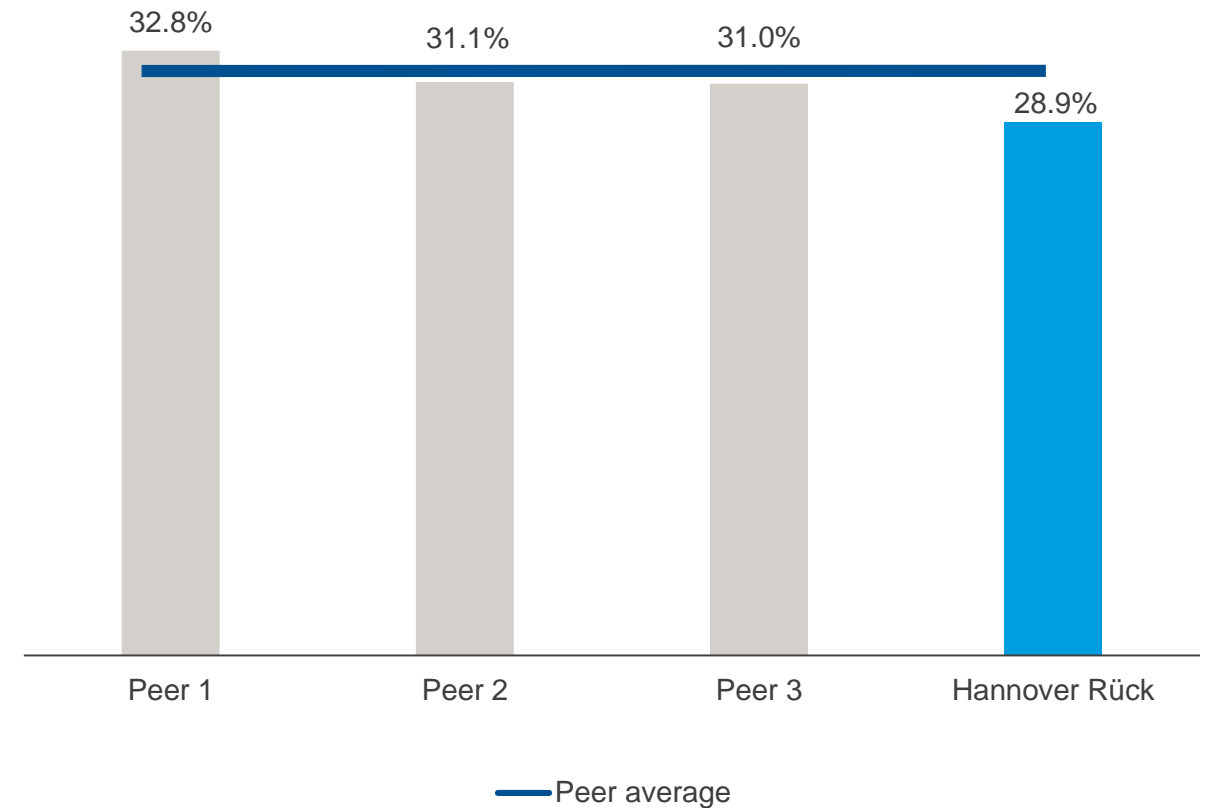
Low expense ratio is an important competitive advantage

Administrative expense ratio



Expense ratio (P&C reinsurance)²⁾

5-year average



1) Peers: Munich Re, Swiss Re, SCOR; own calculation

2) Source: A.M. Best "Market Segment Report" 2017 - 2021, (© A.M. Best Europe - Information Services Ltd. - used by permission); Peers: Munich Re, SCOR, Swiss Re

Purpose & Values

The “why” and the “how” articulate our distinctive corporate culture

Our self-conception



Our values



Purpose

Why do we do what we do?

**Beyond risk sharing –
we team up
to create opportunities**

Strategy

What do we want to achieve?

Core values
Which guiding principles are important for us?

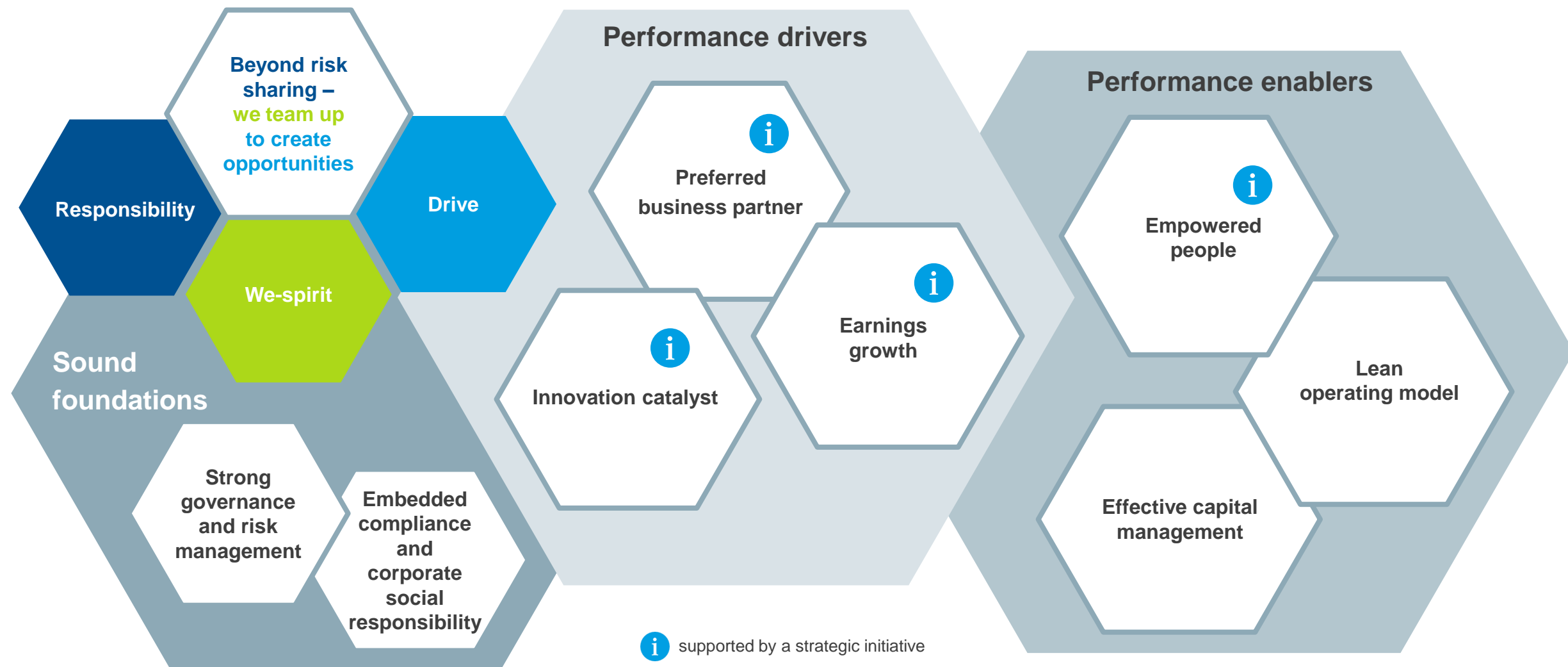


Our competitive strengths lie in our corporate culture and operating model and lead to higher profitability with lower volatility



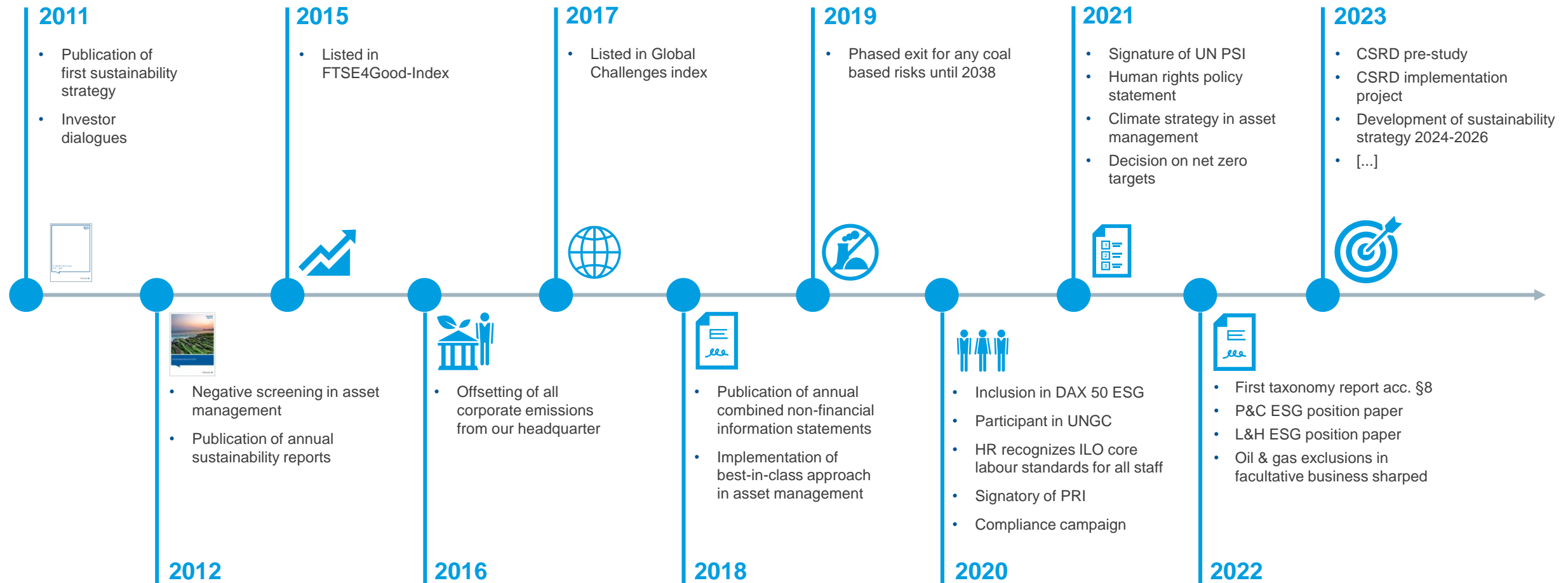
Striving for sustainable outperformance

Group strategy 2021 - 2023



Sustainability at Hannover Re

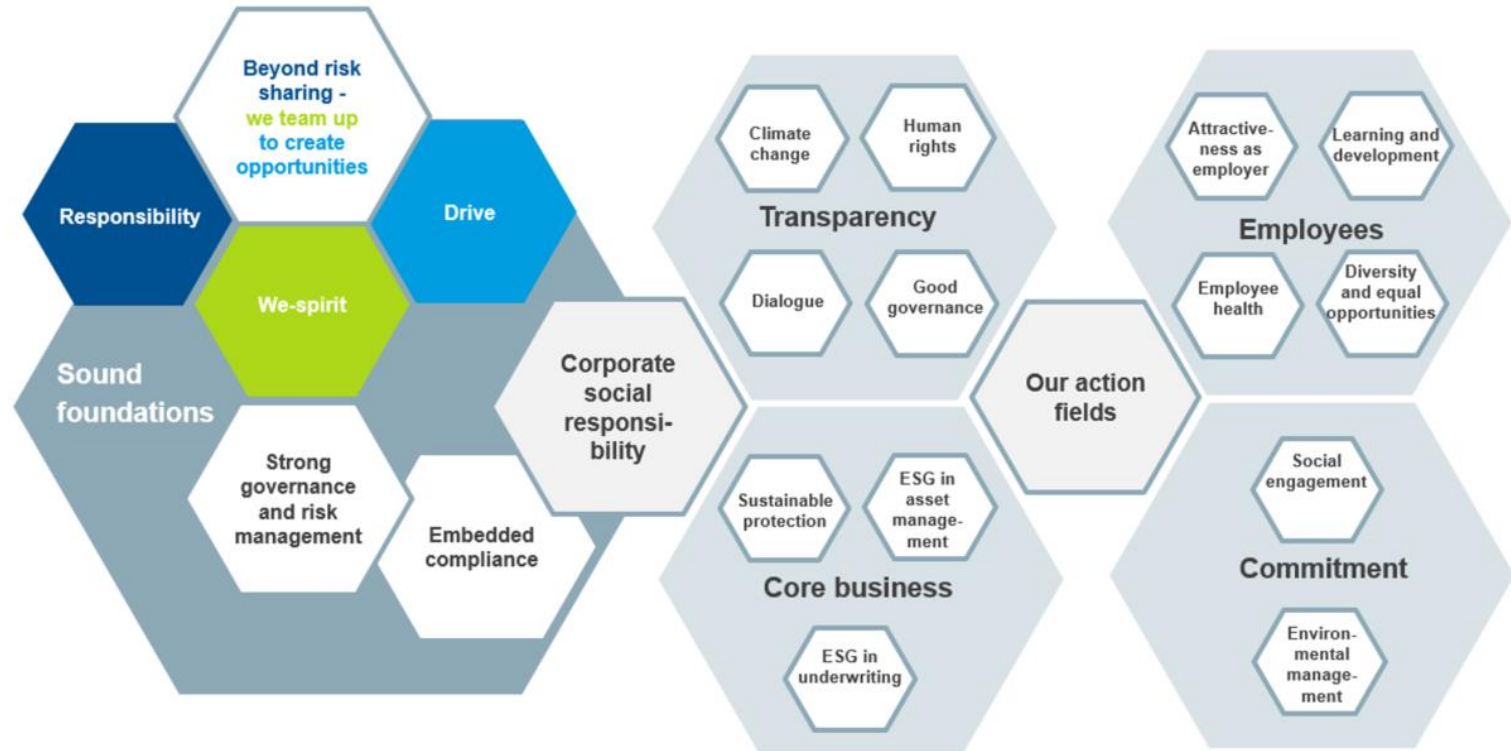
How we evolved



Sustainability at Hannover Re

Sustainability Strategy 2021 - 2023 – Overview

- In summer 2020, [we teamed up](#) to develop our new Sustainability Strategy 2021 - 2023
- The sustainability strategy serves our [purpose and values](#)
- It is closely related to the [Group strategy](#) and encompasses its sound foundations
- [Corporate Social Responsibility](#) bridges the sound foundations of our Group strategy and the four defined action fields
- The [action fields](#) encompass the identified material plus additional topics
- All topics were translated in [specific goals](#) and [target indicators](#)



Sustainability at Hannover Re

Sustainability Strategy 2021 - 2023 – Action fields encompass our material topics

Transparency encompasses voluntary commitments and fundamental issues with implications for all other action fields.

- **Climate change** and **human rights** are interdisciplinary topics, operationalised in the other action fields.
- **Dialogue** is our commitment to interact with our stakeholders.
- **Good governance** aims for ethical governance and good corporate citizenship.

Motivated and well-trained employees are a crucial factor in the success of our company.

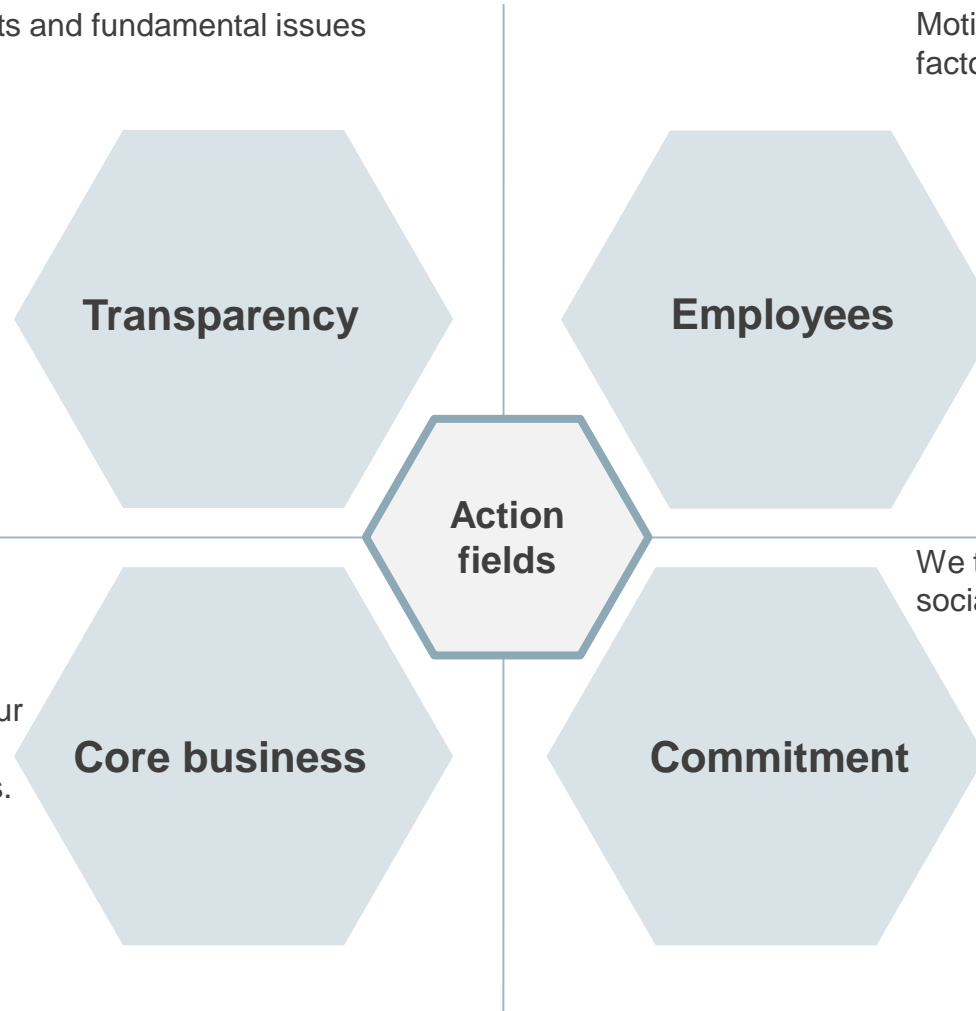
- **Attractiveness an employer**: We want to be the "employer of first choice" for existing and potential future employees alike.
- We support **learning and development** and **employee health and wellness**.
- We embrace and support **diversity and equal opportunities**.

How we organise our core business serves as vital leverage for our contribution to the sustainable development of our world.

- In **sustainable protection**, we bring together all our activities that support the transformation to a sustainable world and offer sustainable solutions.
- With **ESG in underwriting** and **asset management**, we aim to minimize our negative impact.

We take responsibility for the environment and the social landscape in which we operate.

- **Environmental management** and **social engagement** are not defined as material topics.
- Nevertheless, they are important elements of our strategy.



Net zero targets

Comprehensive goal setting in core business and own business operations



Asset Management

- Climate strategy:
 - Decarbonisation: -30% of CO₂ footprint by 2025¹⁾
 - Active investment in sustainable assets
 - Engagement; via proxy voting
- Application of specific exclusion criteria – e.g. thermal coal, oil sands
- Negative screening / active divestment since 2012



Underwriting

- Exit from all risks connected with thermal coal and related infrastructure by 2038 in the entire P&C portfolio
- Development of P&C ESG position paper
- Further exclusions are defined in accordance with the ESG Manual for the facultative division

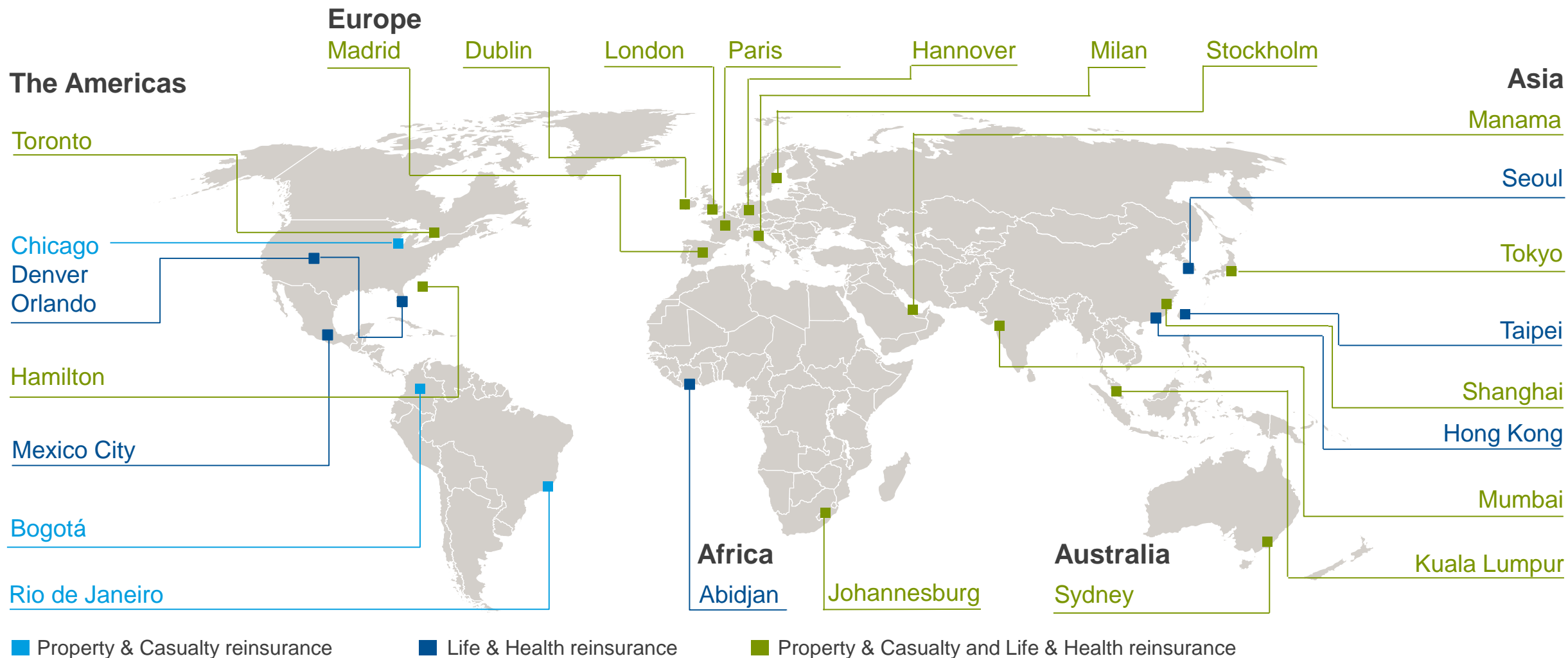


Own business operations

- Carbon neutral at Hannover Office since 2016
- Implementation of a process to collect carbon emissions data Group-wide

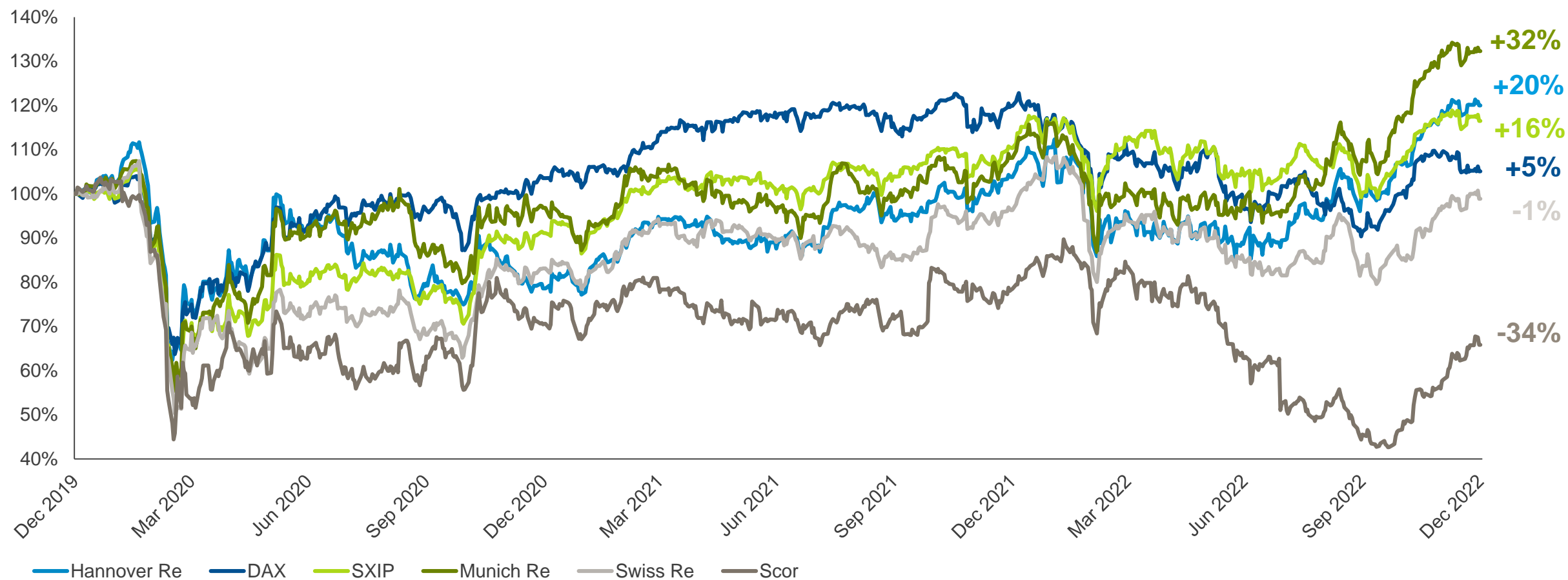
1) Corporates, covered bonds and equities; compared to base year 2019

Present on all continents



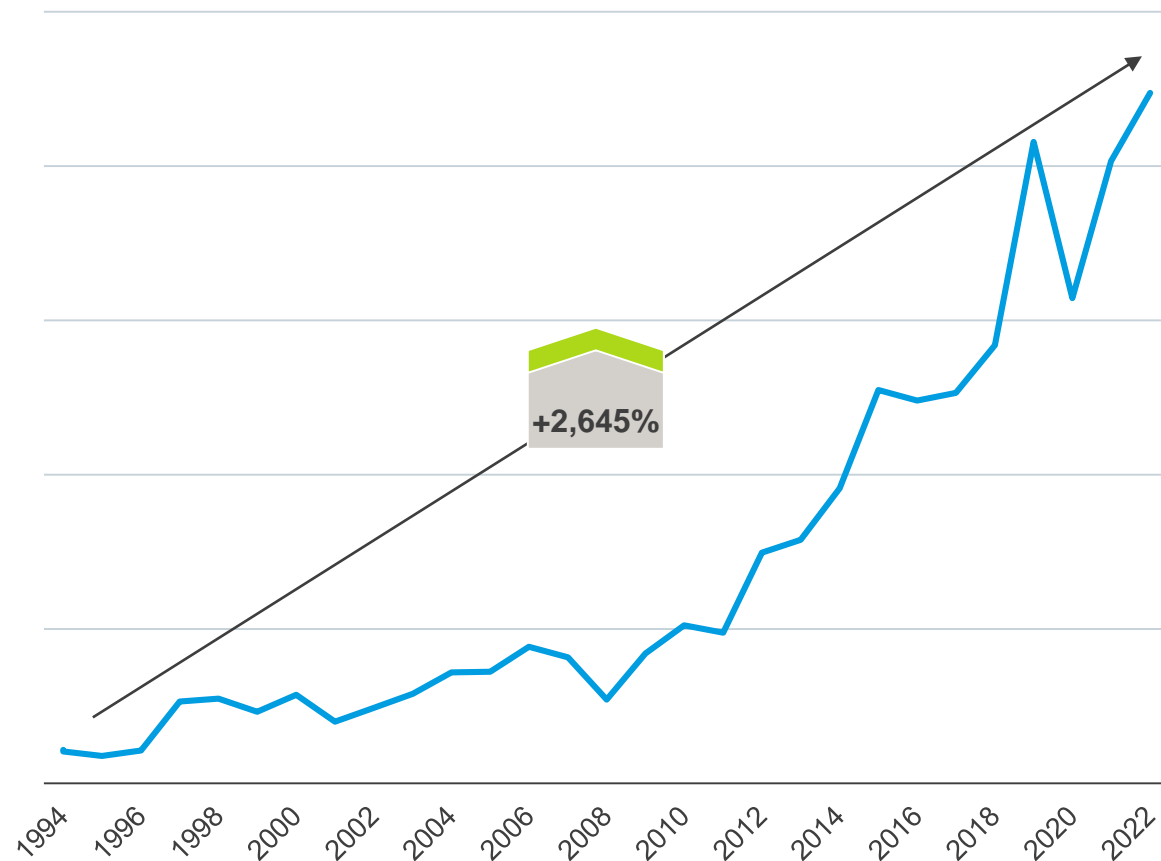
HR share price increased by +20% over the last 3 years

Performance comparison (incl. reinvested dividends)



Yearly Total Shareholder Return (TSR) of 12.6%

Value creation since IPO

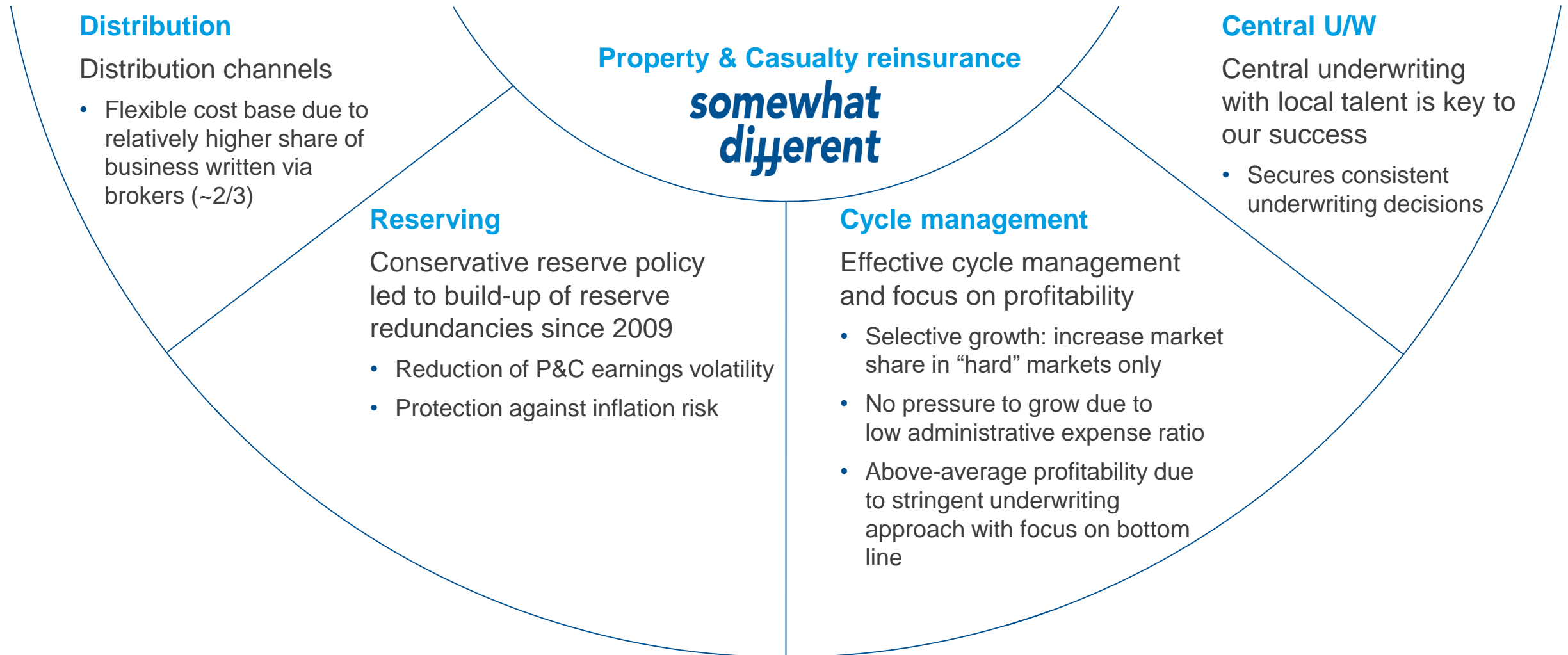


in m. EUR	2021	2022
Market capitalisation as of date	20,158	22,371
- Market capitalisation at IPO (Nov 1994)	1,084	1,084
+ Dividend payments (cumulative)	7,473	8,197
- Capital increases (1996, 1997, 2001, 2003)	811	811
Value creation since IPO	25,736	28,673

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We are somewhat different



Property & Casualty: Strategy

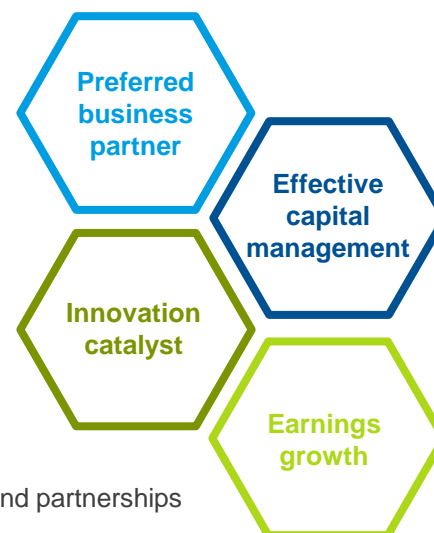


Further expand our bottom line through existing and new client relationships

- Customer Excellence (holistic customer management approach) for clients
- Foster our leadership position in specialty markets
- Expand our corporate client basis to enlarge our portfolio of captive clients
- Build on the strength of E+S Rück as “The Reinsurer for Germany”, based on its unique cooperation model

Continue to build out our position as innovation partner for our clients and position accordingly towards the outside world

- Embed the offering of tailor-made solutions (including AS & ILS)
- Embed digital business accelerator for P&C (including insurtech partnerships and partnerships with global technology firms)
- Foster our capabilities in data analytics and become a preferred partner for ceding companies or other service providers to benefit from new sources/pools of data like telematics
- Develop Cyber reinsurance (including exposure management)
- Increase our activities in the parametric reinsurance field
- Increase private-public partnerships to address the Protection Gap
- Increase the external awareness (incl. investors & applicants) of innovation at HR



Use internal and external retrocession to optimise the internal model and rating agency capital requirements as well as capital fungibility within the Hannover Re Group and reduce volatility of earnings

- Explore the use of Advanced Solutions type retrocessions
- Establish a (composite) framework for effective internal retrocessions

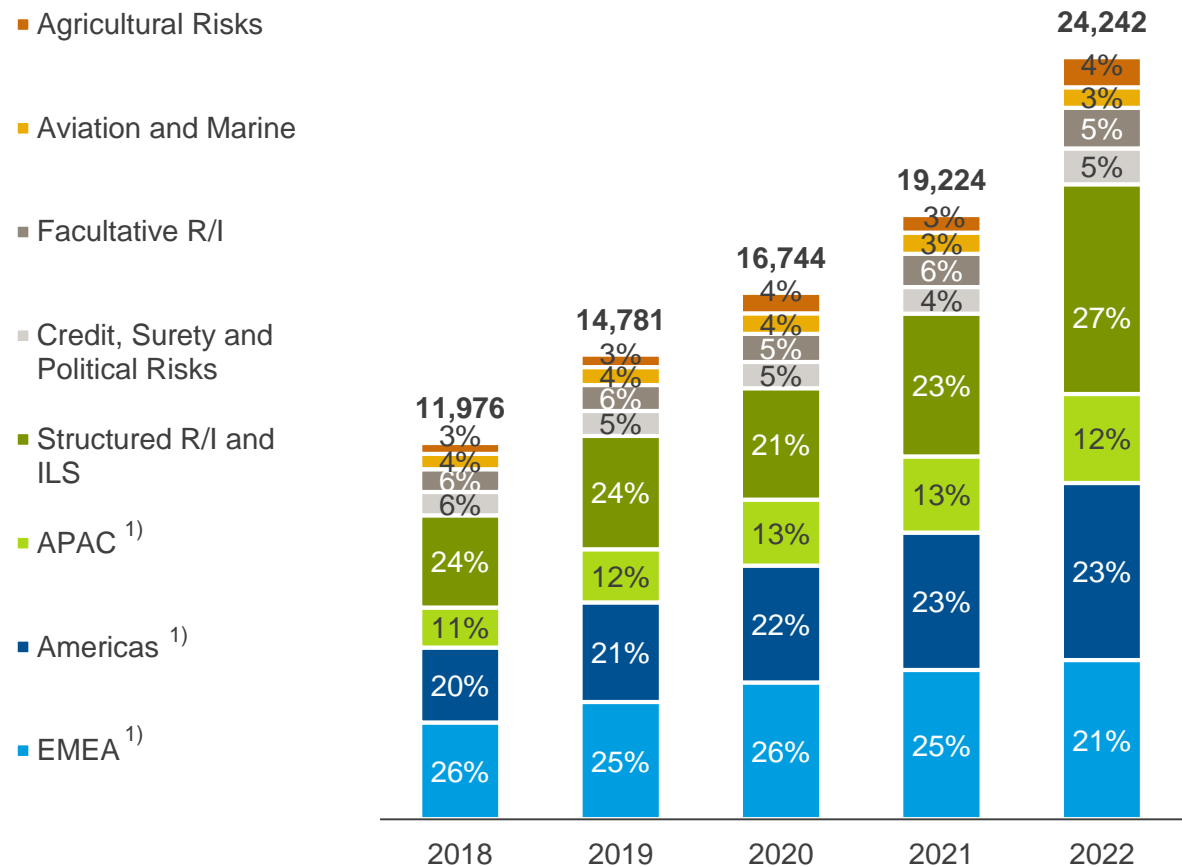
Grow profitably in the APAC region whilst maintaining our strong underwriting culture

- Deliver on current APAC initiative
- Include Specialty lines and foster growth of Advanced Solutions business in the region by decentralized underwriting approach
- Ensure strong Hannover Re underwriting culture is maintained in the APAC offices
- Increase collaboration between the APAC offices whilst maintaining strong links to Hannover

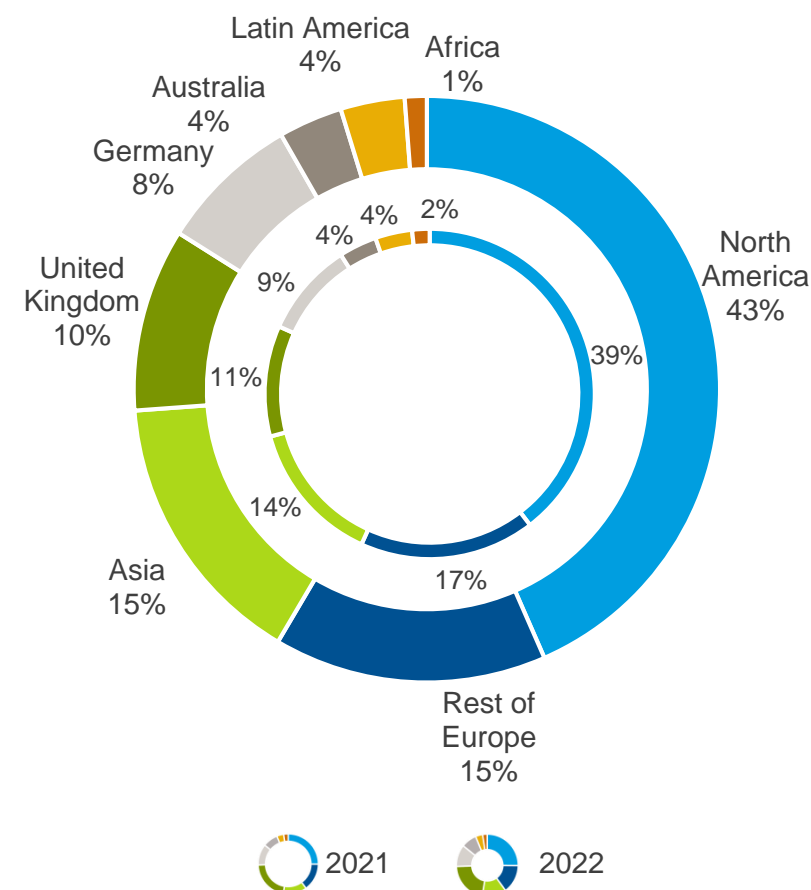
Property & Casualty reinsurance: strong and diversified growth

5-year CAGR +17.7%

GWP split by reporting categories



Gross written premium split by regions



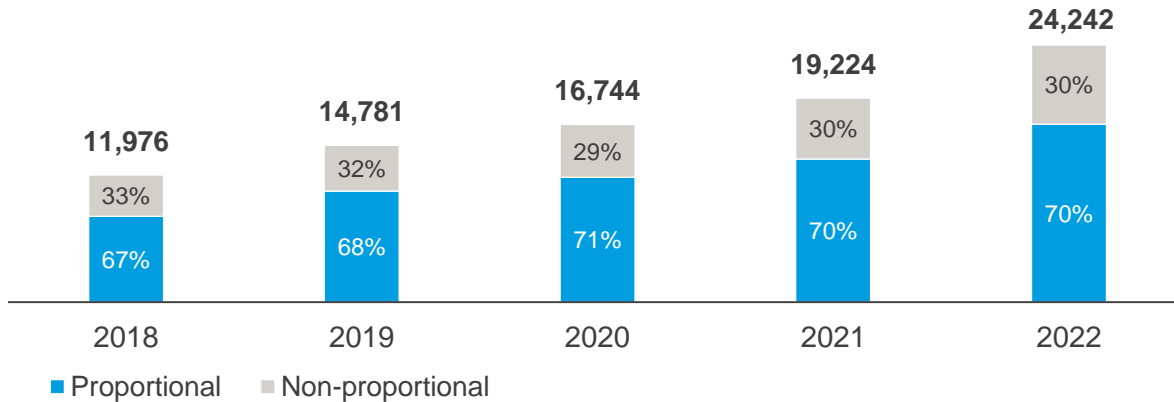
1) All lines of Property & Casualty reinsurance except those stated separately

Around 2/3 of our business is written via brokers

~1/3 of our business is non-proportional

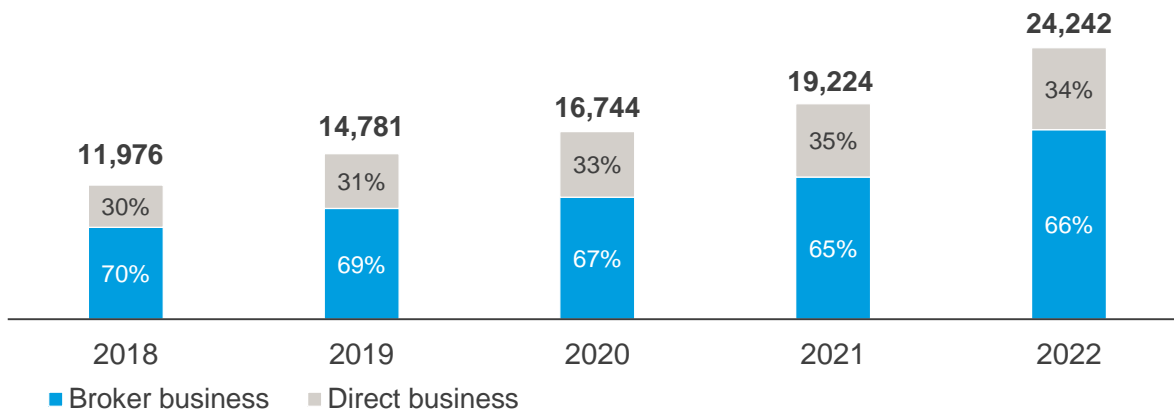
Breakdown of treaties by volume

in % and m. EUR

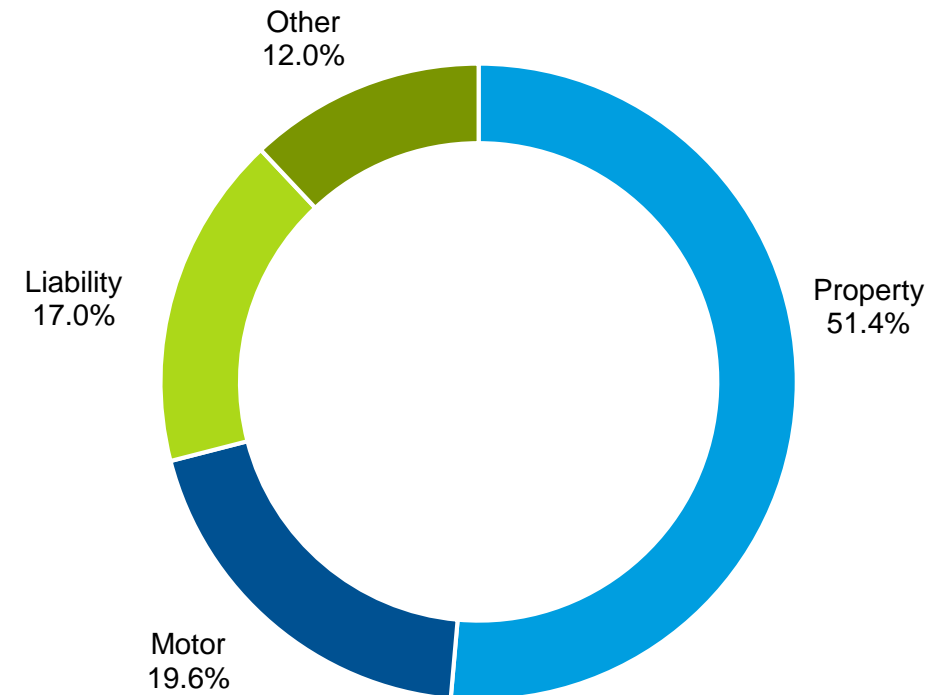


Breakdown of business written

in % and m. EUR



GWP by segment



Margin-oriented U/W approach leads to profitable growth

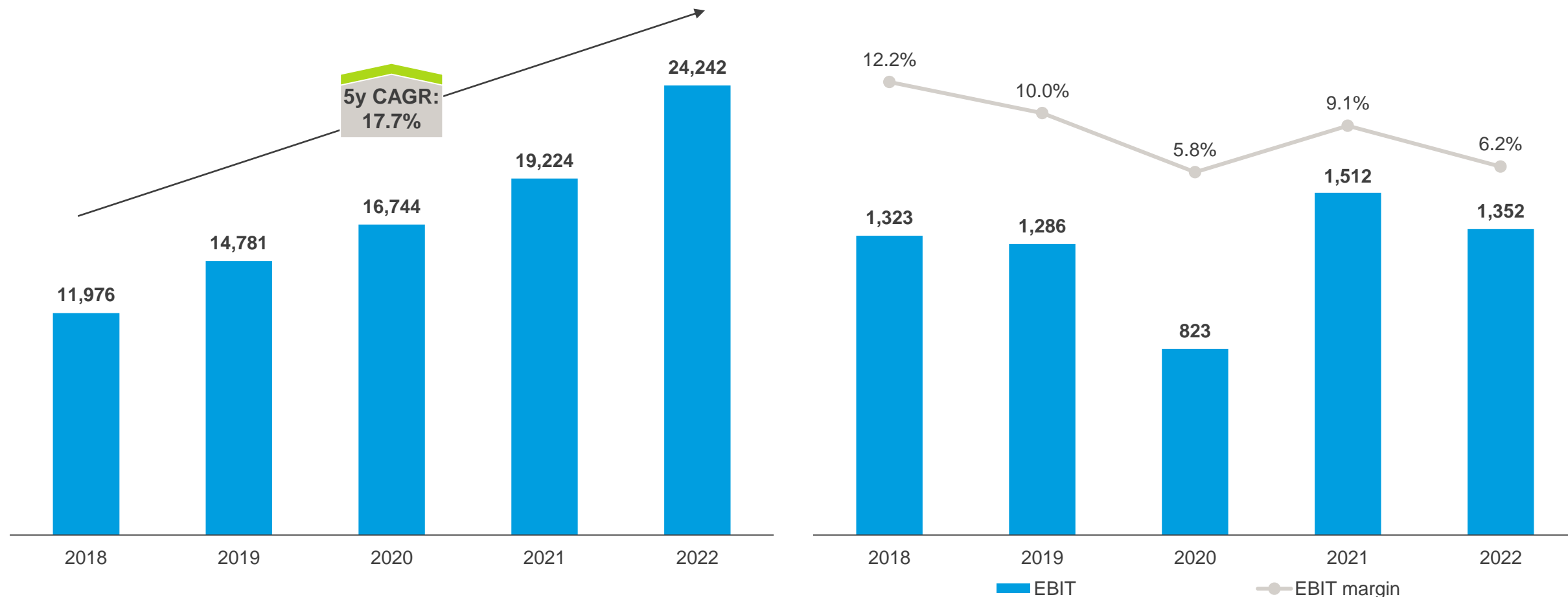
2022: strong premium growth – large losses exceed budget by EUR 306 m.

Gross written premium

in m. EUR

EBIT/EBIT margin

in m. EUR



Resiliency reserve decreased as expected to EUR 1,378 m.

Level of additional IBNR is 51% of total reserves

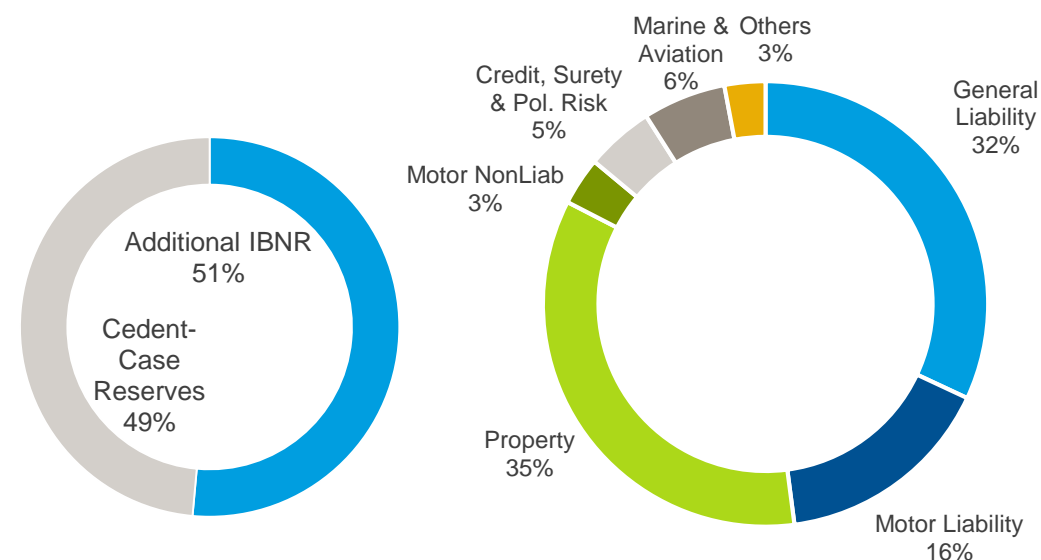
Development of resiliency reserves reviewed by WTW

in m. EUR

Year end ¹⁾	Resiliency Reserve ²⁾	Change	Impact on loss ratio	P&C premium (net earned)
2011	1,117	162	2.7%	5,961
2012	1,308	190	2.8%	6,854
2013	1,517	209	3.1%	6,866
2014	1,546	29	0.4%	7,011
2015	1,887	341	4.2%	8,100
2016	1,865	-22	-0.3%	7,985
2017	1,813	-52	-0.6%	9,159
2018	1,694	-118	-1.1%	10,804
2019	1,457	-238	-1.9%	12,798
2020	1,536	80	0.6%	14,205
2021	1,703	167	1.0%	16,624
2022	1,378	-325	-1.5%	21,637

P&C gross loss reserves³⁾

EUR 41 bn.



1) Figures unadjusted for changes in foreign exchange rate, i.e. based on actual exchange rates at respective year end

2) Resiliency reserve of loss and loss adjustment expense reserve net of reinsurance for its non-life insurance business against held IFRS reserves, before tax and minority participations. WTW reviewed these estimates - see appendix

3) As at 31 December 2022, consolidated, IFRS, IBNR – Incurred but not reported

The risk is manageable

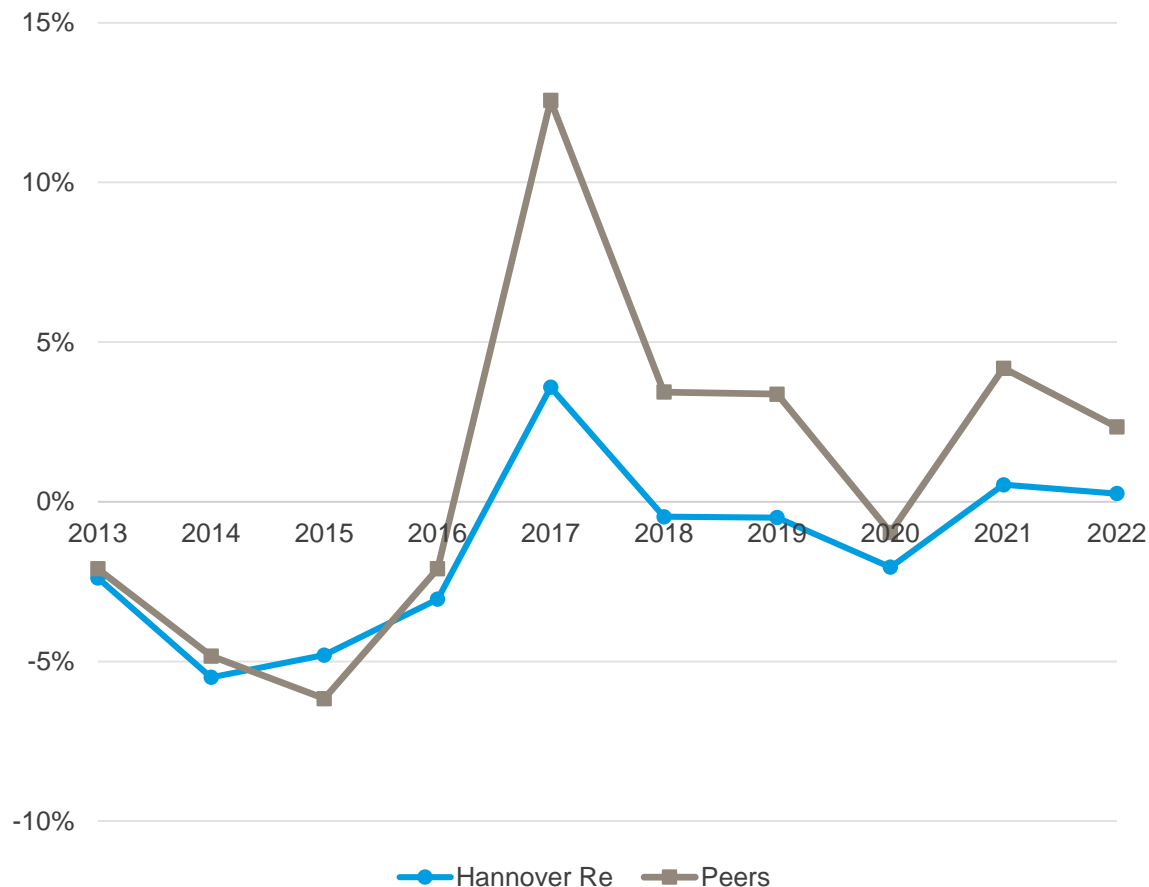
Stress tests for natural catastrophes after retrocessions

Effect on forecast net income in m. EUR

		2021	2022
Hurricane US/Carribean	100-year loss	(1,452)	(1,378)
	250-year loss	(1,959)	(1,859)
Earthquake US West Coast	100-year loss	(839)	(758)
	250-year loss	(1,615)	(1,385)
Winter storm Europe	100-year loss	(667)	(614)
	250-year loss	(1,009)	(874)
Earthquake Japan	100-year loss	(758)	(645)
	250-year loss	(1,203)	(966)
Earthquake Chile	100-year loss	(493)	(513)
	250-year loss	(1,277)	(1,180)

Previous years confirm our reliable planning of NatCat budget

Δ NatCat losses vs. budget in % of NPE



All numbers as % of net premium earned and as reported; numbers do not include Covid-19 or Ukraine war impact; Peers: Munich Re, Swiss Re, SCOR

1) Standard deviation

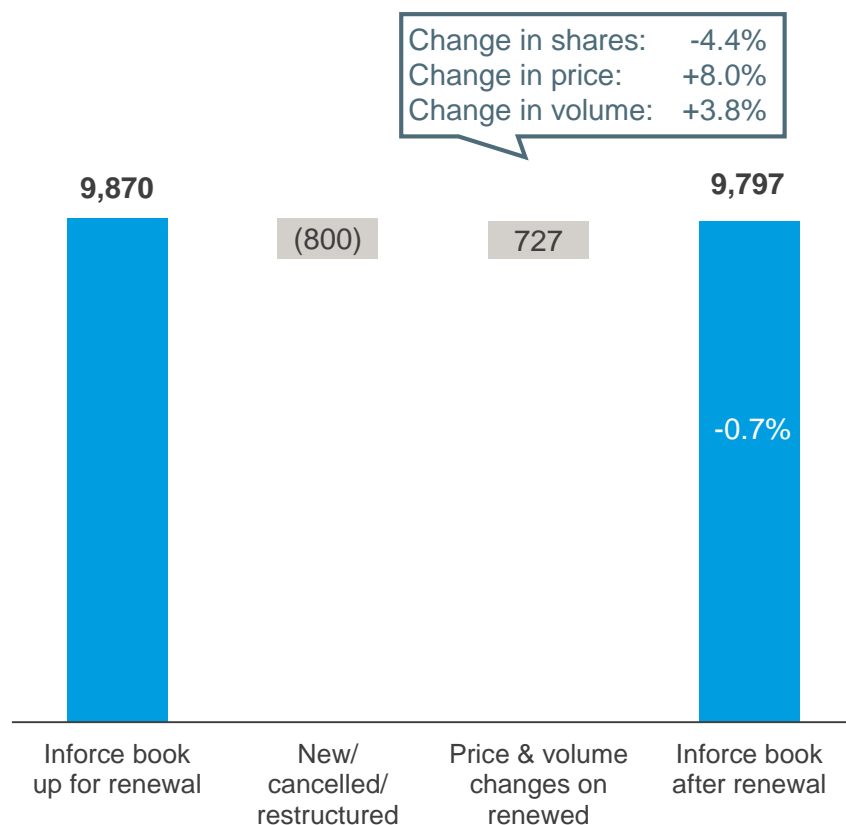
	Δ average NatCat losses vs. budget	Volatility ¹⁾
<i>hannover re</i> [®]	(1.4%)	2.7%
Peers	1.0%	5.6%

- On average, Hannover Re stays within NatCat budget
- Lower volatility of NatCat budget utilisation by Hannover Re compared to peers

Hannover Re's risk-return profile improved considerably

Risk-adjusted overall price increase of +8.0%

1 Jan 2023 P&C Treaty Renewals in m. EUR



- **Successful renewal** supported by superior financial strength, favourable market positioning and long-standing customer relationships
- **Expansion of retro coverage** for NatCat and cyber exposure as price increases in reinsurance markets attracted long-term partners
- **Volume development impacted by**
 - disciplined underwriting and portfolio steering
 - shifting towards non-proportional reinsurance
 - portfolio pruning of least performing treaties
- **Quality of P&C portfolio improved substantially**
 - Price increases combined with T&C tightening
- **Improved pricing across highly diversified portfolio**
 - Non-proportional business rates increased significantly
 - Broader-based price correction beyond NatCat
 - Less pronounced increases in long-tail classes due to a more attractive interest rate environment
 - Stable to improving commission levels for proportional business in a less dynamic insurance pricing environment

Underwriting year figures at unchanged f/x rates (31 December 2022)

Very strong non-proportional renewal in property and some specialty lines

Disciplined underwriting in proportional as primary rates increased less strongly

Reporting lines	Proportional			Non-proportional		
	Premium 1/1/2023	Premium changes	Price changes	Premium 1/1/2023	Premium changes	Price changes
EMEA ¹⁾	3,091	-4.7%	+2.8%	1,197	+27.2%	+22.3%
Americas ¹⁾	1,111	-9.2%	+4.5%	1,514	+22.5%	+21.3%
APAC ¹⁾	966	-27.6%	+3.6%	165	+52.3%	+15.0%
Credit, Surety and Political risks	622	-4.5%	+2.6%	137	+16.4%	+9.9%
Aviation and Marine	206	+19.5%	+11.8%	106	-27.5%	+23.5%
Agricultural Risks	639	+0.2%	+2.9%	44	-21.4%	+6.6%
Total 1 January renewals	6,636	-8.7%	+3.4%	3,162	+21.4%	+20.7%

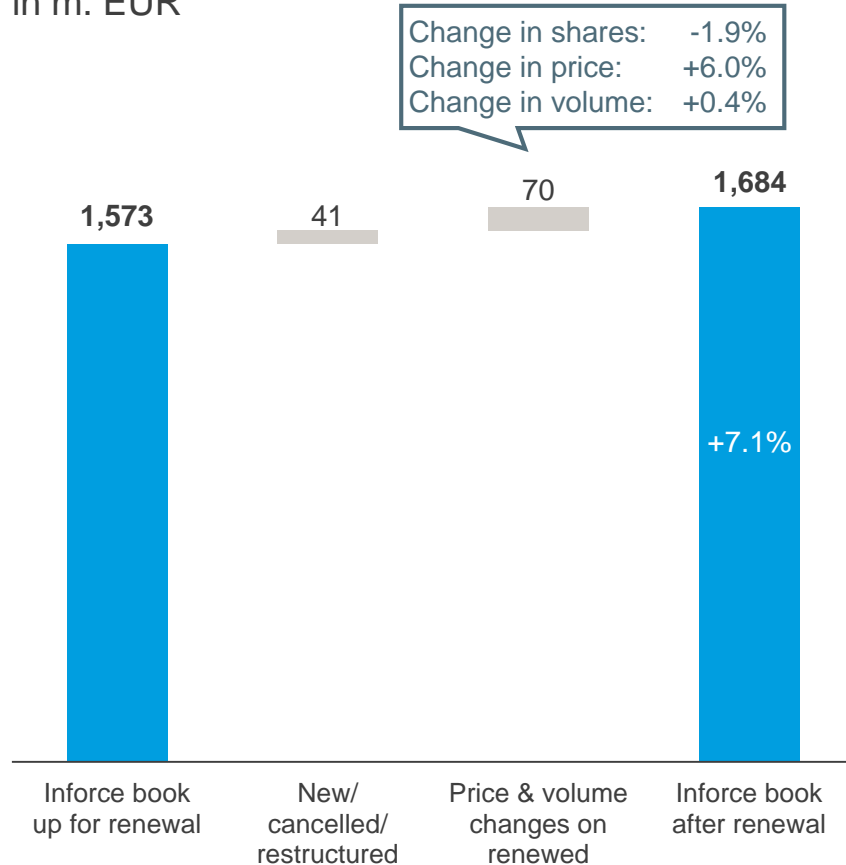
Premium estimates in m. EUR

1) All lines of business except those stated separately (excl. Structured R/I and ILS as well as Facultative R/I)

Hannover Re's risk-return profile improved considerably

Overall price increase of +6.0%; continued shift to non-proportional business

2 Jan – 1 Apr 2023
in m. EUR



Americas¹⁾

- Hard market momentum continues from 1/1 renewals with substantial price improvements, especially for property business
- US NatCat rate increases on a risk-adjusted basis of up to 40%

APAC¹⁾

- Terms continued to harden across the region, primarily in the property line of business
- Most prominent improvements are seen in Japan with rate increases of up to 20% on NatCat business
- R/I structure changes and increased retentions lead to increased profitability expectations

Marine

- Healthy risk-adjusted rate increases could be achieved in all Marine segments and all geographies
- Re-underwriting as of 1/1 continued with increasing retentions, tighter terms and conditions as well as coverage restrictions

Agricultural Risks

- Brazil: hard original and reinsurance markets persist after drought losses 2021 - 2022

Underwriting year figures at unchanged f/x rates
1) Excluding specialty business mentioned separately

Continued favourable market conditions increased P&C premium by 12.6%

Overall risk-adjusted price increase of 4.8%

2 Apr - 1 Jul 2023 P&C renewals

in m. EUR

Change in shares: 0.0%
Change in price: +4.8%
Change in volume: +4.8%

306

3,624

+12.6%

3,218

100

Inforce book
up for renewal

New/
cancelled/
restructured

Price & volume
changes on renewed

Inforce book
after renewals

Americas¹⁾

- US:
 - Property market holding at increased rates, capacity shortages in some areas remaining
 - Primary rate increases still meaningful except for some Special Casualty markets
 - Sustained underwriting discipline

- Latin America: continued hard market conditions across the region

Australia¹⁾

- Continued discipline with rate increases and improved terms & conditions across direct and reinsurance markets
- Substantial rate increases on loss-affected NatCat programs

Asia¹⁾

- Improved profitability supported by share reduction in lesser-performing treaties
- Markets mostly disciplined across the region

Credit & Surety

- Moderate premium growth mainly inflation-driven
- Stable commission levels and risk-adjusted price increases

Underwriting year figures at unchanged f/x rates (31 December 2022)

1) Excluding specialty business mentioned separately

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We are somewhat different

Undogmatic

We have an undogmatic approach

- Strong entrepreneurial spirit
- Appetite to innovate industry solutions

Life & Health reinsurance

**somewhat
different**

Responsive

We are committed to time to market & responsiveness

- Rapid decision-making processes
- In-depth knowledge of local markets

Efficient

We foster an efficient organisational set-up

- >1,200 experts in 24 offices on all continents
- Highly empowered and qualified staff

Flexible

We are a highly flexible business partner

- Tailor-made services and solutions
- Ability to anticipate market and client demands

Life & Health: Strategy

Support our clients in optimizing consumer experience and risk segmentation

- Deepen data analytics expertise in combination with artificial intelligence
- Widen data analytics service offering, including third-party data
- Expand partnerships: consumer experience & digitalisation of sales channels
- Enhance lifestyle & wellness product propositions

Provide our clients with tailored risk-transfer solutions beyond core expertise

- Select appropriate partners to address investment, biometric & expense risk

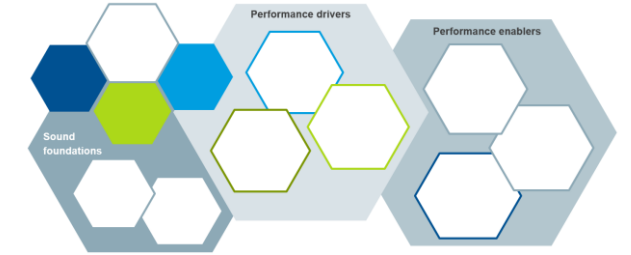


Identify and actively manage value-destroying risks in our portfolio

- Expand inforce management capabilities and activities
- Derive appropriate pricing from lessons learned for new business

Outperforming competition in the fastest growing L&H markets

- Expand our offering in ...
 - Asia
 - Longevity
 - Financial Solutions

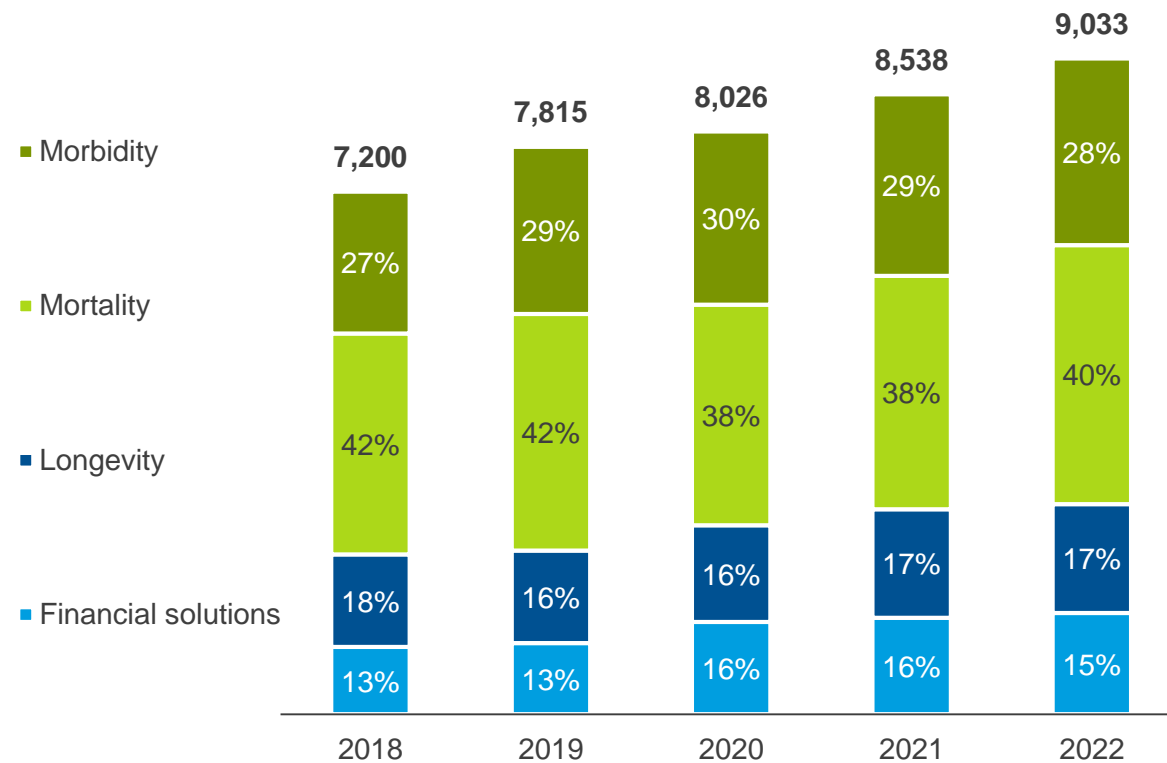


Life & Health reinsurance: moderate and diversified growth

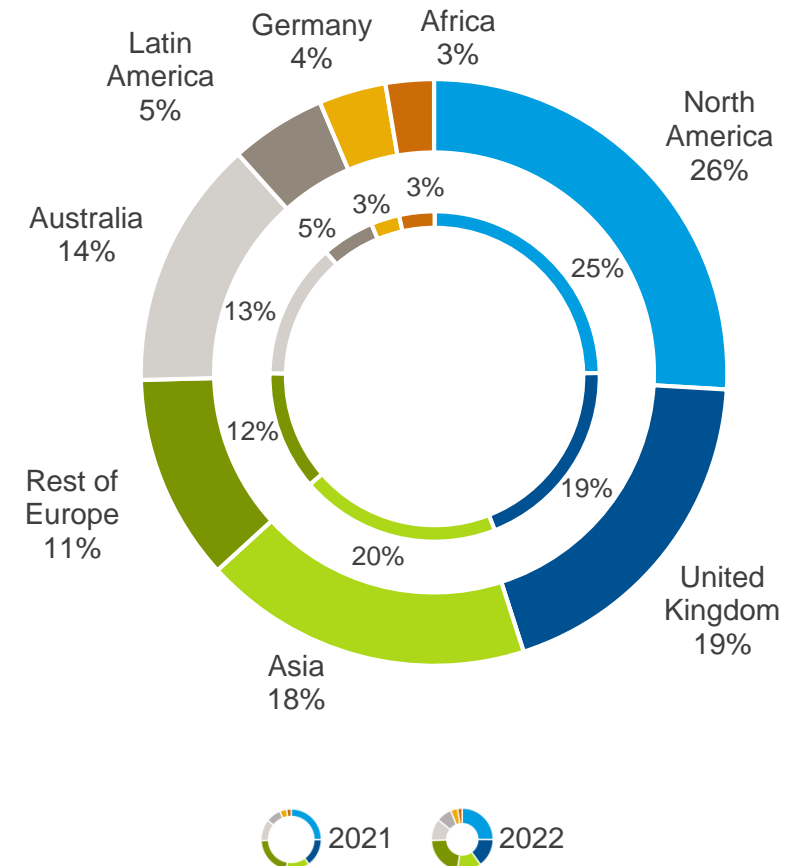
5-year CAGR +5.0%

GWP split by reporting categories

in m. EUR



Gross written premium split by regions

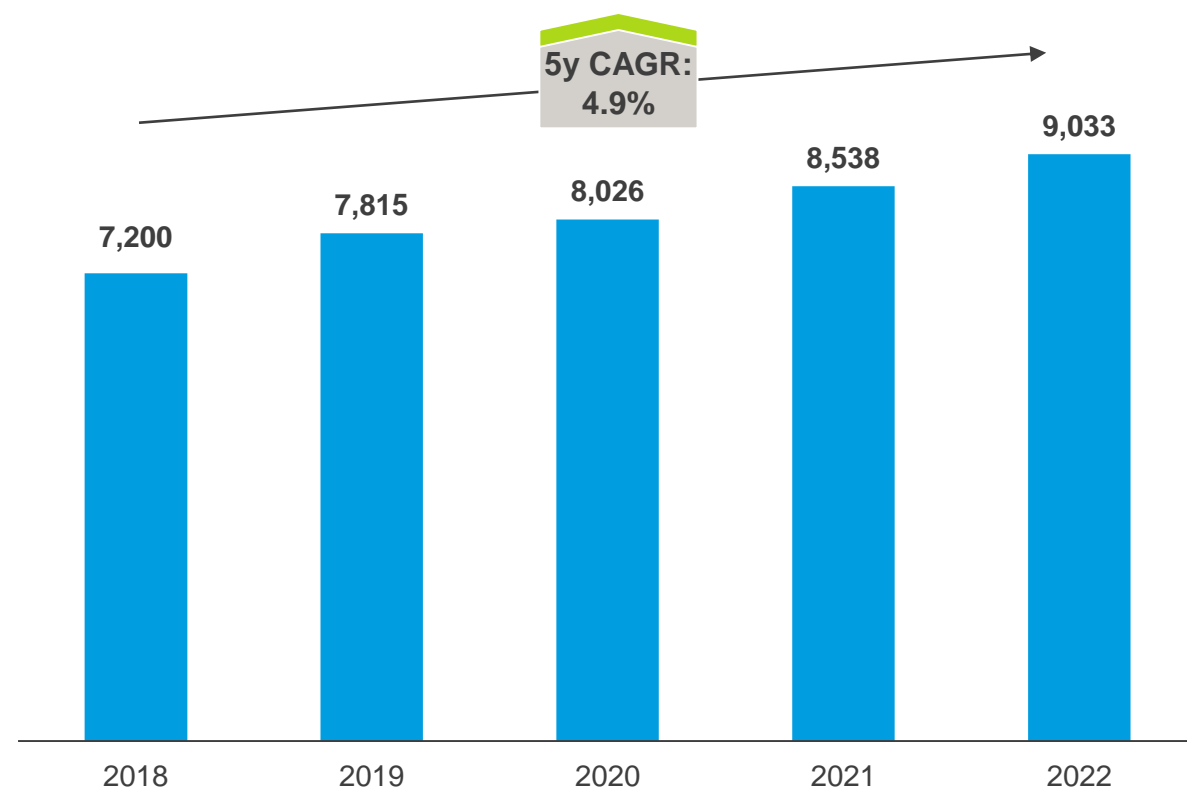


Favourable premium growth

2022: significant increase in underwriting profitability

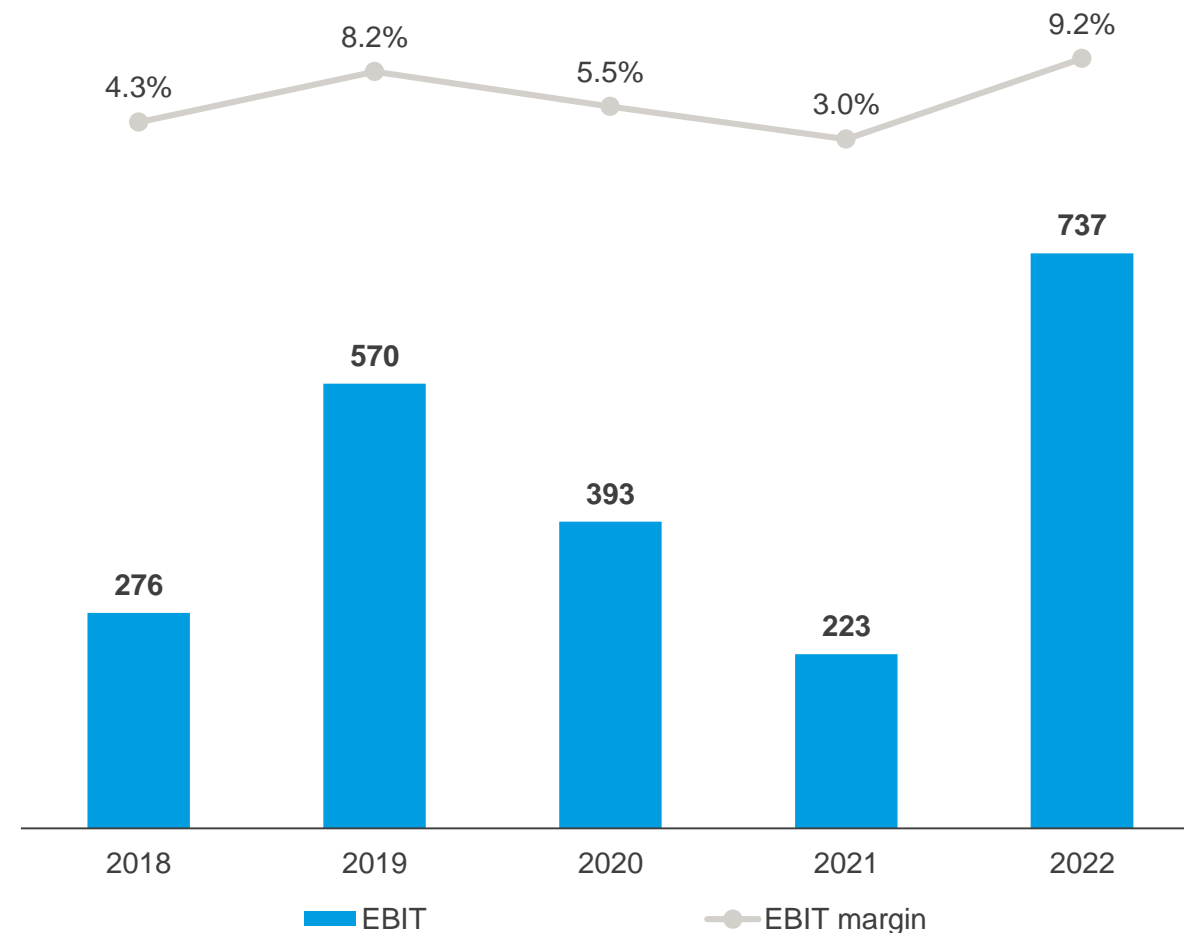
Gross written premium

in m. EUR



EBIT/EBIT margin

in m. EUR

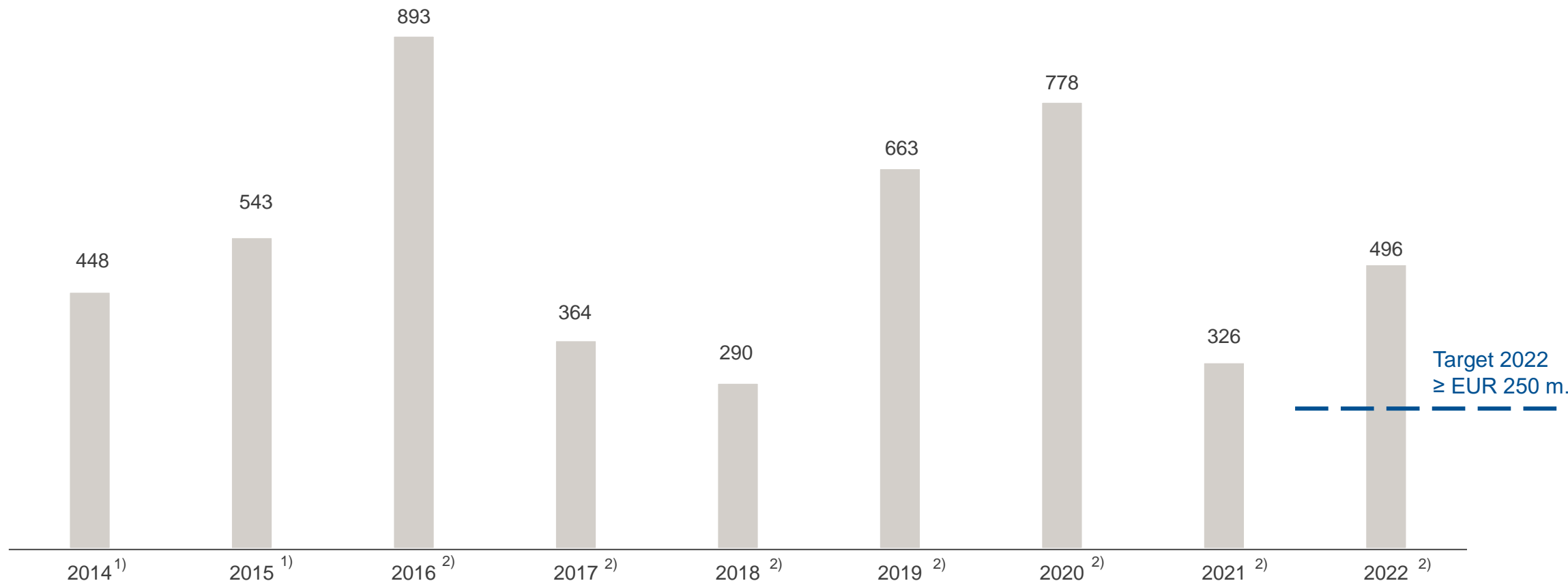


Value of New Business well above target

Mainly driven by Financial Solutions and Longevity business

Value of New Business development

in m. EUR



1) Based on MCEV principles and post-tax reporting (in 2015 cost of capital already increased from 4.5% to 6% in line with Solvency II)

2) Based on Solvency II principles and pre-tax reporting

Writing attractive traditional life & health business

Whilst positioning ourselves for sustainable growth with a clear strategic focus

Risk Solutions

Provide terms and capacity for all types of technical risks

Financial Solutions

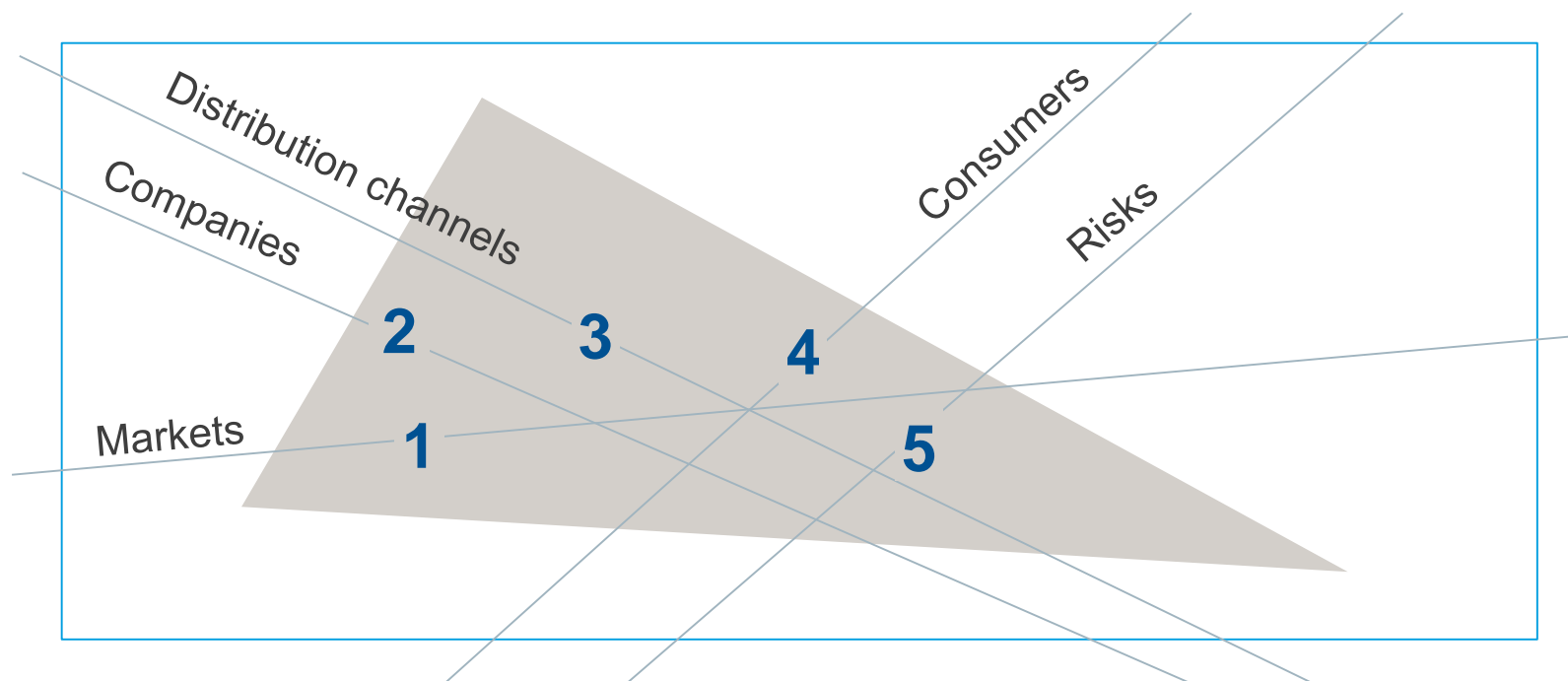
Achieve financial objectives for our clients

Reinsurance Services

Meet the individual needs of our clients

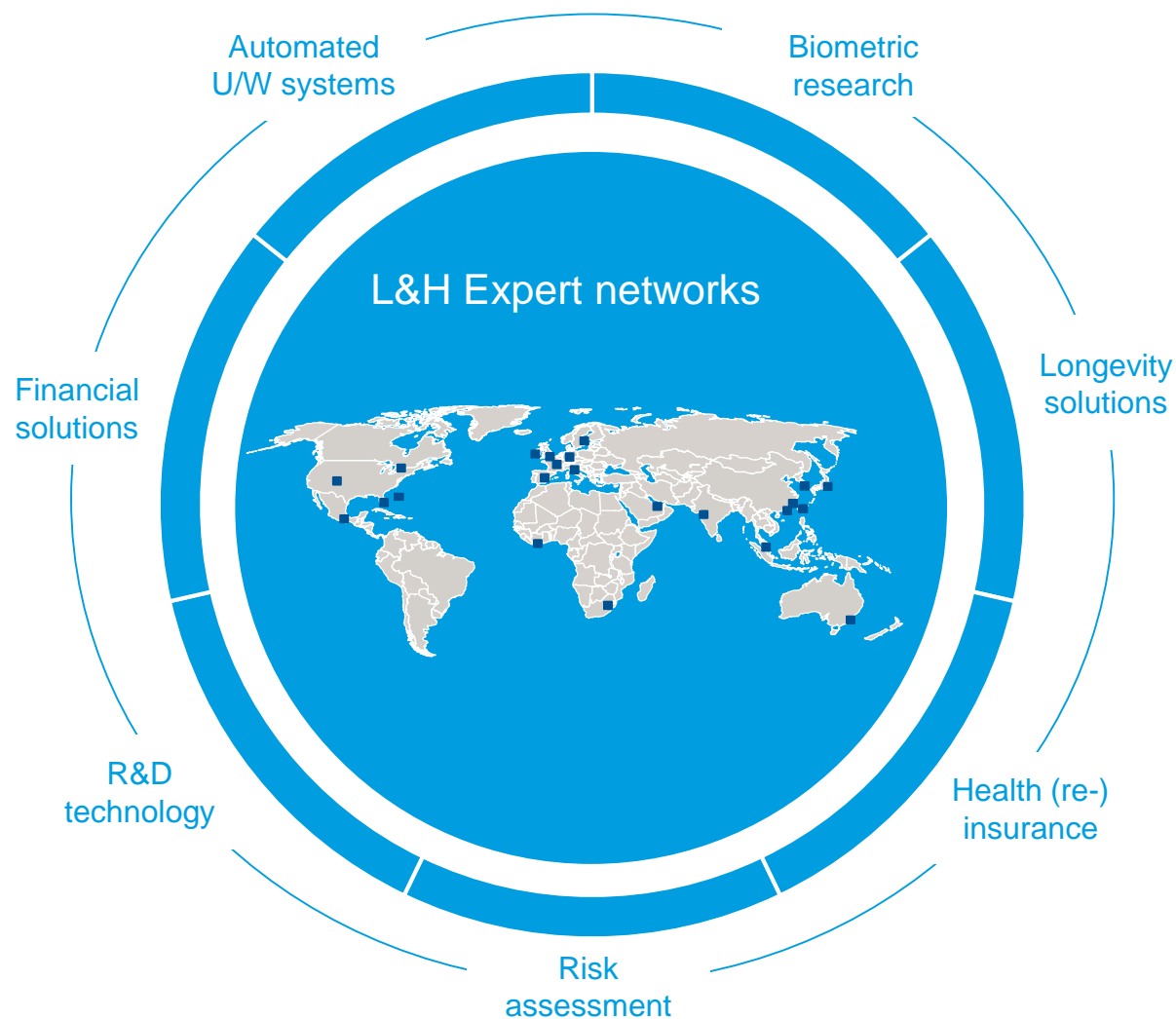
Our strategic focus

- 1 High growth markets
- 2 Companies in transition
- 3 Alternative distribution channels
- 4 Underserved consumers
- 5 Hard-to-quantify risks



□ Reinsurance universe ▲ Positive economic value expected

Our clients are served in the markets by our network of offices and by our solution-orientated expert networks



Complete offerings

Risk and financial solutions & services

Risk Solutions Competitive terms and appropriate capacity for technical risks	
Mortality	Longevity
Morbidity Health Disability Long Term Care Critical Illness	

Profitability depends largely on the underlying biometric risks

Financial Solutions Structured agreements to achieve certain financial objectives
New Business Financing
Reserve & Solvency Relief
Embedded Value Transaction

Profitability is less likely to be affected by the underlying biometric risks

Reinsurance Services Comprehensive range geared towards individual needs	
Products	Processes
Biometrics	Risk Assessment
Underwriting Systems	

Only in combination with risk solutions and/or financial solutions

Example risk solution: mortality & longevity

Risks

Mortality

Risk of paying more death benefits than expected

Longevity

Risk of paying annuities longer than expected

Trigger



Longevity: enhanced annuities¹⁾

Illustration: 50k single premium; male 65; 3% interest

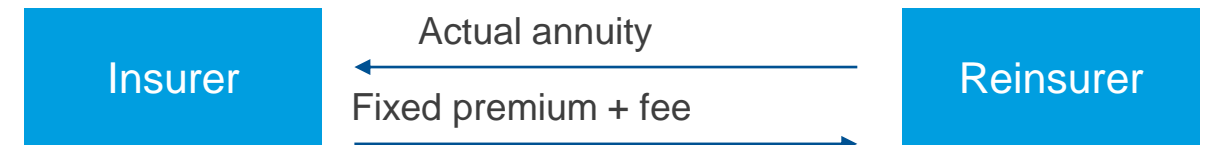
Status of health →	Healthy	Obesity	Diabetes	Cancer
Annuity increase →	+0% (standard)	+9%	+23%	+85%
Monthly annuity →	244	267	300	452

Longevity: risk transfer



Lifelong annuity

no investment participation



¹⁾ Allows people in ill health to receive a higher regular income in recognition of the fact that they, on average, have a shorter life expectancy than a healthy person

Example risk solution: morbidity - critical illness

Morbidity

Risk of experiencing a higher claims burden from traditional health, critical illness, long-term care, and disability covers

Product: Critical illness insurance



Helps consumers to protect their life quality in case of a life-threatening disease



Payment



Income protection/medical insurance
Payment of claim incurred

Critical Illness
Payment of lump sum insured

Hannover Re's contribution



- + Coverage of > than 160 diseases
- + Design, pricing & claims assessment
- + Advice & training in underwriting risks
- + Track record as innovator in the market

Example: services offered with risk and/or financial solutions



Products

Innovative, e.g. products with little or no underwriting



Processes

Lean, e.g. distribution directly to individuals, without advisers



Biometrics

Cover of death, disease or disability risks at an appropriate cost



Risk assessment

Support for proper medical & claims assessment



U/W systems

hr | Quirc, hr | ReFlex or hr | Ascent

Primary differences between L&H and P&C business

Simplified illustration

Accounting considerations (premium)

Single



Recurring

IBNR reserve impact

Low



High

Involvement of brokers

Low



High

Number of competitors

Few



Many

Number of reinsurer participating in one treaty

Few



Many

Premium margin as meaningful benchmark

Low



High

Reinsurance contract terms

Short term



Long term

Saving component in premium

None



Common

Share of proportional business

Low



High

Property & Casualty business ▲ Life & Health business ◆

Takeaways for the Life & Health Business Group

1

Business

All lines of life, health & annuities

2

Focus

Biometric risks not asset risk

3

Relationship

Long term due to very long run-off

4

Service

An important component

5

Premium

Not the only meaningful benchmark → EBIT

6

Financial solutions business

Key driver of earnings

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Strong operating cash flow driven by premium growth

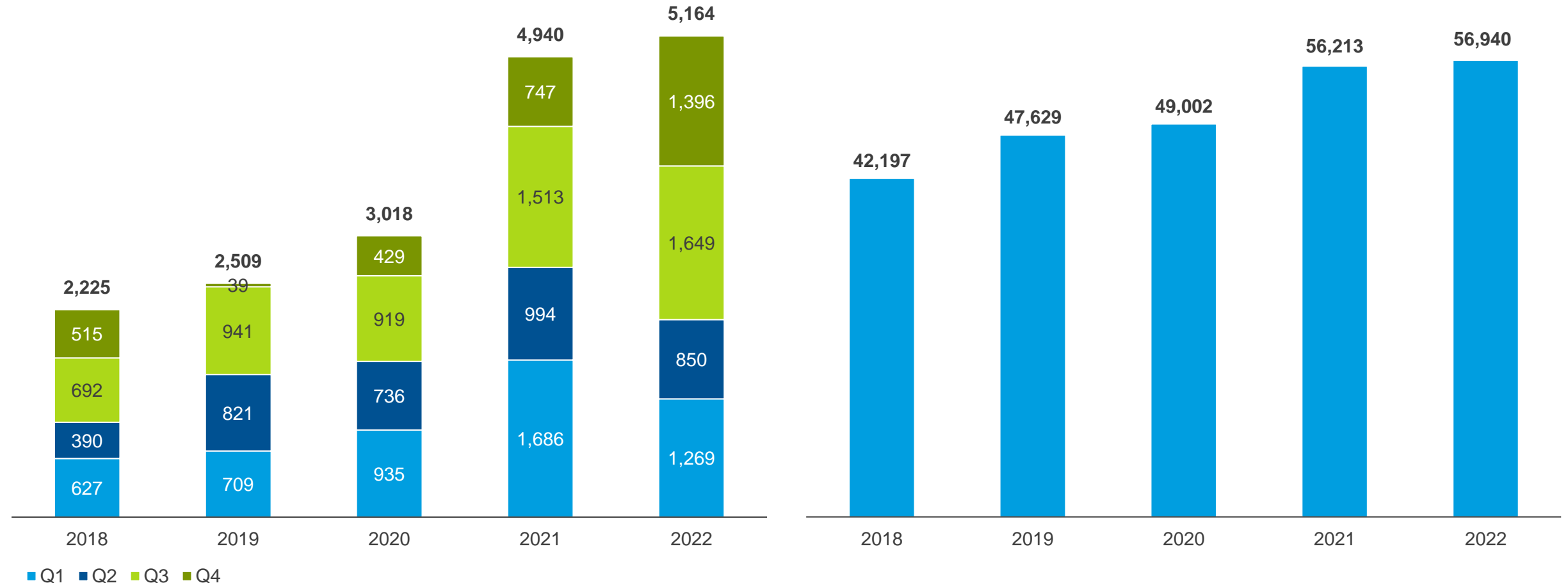
AuM +1.3%, cash flow and stronger USD offset impact of rising interest rates

Operating cash flow

in m. EUR

Assets under own management (AuM)

in m. EUR



Increasing assets under own management and net investment income

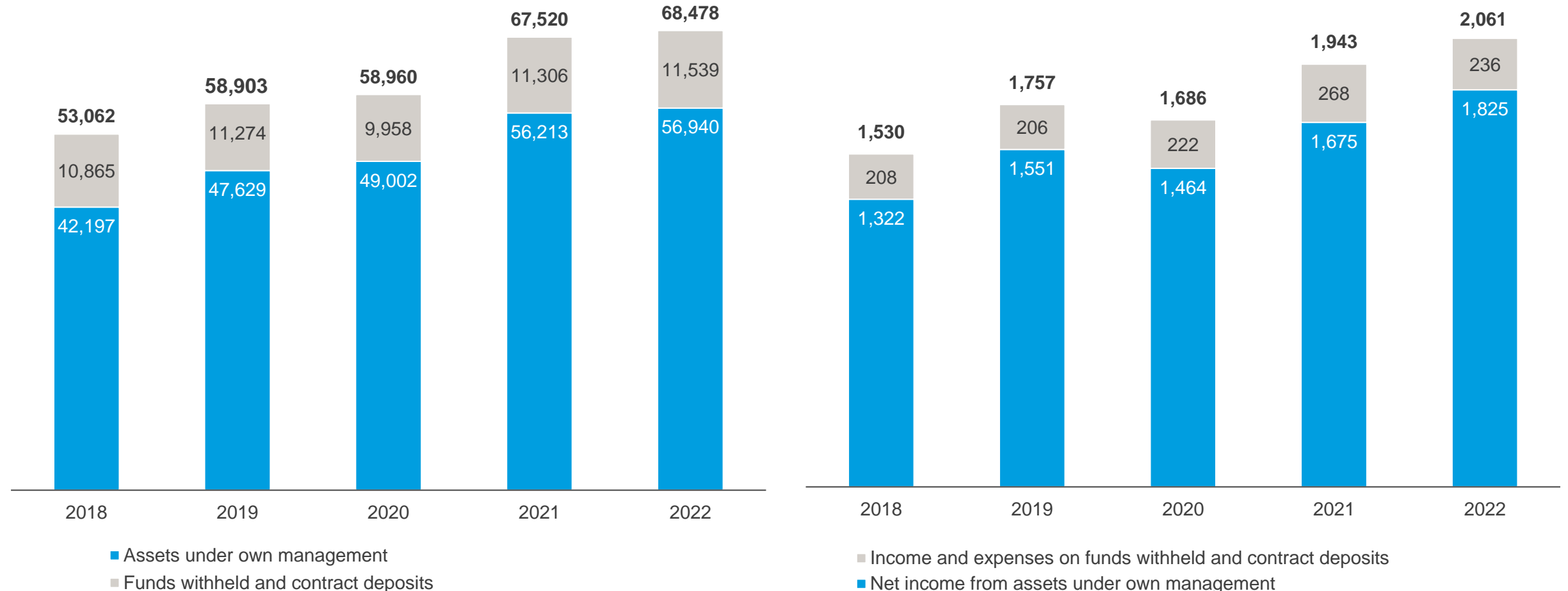
Assets under own management at EUR 57 bn.

Total investments

in m. EUR

Investment income

in m. EUR

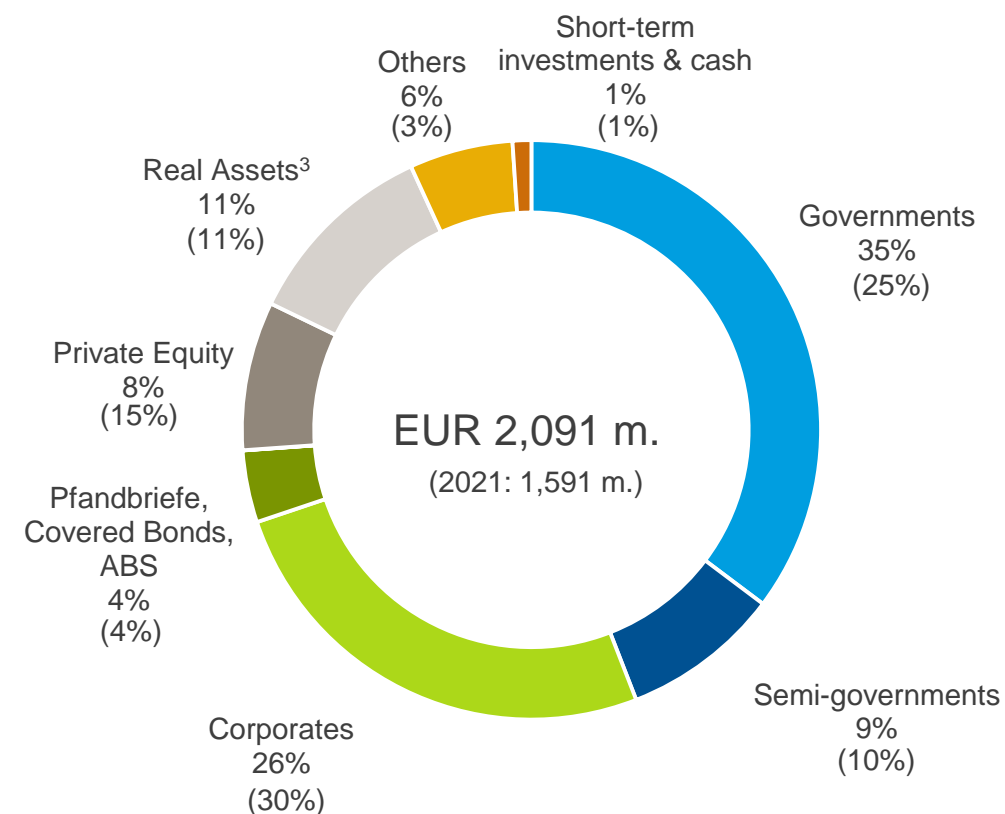


Stable asset allocation with defensive credit risk taking since beginning 2022

Listed equities sold; increased liquidity to seize market opportunities

Asset class	2018	2019	2020	2021	2022
Fixed Income	87%	87%	85%	86%	83%
Governments	44%	42%	42%	40%	42%
Semi-governments	7%	8%	7%	8%	8%
Corporates	29%	31%	30%	32%	27%
Investment grade	25%	26%	25%	28%	23%
Non-Investment grade	4%	4%	4%	4%	4%
Covered Bonds	5%	4%	4%	4%	4% ²⁾
ABS/MBS/CDO	2%	2%	2%	2%	3%
Equities	2%	3%	3%	4%	3%
Listed	<0.1%	<0.1%	1%	1%	0%
Private Equities	2%	2%	3%	3%	3%
Real Assets (without Infra-Debt)	6%	5%	5%	5%	7%
Others	1%	2%	3%	2%	3%
Cash/STI	4%	3%	3%	3%	3%
MV AuM in EUR bn.	42.7	48.2	49.8	56.2	57.4

Ordinary income split



1) Economic view based on market values without outstanding commitments for Private Equity and Alternative Real Estate as well as fixed-income investments of EUR 2,061.7 m. (EUR 1,588.2 m.) as at 31 December 2022

2) Of which Pfandbriefe and Covered Bonds = 59.0%

3) Before real estate-specific costs. Economic view based on market values as at 31 December 2022

High-quality fixed-income book well balanced

Geographical allocation mainly in accordance with our broad business diversification

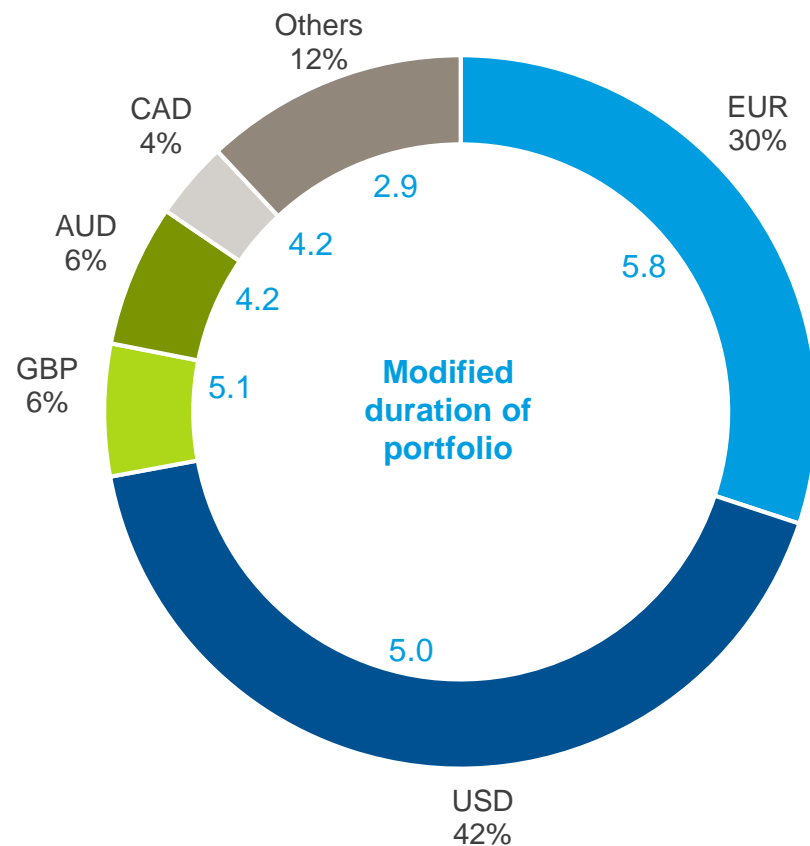
	Governments	Semi-governments	Corporates	Pfandbriefe, Covered bonds, ABS	Short-term investments, cash
AAA	75%	54%	0%	59%	-
AA	10%	23%	9%	13%	-
A	10%	8%	35%	13%	-
BBB	4%	1%	44%	13%	-
<BBB	1%	14%	12%	2%	-
Total	100%	100%	100%	100%	-
Germany	15%	22%	3%	18%	22%
UK	7%	1%	6%	6%	7%
France	2%	1%	6%	8%	1%
GIIPS	0%	3%	6%	8%	0%
Rest of Europe	3%	15%	12%	21%	4%
USA	53%	13%	32%	19%	15%
Australia	2%	17%	6%	5%	7%
Asia	17%	26%	20%	10%	39%
Rest of World	2%	1%	9%	5%	7%
Total	100%	100%	100%	100%	100%
Total b/s values in m. EUR	21,088	7,553	15,096	3,571	1,855

IFRS figures as at 31 December 2022

Currency allocation and duration

Duration-neutral strategy intact; lower modified duration as result of yield increases

Currency split of investments



- Modified duration of fixed-income mainly congruent with liability- and capital-driven targets
- GBP's higher modified duration predominantly due to life business

Modified duration

2022	4.9
2021	5.8
2020	5.8
2019	5.7
2018	4.8

Stress tests on assets under own management

Spread risks remain in focus

Portfolio	Scenario	Change in market value in m. EUR	Change in OCI before tax in m. EUR
Equity (listed and private equity)	-10%	-200	-200
	-20%	-399	-399
Fixed-income securities	+50 bps	-1,188	-1,153
	+100 bps	-2,312	-2,244
Credit spreads	+50%	-908	-889

As at 31 December 2022

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Our capital structure consists not only of equity

Use of hybrids, securitisations etc. lowers cost of capital and levers RoE

- Equity capital is by far the most expensive form of capital. Therefore, we make optimal use of equity substitutes:
 - Conventional reinsurance/retrocession on an opportunistic basis (i. e. use of other reinsurers' capital)
 - Alternative capital market transactions
 - Hybrid capital

Type	Nominal amount	Issue date	Issue ratings S&P / A.M. Best	First call date	Maturity	Coupon rate
Dated subordinated bond ISIN: XS2549815913	EUR 750 m.	2022-11-14	A / -	2033-02-26	2043-08-26	Until 2033-08-26: 5.875% p. a. and thereafter 3.75% p. a. above 3 months EURIBOR
Dated subordinated bond ISIN: XS2320745156	EUR 750 m.	2021-03-22	A / -	2031-12-30	2042-06-30	Until 2032-06-30: 1.375% p. a. and thereafter 2.33% p. a. above 3 months EURIBOR
Dated subordinated bond ISIN: XS2198574209	EUR 500 m.	2020-07-08	A / -	2030-07-08	2040-10-08	Until 2030-10-08: 1.75% p. a. and thereafter 3.00% p. a. above 3 months EURIBOR
Dated subordinated bond ISIN: XS2063350925	EUR 750 m.	2019-10-09	A / -	2029-07-09	2039-10-09	Until 2029-10-09: 1.125% p. a. and thereafter 2.38% p. a. above 3 months EURIBOR
Undated subordinated bond ISIN: XS1109836038	EUR 500 m.	2014-09-15	A / a+	2025-06-26	Perpetual	Until first call date: 3.375% p. a. and thereafter 3.25% p. a. above 3 months EURIBOR
Dated subordinated bond ISIN: XS0856556807	EUR 500 m.	2012-11-20	A / aa-	2023-06-30	2043-06-30	Until first call date: 5.00% p. a. and thereafter 4.30% p. a. above 3 months EURIBOR

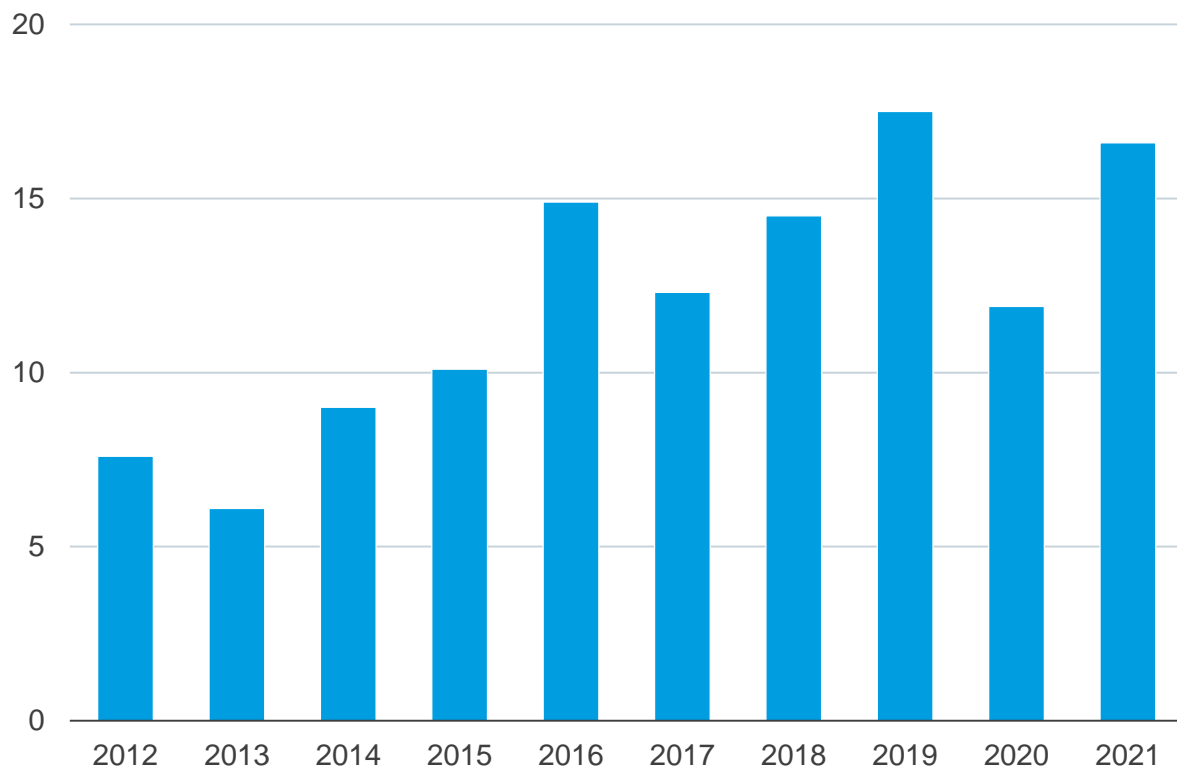
Competitive advantage through low cost of capital (WACC)

Senior bond not recognised as regulatory capital

Leverage ratios support HR's excellent ratings

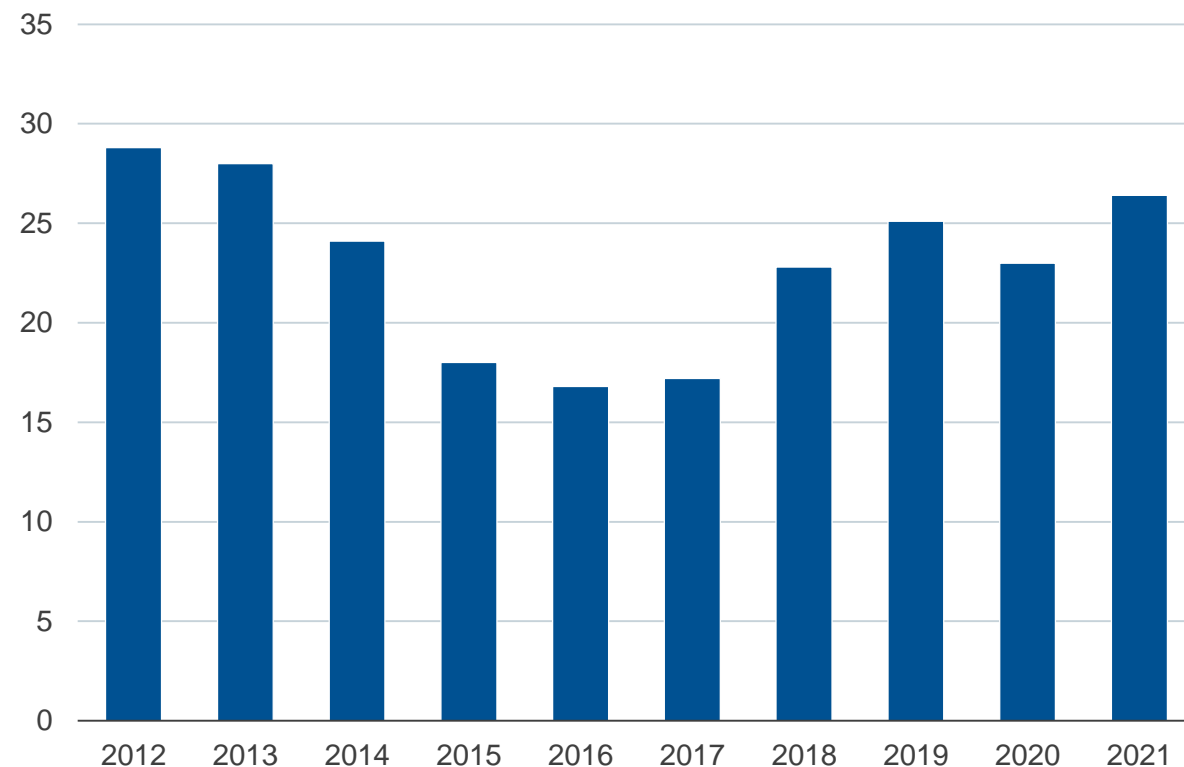
S&P's view on Hannover Re

EBITDA fixed charge coverage (x)¹⁾



Financial leverage²⁾

in %

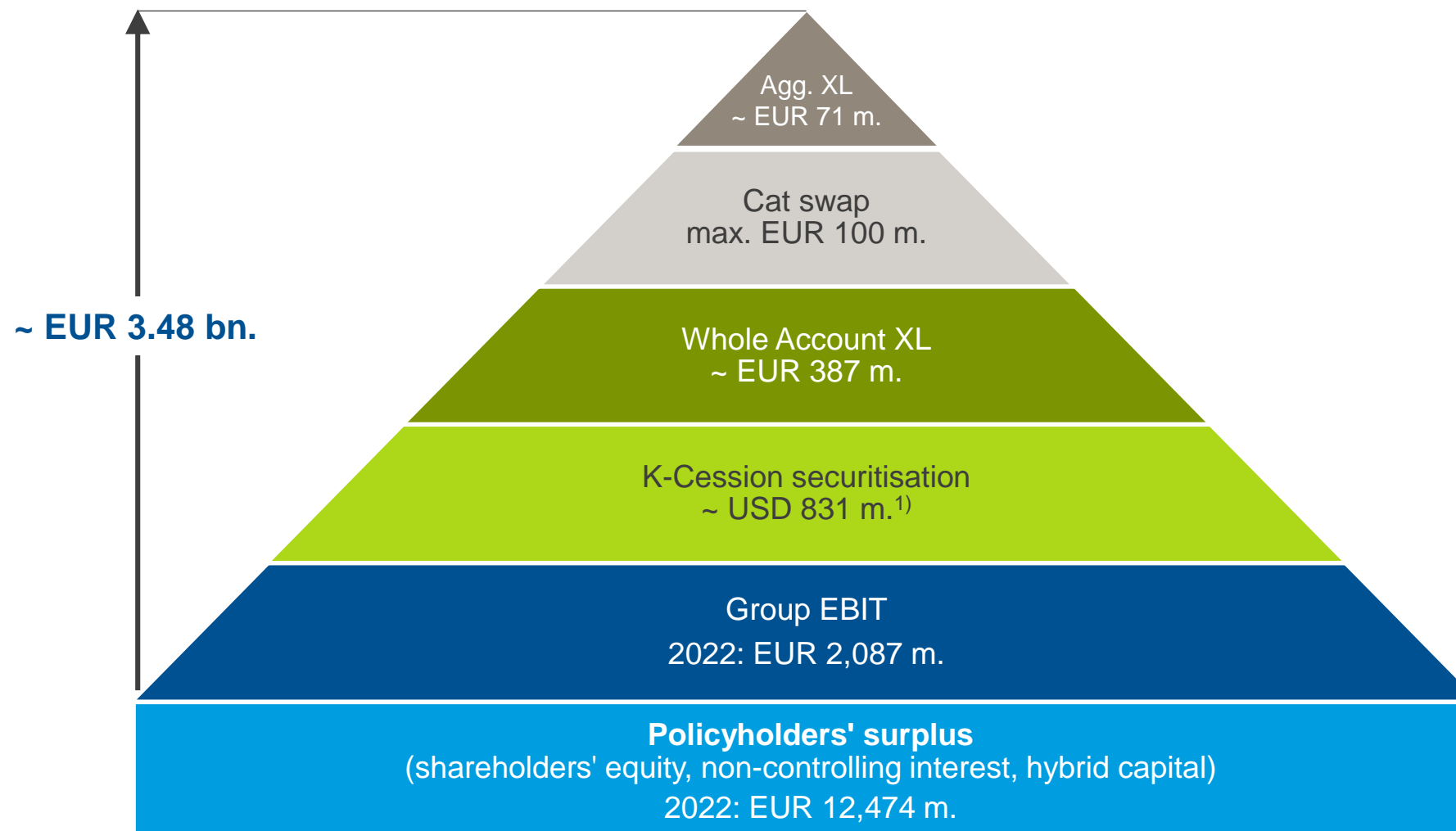


Source: Standard & Poor's rating report of Hannover Re as of 22 August 2022

1) Fixed charge coverage: EBITDA divided by sum of interest expenses and interest on operating lease (S&P definition)

2) Financial leverage: calculated as debt & hybrid capital, pension and operating lease commitments as of economic capital available (S&P definition)

Net risk appetite geared to the desired level with one of the largest retrocession programme in the market



1) Plus expected premium
As at March 2023

We pioneered in transferring risks into capital markets via securitisations

Equity Substitutes

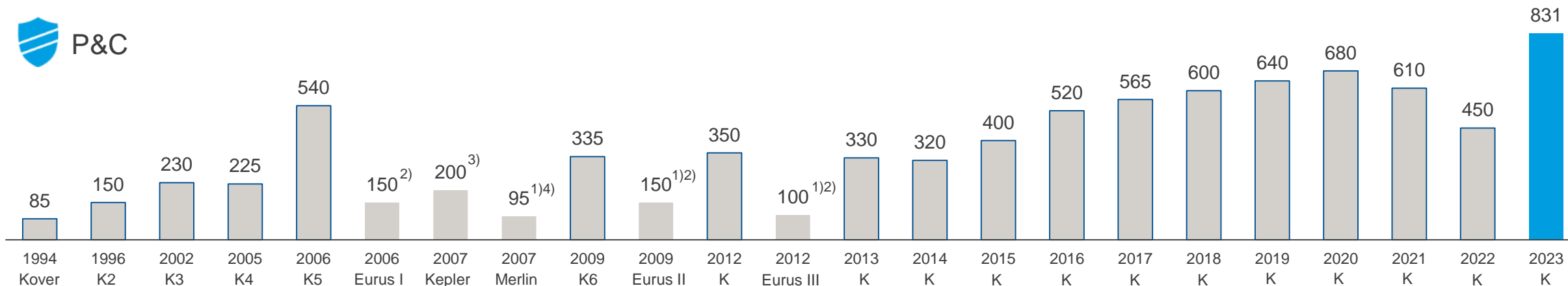
Transactions

(in m. USD if not otherwise stated)

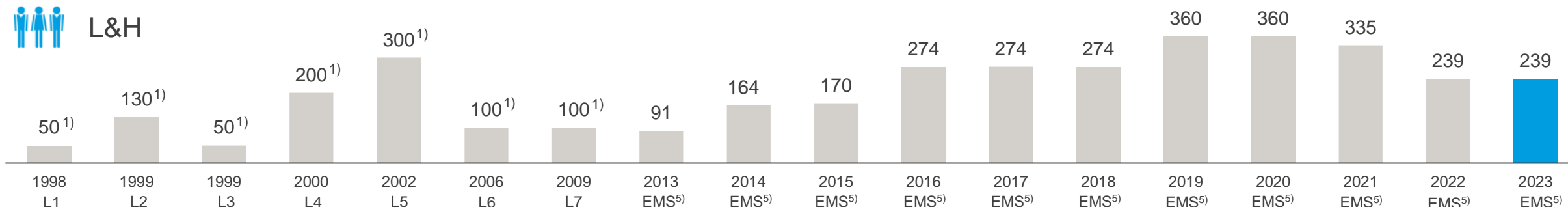
■ Expired transactions ■ On-going transactions ■ Portfolio-linked securitisation (P&C), K-Cessions



P&C



L&H



1) In m. EUR

2) Index-linked securitisation

3) Aggregate XL cover (P&C)

4) Credit-linked floating rate note

5) EMS = Extreme Mortality Swap

- In **1994** Hannover Re pioneered the first securitisation of natural catastrophe risks (**Kover**) followed by further transactions (K2-K6 & K-Cessions)
- In **1998** we started with the first-ever transfer of acquisition costs from L&H business to the capital market (“L” deals, L1-L7)

Financial strength ratings

Group

Berkshire Hathaway

Hannover Re

Munich Re

XL Bermuda

Swiss Re

Everest Re

Partner Re

SCOR

Lloyd's

S&P

AA+

AA-

AA-

AA-

AA-¹⁾

A+

A+

A+

A+

A.M. Best

A++

A+

A+

A+

A+

A+

A+

A²⁾

A

As at 2 August 2023

1) Negative outlook

2) Positive outlook

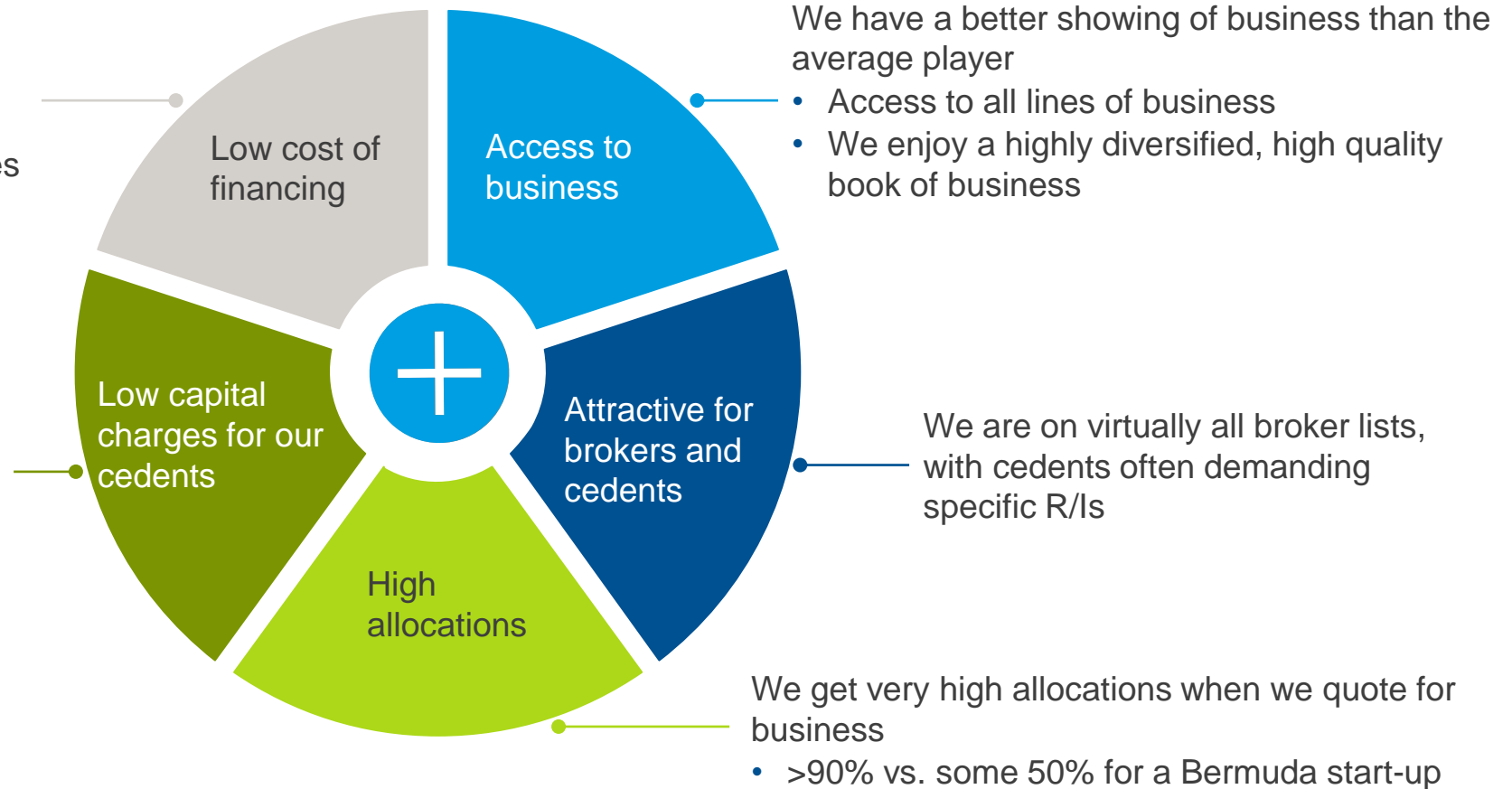
Benefits of an above-average rating

Our cost of financing in the capital markets is lower

- Hybrid bonds trade at tighter spreads
- Better conditions for LoCs and credit lines

We create lower capital charges for our cedents

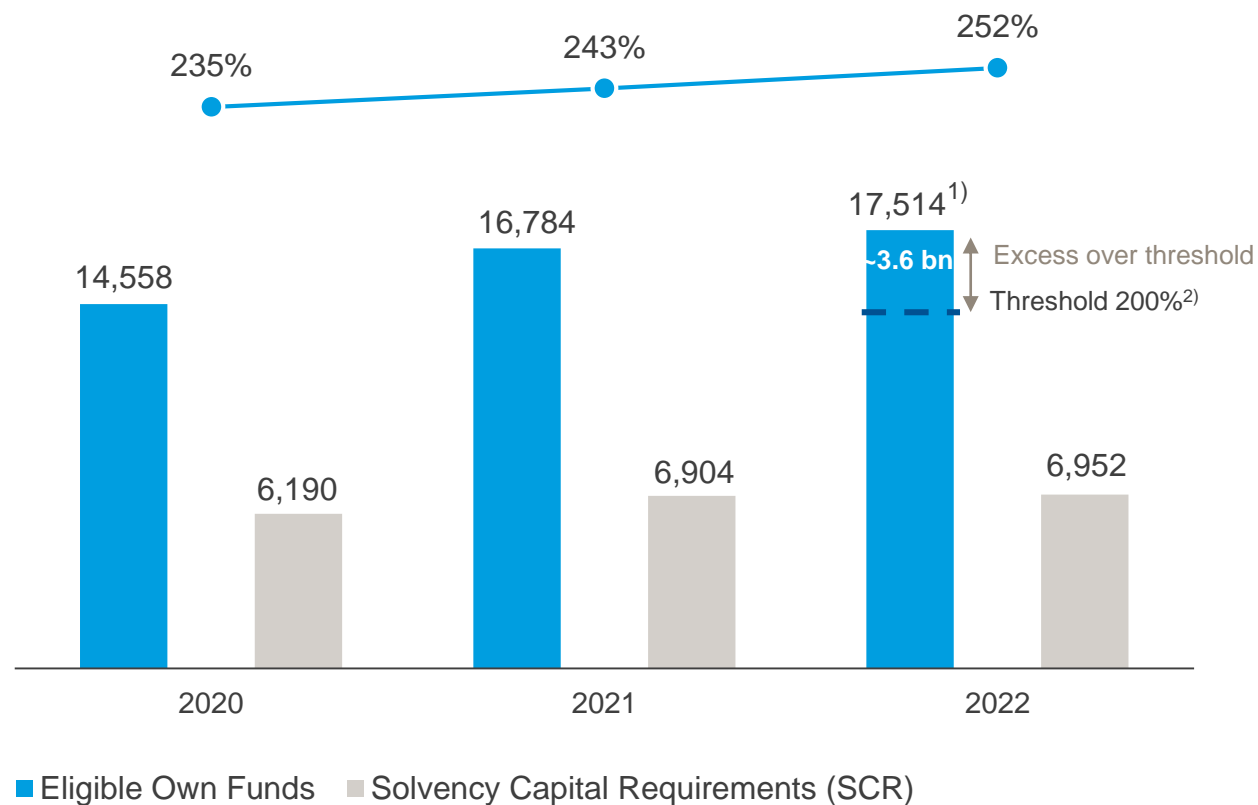
- "AA" range S&P capital charge on reinsurance recoverables = 0.8% ("A" = 1.4%, BBB = 3.1%)
- As an above-average rated R/I, we "minimise" our cedents' cost of capital



Capital adequacy ratio remains well above target

Own Funds increase supported by operating earnings and new hybrid bond

Development of the Solvency II ratio

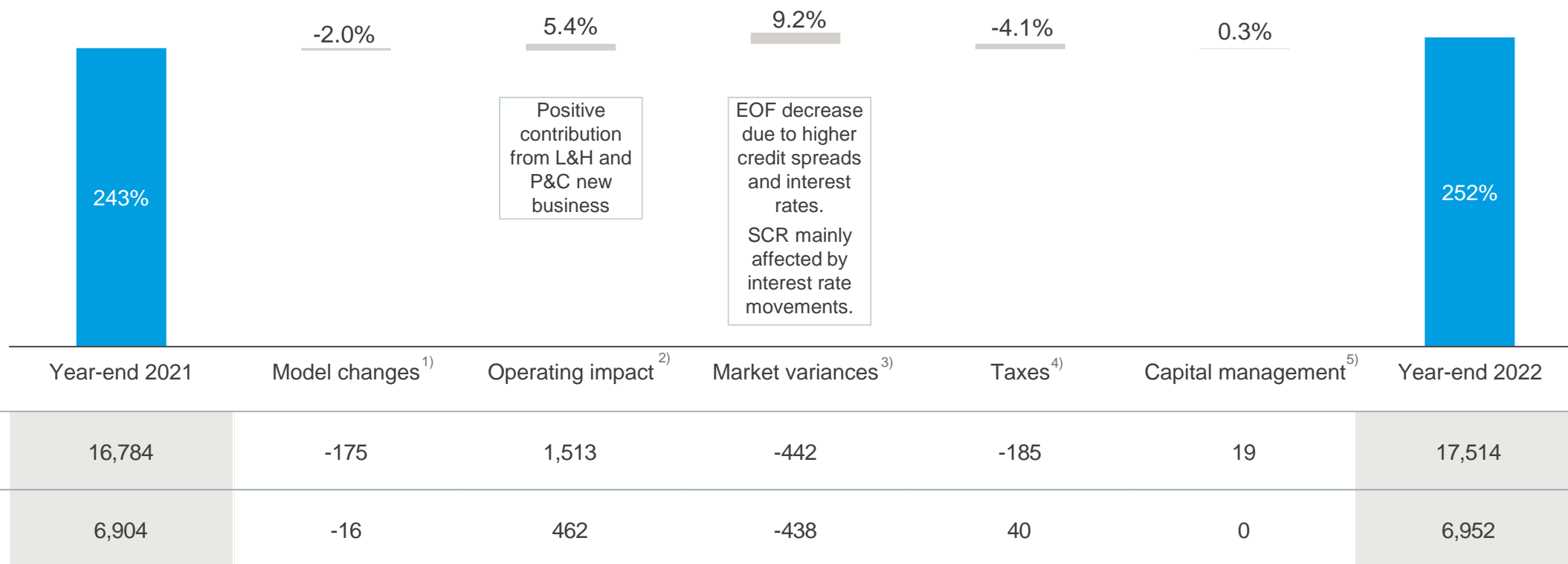


- Increase in eligible own funds due to strong operating capital generation and issuance of new hybrid bond (EUR 750 m.)
- SCR increased mainly as a result of business growth and higher asset volumes as well as stronger f/x rates compared to EUR with offsetting effects from interest rate movements
- Increase in excess capital supports further business growth

Strong capital generation driven by business growth

Increase in solvency ratio supported by issuance of new hybrid bond

Solvency II movement analysis



Figures in m. EUR.

1) Model changes (pre-tax) in terms of Eligible Own Funds (EOF) relate to the calculation of technical provisions, mainly L&H. Changes in terms of Solvency Capital Requirements (SCR) relate to the regulatory approved internal capital model.

2) Operating earnings and assumption changes (pre-tax). EOF increase includes the L&H new business value of EUR 496 m.

3) Changes (pre-tax) due to movements in foreign exchange rates, interest rates, credit spreads, inflation (mainly investments) and other financial market indicators.

4) Tax payments and changes in deferred taxes.

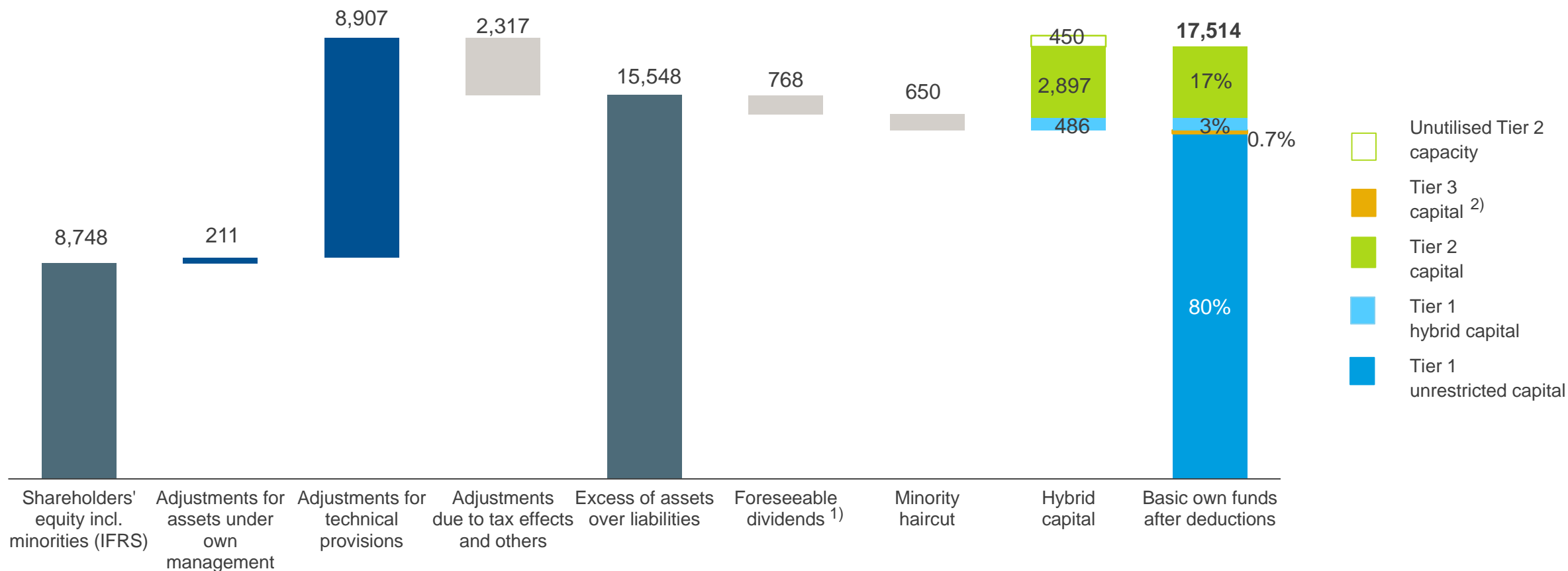
5) Incl. dividend payments and changes in foreseeable dividends and the issuance of a hybrid bond of EUR 750 m.

High-quality capital base with 83% Tier 1

Unutilised Tier 2 provides additional flexibility

Reconciliation of IFRS Shareholders' equity vs. Solvency II own funds

in m. EUR



As at 31 December 2022

1) Foreseeable dividends and distributions incl. non-controlling interests

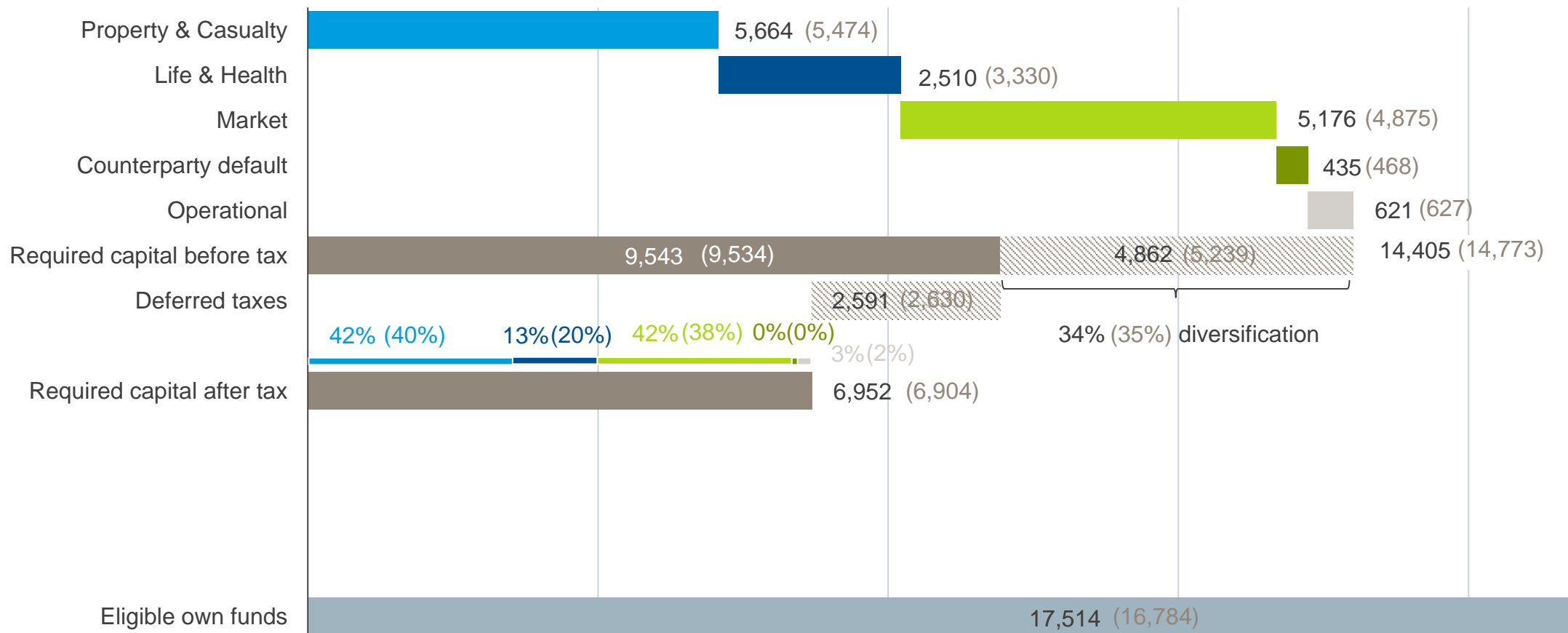
2) Net deferred tax assets

Efficient capital deployment supported by significant diversification

Increase in own funds and capital requirements in line with business growth

Solvency Capital Requirements

in m. EUR



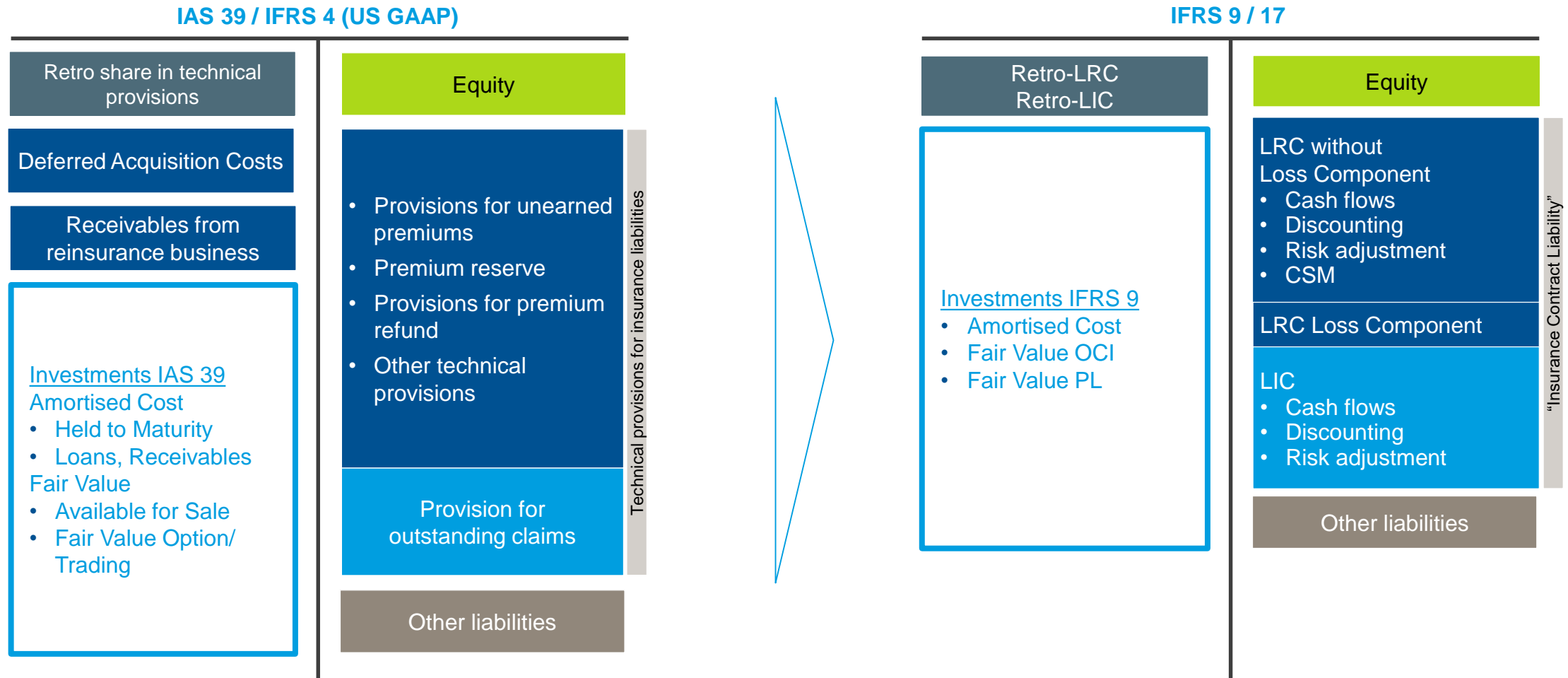
As at 31 December 2022 (2021)
 Solvency capital requirements based on the internal model
 Capital allocation based on Tail Value-at-Risk taking account of the dependencies between risk categories

Agenda

1	Hannover Re Group	2
2	Property & Casualty reinsurance	31
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IFRS 17 significantly changes the structure of the balance sheet

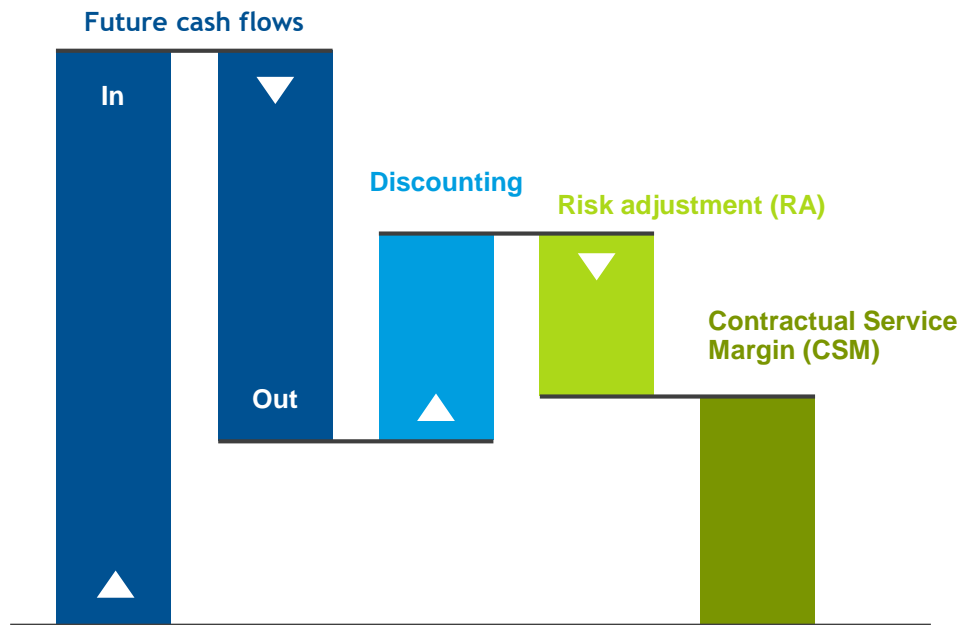
IFRS 9 changes the classification and measurement of financial instruments



IFRS 17 - Full adoption of GMM allows to steer business on a consistent basis

Ensuring transparency and bridging the GA(A)P to economic view

Full adoption of General Measurement Model (GMM) for entire business (P&C and L&H)



Valuation methods and rationale

- Cash flows and economics of reinsurance business will remain unchanged
- IFRS 17, in particular **GMM** as default model, is complex with significantly increased data and other requirements
- However, we have taken a broader, long-term view and aim to use the change in accounting as **transformational** in order to
 - increase transparency on **earning patterns** and **value creation**, incl. comparability between lines of business
 - improve alignment with both Solvency II and internal performance measures (IVC: Intrinsic Value Creation)
 - review our data and IT infrastructure, streamline processes and increase automation
 - solve systematic IFRS4 accounting mismatches and reward asset-liability management efforts
 - improve steering and managing of our portfolios
- Adoption of **OCI option** for large parts of our portfolio to match investment valuation will reduce volatility from interest rate movements
- **Prudent reserving approach** will be maintained and – together with CSM and RA at transition – help to manage potential increased volatility

IFRS 9 - Fundamental revision of accounting rules for financial instruments

Higher share of assets at Fair Value through P&L

Classification and valuation

- Majority of investments in **scope of IFRS 9** (direct real estates out of scope)
- IAS 39 **categories** HtM, L&R, AfS, FVPL will change to
 - Amortised Costs (AC)
 - Fair Value through P&L (FVPL)
 - Fair Value through OCI (FVOCI)
 - Fair Value through OCI w/o recycling (FVOCI non-recycling)
- Reduced flexibility in assigning financial instruments to valuation categories (“**SPPI**” criteria)
- Business model „**Hold & Sell**“ has been applied, i.e. most financial instruments **continue to be classified as FVOCI** (~ 93%)
- **FVPL** volume rises significantly
- **Expected Credit Loss** (ECL) becomes new P&L component
- Existing **currency accounting mismatch** (monetary vs. non-monetary items) will be mitigated with changes in FV of investment funds (incl. Private-Equity, Real-Estate, fixed-income funds and the respective f/x effects) now being recognised in P&L (previously OCI)
- Minor effect on **equity** at transition (amortised costs instruments)

SPPI = Solely payment of principle interest

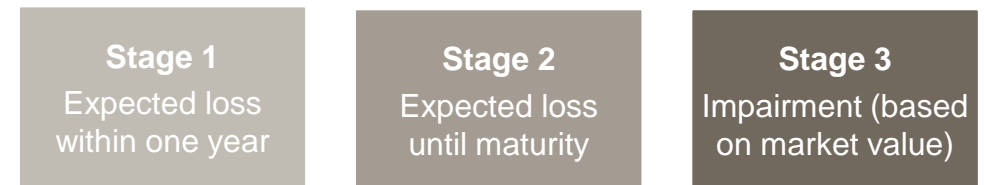
Assets categorised Fair Value P&L

- Main asset classes: Private-Equity, Real-Estate, fixed-income funds



Introduction of Expected Credit Loss (ECL)

- ECL is measured at acquisition for all fixed-income instruments categorised Amortised Cost or Fair Value OCI
- In case of a significant change in credit quality, probability of default changes from 1 year to remaining maturity



Transition to IFRS 17 moderately increases earnings level

Impact of IFRS 17/9 accounting change



Property & Casualty reinsurance

- Prudent Reserving approach and Retro Strategy continue to mitigate overall volatility
- OCI option limits volatility of technical result and equity



Life & Health reinsurance

- CSM release with stabilising effect on overall result
- OCI option limits volatility of technical result and equity



Investments

- Volatility likely to increase due to higher share of assets FVPL, but due to "hold & sell" >90% FVOCI
- Minor impact from introduction of Expected Credit Loss
- Insurance related derivatives reflected in technical result



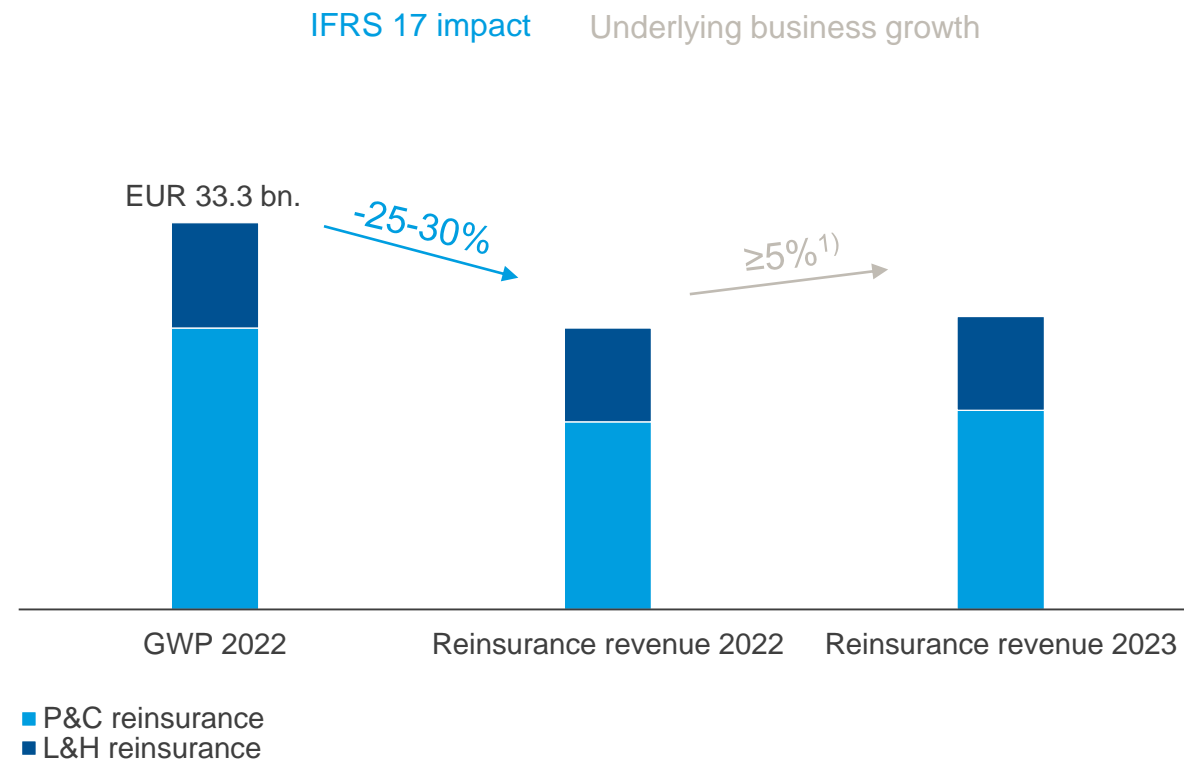
- Minor impact from accounting change

- Minor impact for large parts of L&H business
- Uplift from unlocking effect for mortality business with long durations

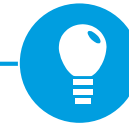
- Minor impact from accounting change

Reinsurance revenue will be lower than gross written premium

Reinsurance revenue



1) At unchanged f/x rates



Accounting impact IFRS 17

- Exclusion of commissions and non-distinct investment components (NDIC) ↘
- Exclusion of unearned premiums (mainly impacting P&C) ↘
- Inclusion of result from deposit-accounted Financial Solutions business ↗

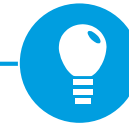
P&C: IFRS 17 with limited impact on earnings level

Prudent reserving approach



Underlying development

- Positive impact from margin improvements expected in 2023 renewals provides flexibility to strengthen resilience reserve
- Prudent reserving approach
- Large loss budget increased to EUR 1,725 m.



Accounting impact IFRS 17

Discounting

- Lower Combined ratio due to discounting of cash flows, offsetting impact from interest accretion in insurance finance expenses
- OCI option limits volatility of technical result and equity

Reserving

- Prudent best estimate reflected in LIC; expectation of positive run-off result (A/E experience)
- As a result of prudent initial reserving parts of the loss component might ultimately not be loss making
- Risk adjustment (RA) provides additional layer of prudence

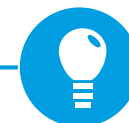
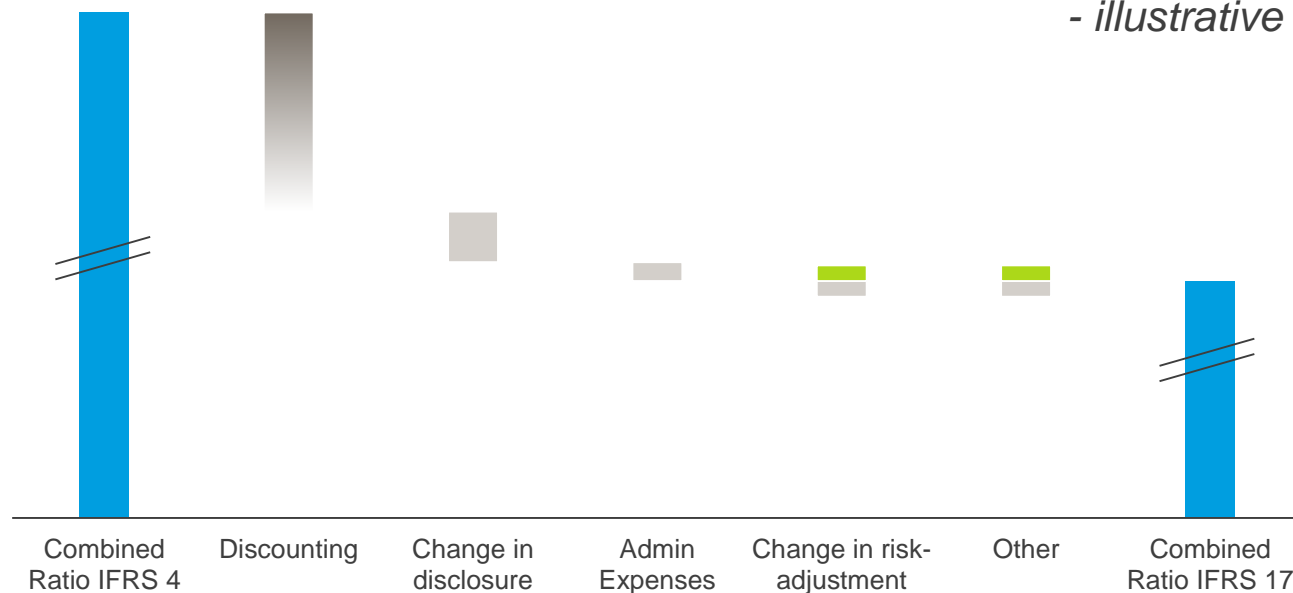
P&C: translation to IFRS 17 metrics results in lower combined ratio

Outlook 2023: Expected margin improvements enable strengthening of resiliency

IFRS 17 combined ratio (net / net calculation)

$$\text{Combined ratio} = \frac{\text{Reinsurance service expenses (net)}}{\text{Reinsurance revenue (net)}^{1)}$$

- illustrative -



Accounting impact IFRS 17

Discounting

- Positive impact on combined ratio (magnitude depending on interest rate level)

Change in disclosure

- Deduction of commissions and NDIC²⁾ from both numerator and denominator

Admin expenses

- Directly attributable expenses are lower than IFRS 4 admin expenses
- Moderate positive impact of ~0.6%p reflects overall low expense ratio

Risk adjustment

- Business growth with negative impact on combined ratio

Other

- Other methodological changes (e.g. seasonality of loss component)

L&H: IFRS 17 transition effects will lead to moderately higher earnings level

Outlook 2023: further growth mainly from Longevity and Financial Solutions



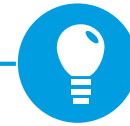
Underlying development

- Supported by further growth mainly in Longevity and Financial Solutions
- Further decreasing impact from Covid-19



Insurance service result

- Insurance service result will include full profitability of underwriting activity
 - Includes result from currently deposit accounted treaties in Financial Solutions
 - Includes planned income from funds withheld



Accounting impact IFRS 17

- Focus of transition approach on sustainability of future earnings
- Better reflection of value and earnings of L&H business
- Increasing transparency in particular in connection to CSM development
- Overall similar earnings pattern (largely unchanged for Financial Solutions and Longevity business)
- Transition to IFRS 17 results in unlocking of best estimate liability and unlocking of discount rates to current interest rates

EBIT level up by mid to high double-digit million

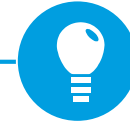
Investments: IFRS 9 has limited impact on underlying earnings level

P&L volatility likely to increase due to higher share of assets FVPL



Underlying development

- Ordinary investment income
 - Increasing contribution from fixed income securities (excl. inflation-linked bonds),
 - Decreasing contribution from inflation-linked bonds based on currently embedded inflation expectation
 - Planned contribution from alternative investments in line with 2022
- No realised gains / losses planned
- Current economic environment bears risk of decreasing valuation of private equity and real estate



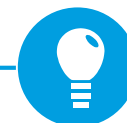
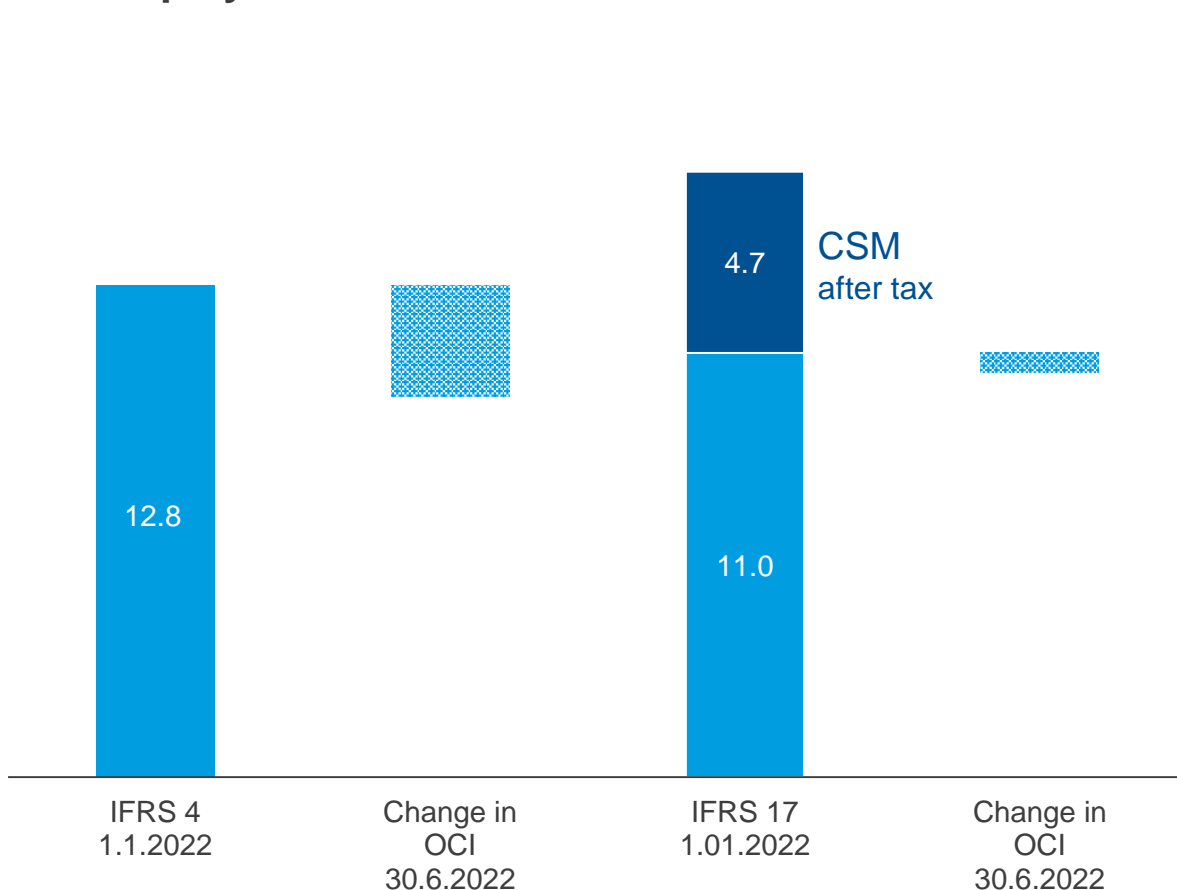
Accounting impact IFRS 9

- Volatility likely to increase (more pronounced in P&C) due to higher share of assets FVPL
 - Increase from <1% to ~7.5%, main asset classes: Private-Equity, Real-Estate, fixed-income funds
- Minor impact from introduction of Expected Credit Loss
- Insurance related derivatives reflected in technical result

Strategic RoE target increased to 1000 bps above risk free... ...reflecting transition to IFRS 17/9

Total equity

in bn. EUR



Accounting impact IFRS 17

$$RoE = \frac{\text{Group net income} \uparrow}{\text{Average equity} \downarrow}$$

- Unlocking of best-estimate liabilities in L&H results in decrease of shareholders' equity and increase in EBIT (mid to high double-digit millions)

Shareholders' equity will be more stable due to improved matching of assets and liabilities

RoE uplift of 100bps

All figures as of 1.1.2022, preliminary unaudited figures

Risk-adjustment methodology based on internal view on price for insurance risks



Interest rates

- Bottom-up approach (risk-free rates + illiquidity premium (ILP))
- Interest rates based on SII, adjusted to better reflect economic reality and Hannover Re portfolio

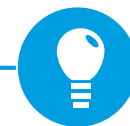
IFRS 17 risk-free rates

- largely aligned with SII methodology, differences in extrapolation

IFRS 17 ILP

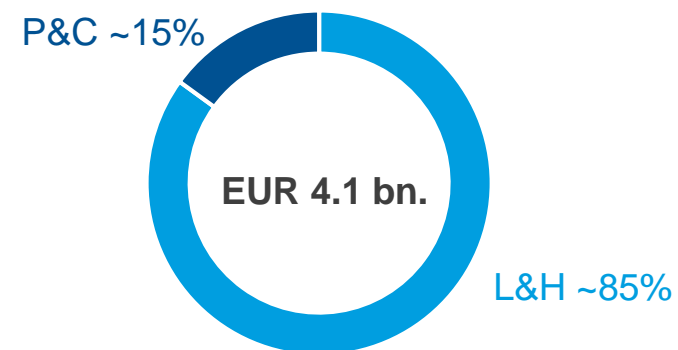
- based on SII methodology with use of individual asset portfolio
- Duration-dependent ILP for EUR and USD to reflect the dependency between spread levels and duration

Changes in interest rates will largely be reflected in OCI



Risk adjustment

- Margin approach aligned with pricing metrics for insurance risks calculated with available capital as base
- Consideration of group diversification
- Confidence level of risk adjustment ~80%
- Risk adjustment (RA) is sensitive to interest rate movements
- Risk adjustment (at transition) at similar level to Solvency II risk margin



All figures as of 1.1.2022, preliminary unaudited figures

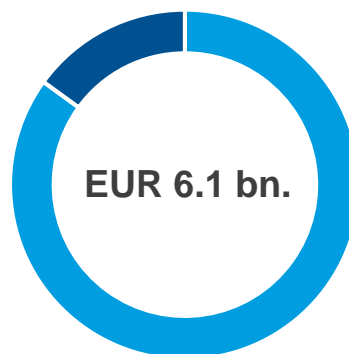
CSM reflects future profits of L&H reinsurance business and stabilises profit emergence over time



Contractual service margin

P&C ~15%

- (Low) level of CSM reflects short duration of business and conservative reserving
- Well diversified by line of business and region
- Release of CSM largely within two years

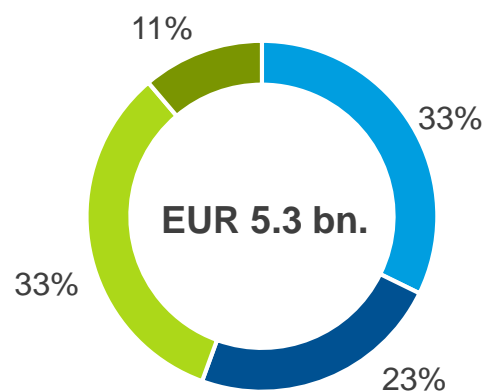


L&H: ~85%

- New business contribution expected to be higher than CSM release (~10% p.a., on average/multi-year view)
- Volatility will mainly come from new or discontinued individual large transactions or assumption changes for business with long durations
- Interest-rate movements impact valuation of new business, overall CSM not materially affected due to locked-in interest rates

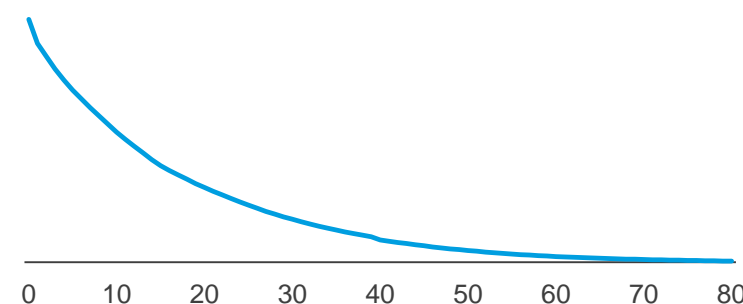
L&H CSM

- New business CSM + Loss Component on similar level to SII VNB
 - Only directly attributable costs included in IFRS 17 vs. full internal costs in SII
 - Differences in new business definition between IFRS 17 and SII



- FinSol
- Longevity
- Mortality
- Morbidity

Release of L&H CSM (in-force business)



All figures as of 1.1.2022, preliminary unaudited figures

Key take-aways: Greater transparency on future results

Increasing earnings in the medium term



- **Economic view:** More realistic and aligned presentation of market and interest rate developments
- **Increasing Transparency:** Additional items will help to estimate current financial status
- **Increased comparability:** Common set of valuation principles across the industry
- **Better visibility:** Better disclosure of information to anticipate future profits

Outlook for Hannover Re:

Property & Casualty reinsurance:

- Very favourable underlying market conditions
 - improved net risk return and underlying earnings profile provide increased flexibility to increase confidence level of reserves

Life & Health reinsurance:

- Positive underlying business development
 - profitable business growth mainly driven by Longevity and Financial Solutions
 - additional uplift from transition to IFRS17
- Further decrease of Covid-19-impact expected

Investments:

- Ordinary investments will benefit from higher interest rates
- Contribution from inflation-linked bonds is expected to decline (materially)
- Some allowance for negative FVPL impact from Private Equity and real estate

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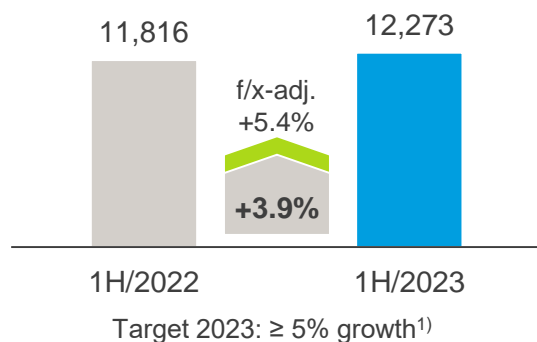
1H/2023 performance fully supports targets for the full year

Strong contribution from L&H and investments, increased resiliency in P&C

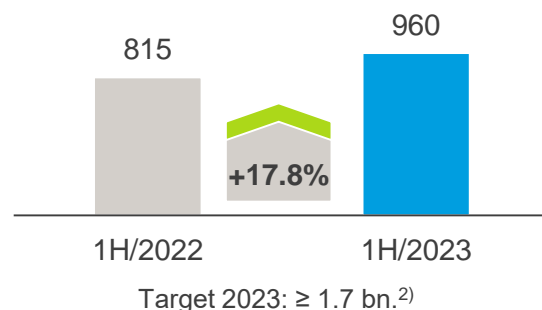


Group

Reinsurance revenue



Group net income



P&C reinsurance

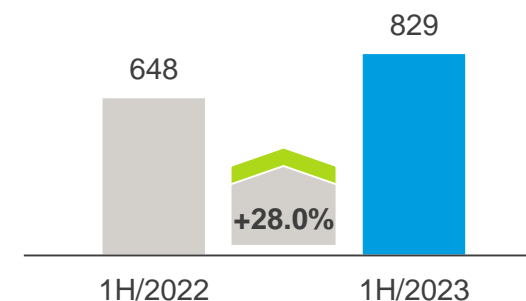
Reinsurance revenue (gross)

8.4 bn.
+6.6% (f/x-adj. +7.8%)

New business CSM & LC (net)

1,794 m.
+74.8%

EBIT



L&H reinsurance

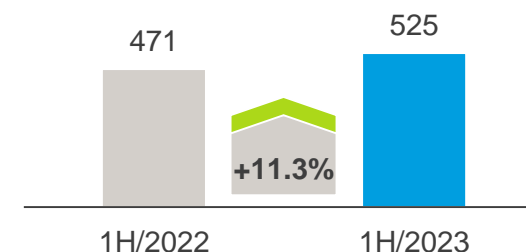
Reinsurance revenue (gross)

3.9 bn.
-1.5% (f/x-adj. +0.8%)

New business CSM & LC (net)

147 m.
-35.7%

EBIT



AuM
56.5 bn.
+2.1%

RoI
3.0%
Target 2023: ≥ 2.4%

RoE
21.0%
Target 2023: 10.8%

CSM (net)
7.3 bn.
+10.9%

Shareholders' equity
9.3 bn.
+2.2%

Solvency ratio
270%
30.06.2023

All figures in m. EUR unless otherwise stated

1) At unchanged f/x rates

2) Subject to no major distortions in capital markets and/or major losses not exceeding the large loss budget of EUR 1.725 bn. in 2023 and no further significant impact from Covid-19 on L&H result

Continued P&C margin improvement in favourable market environment

Revenue and profit in line with expectations, C/R reflects increase in resiliency

Property & Casualty R/I	Q2/2022	Q2/2023	1H/2022	1H/2023
Reinsurance revenue (gross)	3,262	3,765	7,850	8,365
Reinsurance revenue (net)	2,763	3,082	7,104	7,183
Reinsurance service result	208	283	397	598
Reinsurance finance result	(55)	(155)	(149)	(285)
Investment result	333	327	548	625
Other result	(136)	(91)	(148)	(108)
Operating profit/loss (EBIT)	349	363	648	829
Combined ratio (net)	92.5%	90.8%	94.4%	91.7%
New business CSM (net)	183	374	1,261	1,829
New business LC (net)	(46)	(10)	(235)	(35)

YTD

- **Reinsurance Revenue (RR) / New business CSM & LC (net)**
 - Reinsurance revenue growth +6.6% (f/x-adjusted +7.8%)
 - Strong growth in New business CSM & LC of 1,794 m. (+75%); mainly from EMEA, Americas and Structured Reinsurance/ILS; Increased New business CSM & LC from APAC despite decreasing revenue
- **Reinsurance service result (RSR)**
 - RSR supported by strong margin increase, reflected in higher New business CSM and lower New business LC
 - Large losses of 607 m. within 1H budget of 751 m., however booked to budget
 - Discount effect of ~5%, higher than interest accretion in finance result
 - Increase in confidence level of reserves
- **Investment result**
 - Strong ordinary income supported by higher fixed income yields (including 74 m. contribution from inflation-linked bonds)

All figures in m. EUR unless otherwise stated

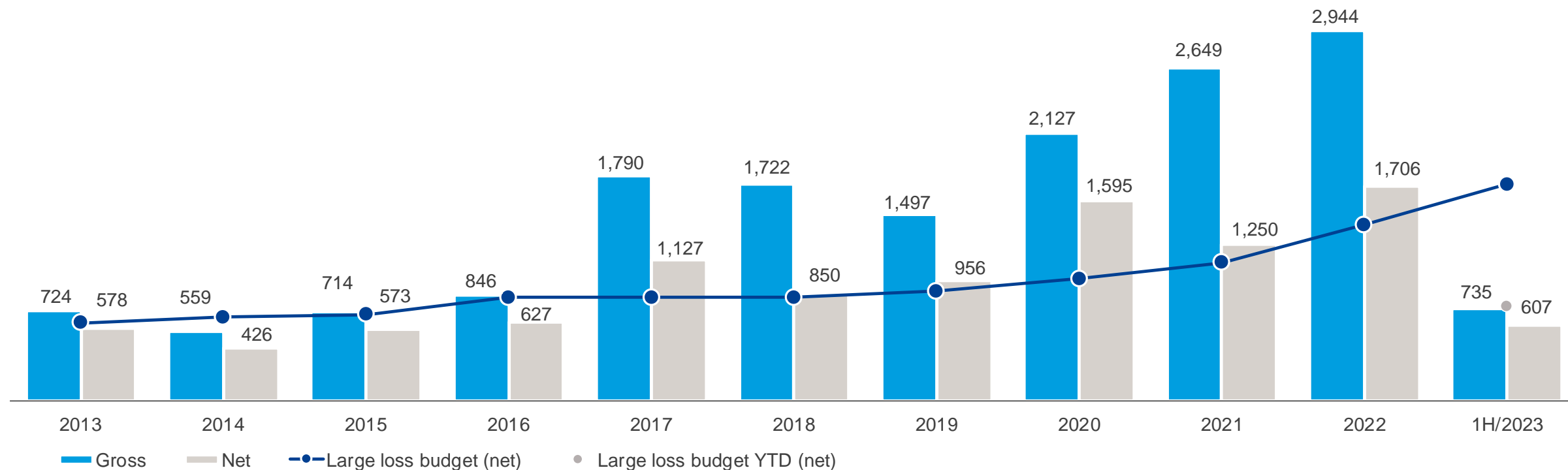
CSM = Contractual Service Margin

LC = Loss component

Large losses below 1H/2023 budget of EUR 751 m.

Natural and man-made catastrophe losses¹⁾

in m. EUR



Large loss budget (net) in m. EUR

625	670	690	825	825	825	875	975	1,100	1,400	1,725
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ILS share of gross loss in m. EUR

22	21	7	34	358	378	244	88	439	1,002	14
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1) Natural catastrophes and other major losses in excess of EUR 10 m. gross

Large losses within 1H/2023 budget of EUR 751 m.

NatCat losses below budget, man-made losses above budget

Catastrophe losses ¹⁾ in m. EUR	Date	Gross	Net
Floods, New Zealand	27 Jan - 6 Feb	89.3	45.3
Earthquake, Türkiye	6 Feb	262.8	257.0
Cyclone "Gabrielle", New Zealand	10 - 17 Feb	121.3	65.4
Hail / Storm, USA	01 - 03 Mar	20.9	6.2
Tornadoes, USA	24 - 27 Mar	11.5	11.4
Tornadoes / Storm, USA	30 Mar - 02 April	43.4	35.7
Rain / Flood, Italy	16 - 22 May	41.5	41.5
7 Natural catastrophes		590.6	462.5
5 Property losses		114.3	114.3
2 Credit losses		30.2	30.2
7 Man-made losses		144.5	144.5
14 Major losses		735.1	606.9

1) Natural catastrophes and other major losses in excess of EUR 10 m. gross
 Large loss budget 2023: EUR 1,725 m., thereof EUR 1,475 m. NatCat and EUR 250 m. man-made

Strong operating performance in L&H reinsurance

IFRS 17 with better reflection of value and earning power of business

Life & Health R/I in m. EUR	Q2/2022	Q2/2023	1H/2022	1H/2023
Reinsurance revenue (gross)	1,943	1,938	3,966	3,908
Reinsurance revenue (net)	1,805	1,775	3,697	3,544
Reinsurance service result	65	228	297	481
Reinsurance finance result	(28)	(20)	(57)	(58)
Investment result	99	142	276	225
Other result	36	(78)	(45)	(124)
Operating profit/loss (EBIT)	171	271	471	525
New business CSM (net)	110	67	229	151
New business LC (net)	1	2	(1)	(4)

YTD

- **Reinsurance Revenue (RR) / New Business CSM & LC (net)**
 - Reinsurance revenue (gross) stable: -1.5% (f/x-adjusted +0.8%)
 - Financial Solutions business increasing and fully captured in revenue, Longevity stable, slowdown in contribution from Mortality and Morbidity
- **Reinsurance service result (RSR)**
 - Improvement in RSR largely driven by Mortality, favourable claims experiences and rate improvements after significant Covid losses in 2022; one-off from recapture of UK retrocession treaty (+23 m.)
 - Financial Solutions with continued strong contribution
 - Continued business growth combined with very strong CSM of 5.8 bn. and RA of 2.9 bn. support sustainable and stable earnings outlook
- **Investment result**
 - Increase in ordinary income and higher result from fair value changes

All figures in m. EUR unless otherwise stated

Rol well above target, driven by favourable ordinary income

Resilient portfolio with minor impact from FVTPL valuation

in m. EUR	Q2/2022	Q2/2023	1H/2022	1H/2023	Rol
Ordinary investment income ¹⁾	453	490	876	941	3.4%
Realised gains/losses	(36)	(31)	(57)	(44)	-0.2%
Depreciations Real Assets, Impairments	(12)	(14)	(23)	(27)	-0.1%
Change in ECL	26	6	(20)	9	0.0%
FVTPL ²⁾ - Valuation	35	61	122	57	0.2%
Investment expenses	(34)	(43)	(75)	(86)	-0.3%
Investment result	432	470	825	851	3.0%

Unrealised gains/losses on investments (OCI)	31 Dec 22	30 Jun 23
Fixed Income	(4,863)	(4,476)
Equities	(0.1)	(0.1)
Real Assets	546	563
Others (Participations etc.)	275	282
Total	(4,042)	(3,632)

YTD

- Increase in ordinary income predominantly due to higher locked-in yields, contribution from inflation-linked bonds (74 m.) based on inflation expectation for current year
- Realised gains/losses driven by normal portfolio maintenance with minor changes on asset allocation
- Result from change in fair value of financial instruments driven by insurance-related derivatives
- Slight increase in asset volume driven by strong operating cash flow and partially lower interest levels
- Unrealised losses decreasing predominantly due to natural amortisation effects (pull to par)

All figures in m. EUR unless otherwise stated

1) Incl. results from associated companies

2) Fair Value Through P/L of financial instruments

Our business groups at a glance

1H/2023 vs. 1H/2022

in m. EUR	Property & Casualty R/I			Life & Health R/I			Total		
	1H/2022	1H/2023	Δ-%	1H/2022	1H/2023	Δ-%	1H/2022	1H/2023	Δ-%
Reinsurance revenue (gross)	7,850	8,365	6.6%	3,966	3,908	-1.5%	11,816	12,273	3.9%
Reinsurance service expenses	(7,283)	(6,896)	-5.3%	(3,637)	(3,395)	-6.6%	(10,920)	(10,291)	-5.8%
Reinsurance service result (gross)	567	1,469	159.1%	329	513	55.8%	896	1,982	121.2%
Reinsurance result (ceded)	(171)	(872)	-	(32)	(32)	-1.2%	(203)	(903)	-
Reinsurance service result	397	598	50.7%	297	481	62.0%	694	1,079	55.5%
Reinsurance finance result	(149)	(285)	91.6%	(57)	(58)	1.6%	(205)	(342)	66.7%
Investment income	548	625	13.9%	276	225	-18.5%	825	851	3.2%
Currency result	(24)	59	-	(3)	(25)	-	(27)	34	-
Other income and expenses	(124)	(168)	34.9%	(42)	(98)	136.3%	(168)	(268)	59.9%
Operating profit/loss (EBIT)	648	829	28.0%	471	525	11.3%	1,118	1,353	21.0%
Net income before taxes							1,075	1,288	+19.8%
Taxes							(205)	(298)	+45.4%
Net income							870	990	+13.8%
Non-controlling interest							55	30	-46.1%
Group net income							815	960	+17.8%

Our business groups at a glance

Q2/2023 vs. Q2/2022

in m. EUR	Property & Casualty R/I			Life & Health R/I			Total		
	Q2/2022	Q2/2023	Δ-%	Q2/2022	Q2/2023	Δ-%	Q2/2022	Q2/2023	Δ-%
Reinsurance revenue (gross)	3,262	3,765	+15.4%	1,943	1,938	-0.3%	5,205	5,702	+9.6%
Reinsurance service expenses	(2,806)	(2,978)	+6.2%	(1,852)	(1,705)	-8.0%	(4,658)	(4,683)	+0.5%
Reinsurance service result (gross)	456	786	+72.6%	91	233	156.3%	547	1,019	+86.5%
Reinsurance result (ceded)	(248)	(504)	+103.0%	(26)	(5)	-79.9%	(275)	(509)	+85.4%
Reinsurance service result	208	283	+36.2%	65	228	-	272	510	+87.6%
Reinsurance finance result	(55)	(155)	+180.0%	(28)	(20)	-27.5%	(83)	(176)	+110.5%
Investment income	333	327	-1.9%	99	142	44.3%	432	470	+8.8%
Currency result	(58)	12	-120.6%	43	(21)	-148.1%	(15)	(9)	-43.2%
Other income and expenses	(78)	(103)	+33.0%	(7)	(57)	-	(85)	(164)	+92.3%
Operating profit/loss (EBIT)	349	363	+4.0%	171	271	58.7%	520	632	+21.6%
Net income before taxes							499	600	+20.3%
Taxes							(87)	(128)	+46.8%
Net income							411	472	+14.6%
Non-controlling interest							24	(4)	-116.7%
Group net income							387	476	+22.9%

Agenda

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2	Property & Casualty reinsurance	31
3	Life & Health reinsurance	44
4	Investment management	58
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Outlook for 2023

Hannover Re Group

- Reinsurance revenue¹⁾ _____ $\geq 5\%$ growth
- Return on investment²⁾ _____ $\geq 2.4\%$
- Group net income²⁾ _____ \geq EUR 1.7 bn.
- Ordinary dividend _____ \geq prior year
- Special dividend _____ if capitalisation exceeds capital requirements for future growth and profit targets are achieved

1) At unchanged f/x rates

2) Subject to no major distortions in capital markets and/or major losses not exceeding the large loss budget of EUR 1,725 m. in 2023 and no further significant impact from Covid-19 on L&H result

2023 assumptions

Expectations for business groups

	P&C	L&H
Reinsurance service result	~ 91% - 92% Combined ratio	~ EUR 750 - 800 m.
Interest accretion	~ EUR 570 m.	~ EUR 140 m.
EBIT	≥ EUR 1,600 m.	≥ EUR 750 m.

Agenda

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Financial calendar and our Investor Relations contacts



9 November 2023

Quarterly Statement as at 30 September 2023



Karl Steinle

General Manager

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12 December 2023

Investors' Day 2023



7 February 2024

1 January P&C Treaty Renewals



Axel Bock

Senior Investor Relations Manager

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18 March 2024

Annual Press Conference and Analysts' Conference



6 May 2024

Annual General Meeting



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Basic information on the Hannover Re share

Basic information

International Securities Identification Number (ISIN)	DE 000 840 221 5
Ticker symbols	
-Bloomberg	HNR1
-Thomson Reuters	HNRGn
-ADR	HVRRY
Exchange listings	
-Germany	Xetra, Frankfurt, Munich, Stuttgart, Hamburg, Berlin, Düsseldorf, Hannover (official trading: Xetra, Frankfurt and Hannover)
-USA	American Depositary Receipts (Level 1 ADR programme; 2 ADR = 1 share)
Market segment	Prime Standard
Index inclusion	DAX
First listed	30 November 1994
Number of issued shares ¹⁾	120,597,134
Common shares ¹⁾	EUR 120,597,134
Share class	No-par-value registered shares

1) As at 31 December 2022

Details on reserve review by WTW

- The scope of WTW's work was to review certain parts of the held loss and loss adjustment expense reserve, net of outwards reinsurance, from Hannover Re Group's consolidated IFRS financial statements and the implicit resiliency reserve margin, for the non-life business of Hannover Re Group annually as at each 31 December, most recently as at 31 December 2022. WTW concludes that the reviewed loss and loss adjustment expense reserve, net of reinsurance, less the resiliency reserve margin is reasonable in that it falls within WTW's range of reasonable estimates.
- Life reinsurance and health reinsurance business are excluded from the scope of this review.
- WTW's review of non-life reserves as at 31 December 2022 covered 97.2% / 100.0% of the gross and net held non-life reserves of €41.0 billion and €37.8 billion respectively. Together with life reserves of gross €5.9 billion and net €5.7 billion, the total balance sheet reserves amount to €46.9 billion gross and €43.6 billion net.
- The results shown in WTW's reports are not intended to represent an opinion of market value and should not be interpreted in that manner. The reports do not purport to encompass all of the many factors that may bear upon a market value.
- WTW's analysis was carried out based on data as at evaluation dates for each 31 December. WTW's analysis may not reflect claim development or all information that became available after the valuation dates and WTW's results, opinions and conclusions presented herein may be rendered inaccurate by developments after the valuation dates.
- The results shown in this presentation are based on a series of assumptions as to the future. It should be recognised that actual future claim experience is likely to deviate, perhaps materially, from WTW's estimates. This is because the ultimate liability for claims will be affected by future external events; for example, the likelihood of claimants bringing suit, the size of judicial awards, changes in standards of liability, and the attitudes of claimants towards the settlement of their claims.
- As is typical for insurance and reinsurance companies, claims reporting can be delayed due to late notifications by some claimants and cedants. This increases the uncertainty in the WTW results.
- Hannover Rück SE has asbestos, environmental and other health hazard (APH) exposures which are subject to greater uncertainty than other general liability exposures. WTW's analysis of the APH exposures assumes that the reporting and handling of APH claims is consistent with industry benchmarks. However, there is scope for wide variation in actual experience relative to these benchmarks. Thus, although Hannover Re Group's held reserves show resiliency reserve compared to WTW's indications, the actual fully developed losses could prove to be significantly different to both the held and indicated amounts.
- WTW has not anticipated any extraordinary changes to the legal, social, inflationary or economic environment, or to the interpretation of policy language, that might affect the cost, frequency, or future reporting of claims. In addition, WTW's estimates make no provision for potential future claims arising from causes not substantially recognised in the historical data (such as new types of mass torts or latent injuries, terrorist acts), except in so far as claims of these types are included incidentally in the reported claims and are implicitly developed.
- Sharp increases in inflation in many economies worldwide have resulted from recent rises in energy, food, component and raw material prices driven by wider economic effects of the Russia-Ukraine conflict combined with factors such as supply chain disruptions caused by the COVID-19 pandemic and labour shortages. Generally, inflation is expected to remain elevated in the near term despite mitigating policy responses by central banks and governments. Over time reductions in inflation rates to more normative levels, barring future shocks to the global economy are expected. However, prospective inflationary risks remain high due to the continuing Russia-Ukraine conflict and heightened geopolitical tensions with increased possibilities of hitherto unexpected conflict escalation. Longer term implications for inflation from current conflicts, heightened geopolitical tensions, increased energy prices, potential reductions in food supplies, disruption in global trading and their impacts on insurance exposures remain highly uncertain. The WTW analysis makes no explicit allowance for extraordinary future effects that may result from the above factors or other emerging shocks on the projection results.
- In accordance with its scope WTW's estimates are on the basis that all of Hannover Re Group's reinsurance protection will be valid and collectable. Further liability may exist for any reinsurance that proves to be irrecoverable.
- WTW's estimates are in Euros based on the exchange rates provided by Hannover Re Group as at each 31 December evaluation date. However, a substantial proportion of the liabilities is denominated in foreign currencies. To the extent that the assets backing the reserves are not held in matching currencies, future changes in exchange rates may lead to significant exchange gains or losses.
- WTW has not attempted to determine the quality of Hannover Re Group's current asset portfolio, nor has WTW reviewed the adequacy of the balance sheet provisions except as otherwise disclosed herein.
- In its review, WTW has relied on audited and unaudited data and financial information supplied by Hannover Rück SE and its subsidiaries, including information provided orally. WTW relied on the accuracy and completeness of this information without independent verification.
- Except for any agreed responsibilities WTW may have to Hannover Re Group, WTW does not assume any responsibility and will not accept any liability to any person for any damages suffered by such person arising out of this commentary or references to WTW in this document.

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