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23rd International Investors' Day

Hannover, 21 October 2020

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Striving for sustainable outperformance

Jean-Jacques Henchoz, Chief Executive Officer
23rd International Investors' Day 2020
Hannover, 21 October 2020

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Agenda

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Our starting point: excellent position in
today's reinsurance market

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Top tier market leader in profitability, earnings growth and cost efficiency (1/2)

Hannover Re's consistent track record of outperformance

Attractive premium growth (GWP)

Hannover Re

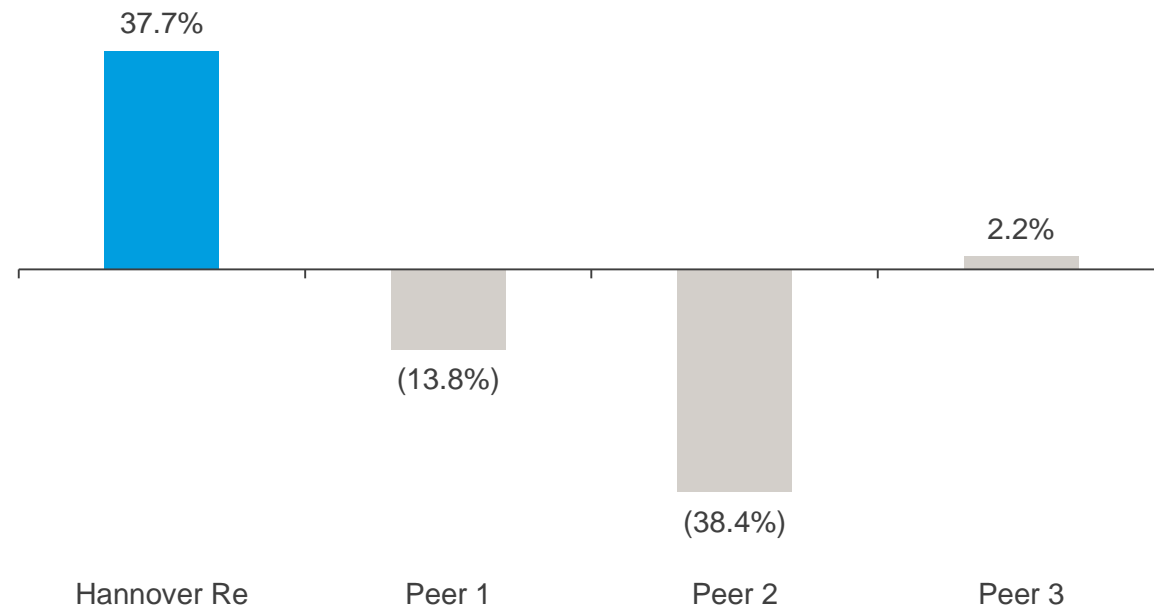


Top 10 reinsurers¹⁾



Outstanding earnings growth

Net income growth European reinsurers²⁾ total 2015 - 2019 vs. total 2010 - 2014



1) A.M. Best "Segment Report" (Sept 2020/2016)

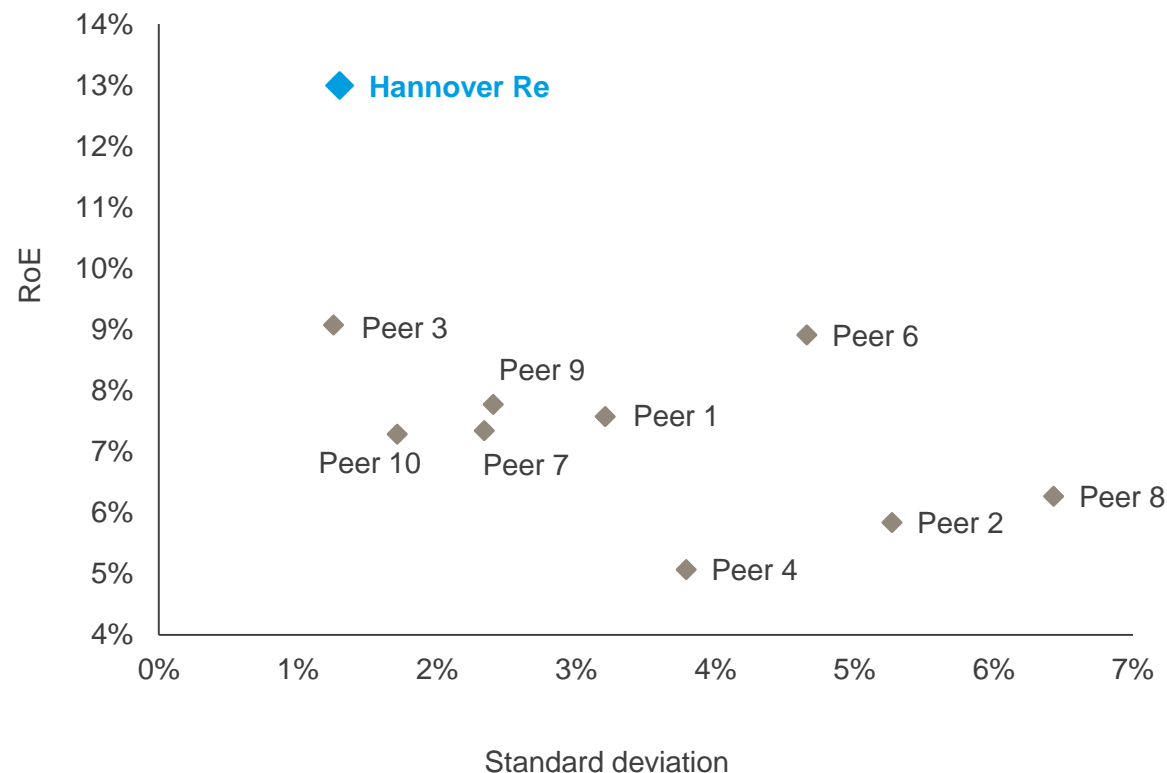
2) Peers in alphabetical order: Munich Re, Scor, Swiss Re; own calculation based on company data

Top tier market leader in profitability, earnings growth and cost efficiency (2/2)

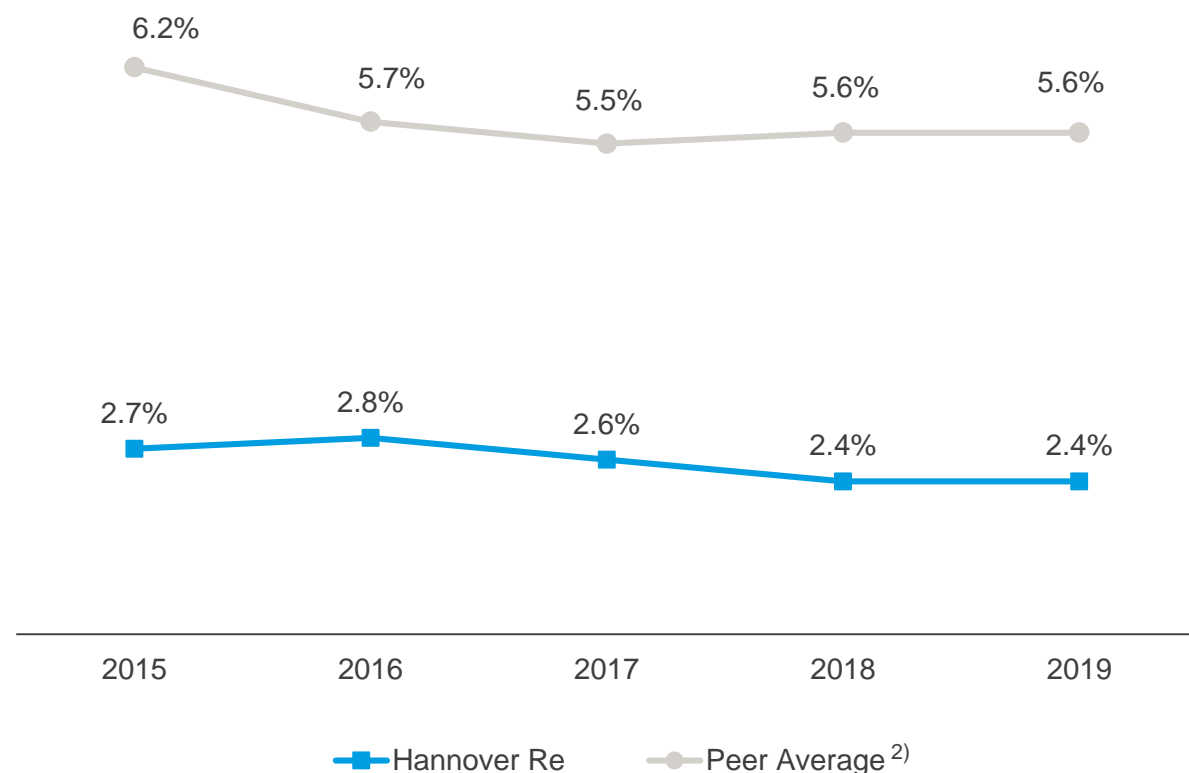
Hannover Re's consistent track record of outperformance

High return on equity with low volatility

Ø 2015 - 2019¹⁾



Competitive administrative expense ratio

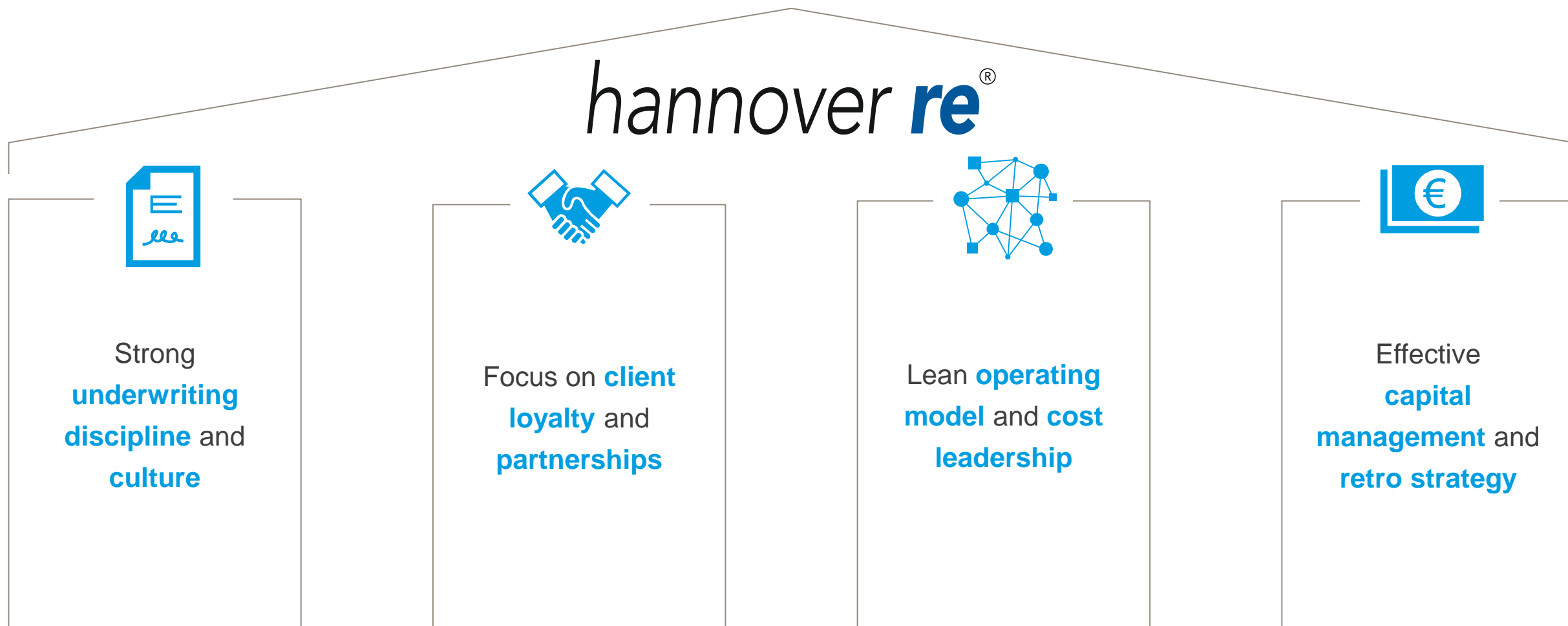


1) Top 10 of the Global Reinsurance Index (GloRe); own calculation based on company data (RGA excl. one-off effect from US tax reform in 2017)

2) Peers: Munich Re, Scor, Swiss Re

Strategic imperatives will remain cornerstones of our model

Our competitive strengths lie in our corporate culture and operating model

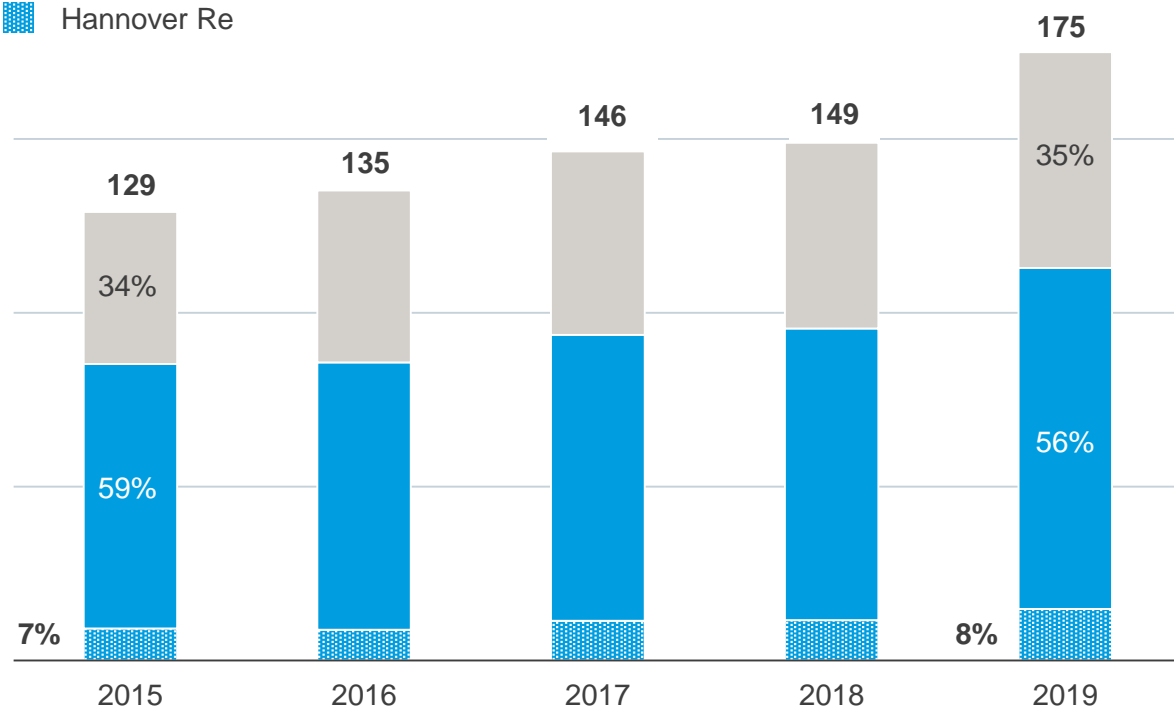


Hannover Re is well positioned to deliver growth

Market size P&C reinsurance

GWP in bn. EUR

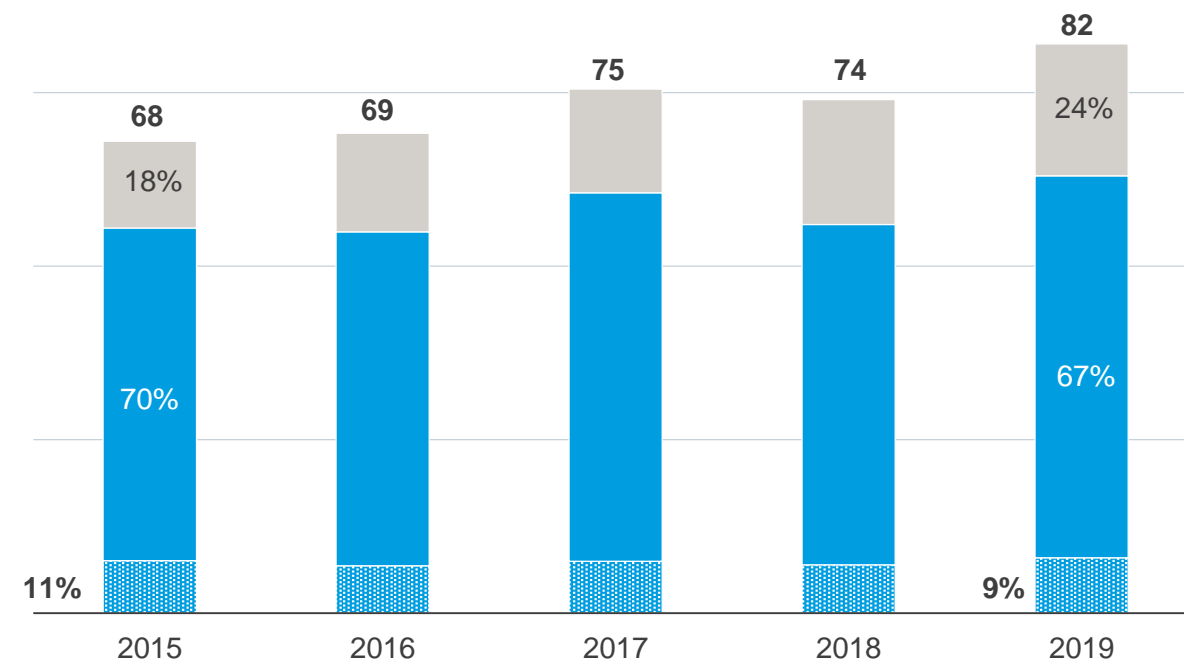
- Other
- Top 10
- Hannover Re



Market size L&H reinsurance

GWP in bn. EUR

- Other
- Top 6
- Hannover Re



Market: Sum of Non-life GWP of Top 50 Global Reinsurance Groups according to A.M. Best "Segment Report" (Sept 2020)
 2017: Berkshire Hathaway excl. AIG deal; Top 10 in 2019: Munich Re, Swiss Re, Lloyd's, Hannover Re, Berkshire Hathaway, SCOR, GIC India, Everest Re, Korean Re, Partner Re; © A.M. Best Europe - Information Services Ltd. - used by permission

Market: Sum of Life GWP of Top 50 Global Reinsurance Groups according to A.M. Best "Segment Report" (Sept 2020)
 Top 6 in 2019: Swiss Re, Munich Re, RGA, SCOR, Great-West Lifeco, Hannover Re
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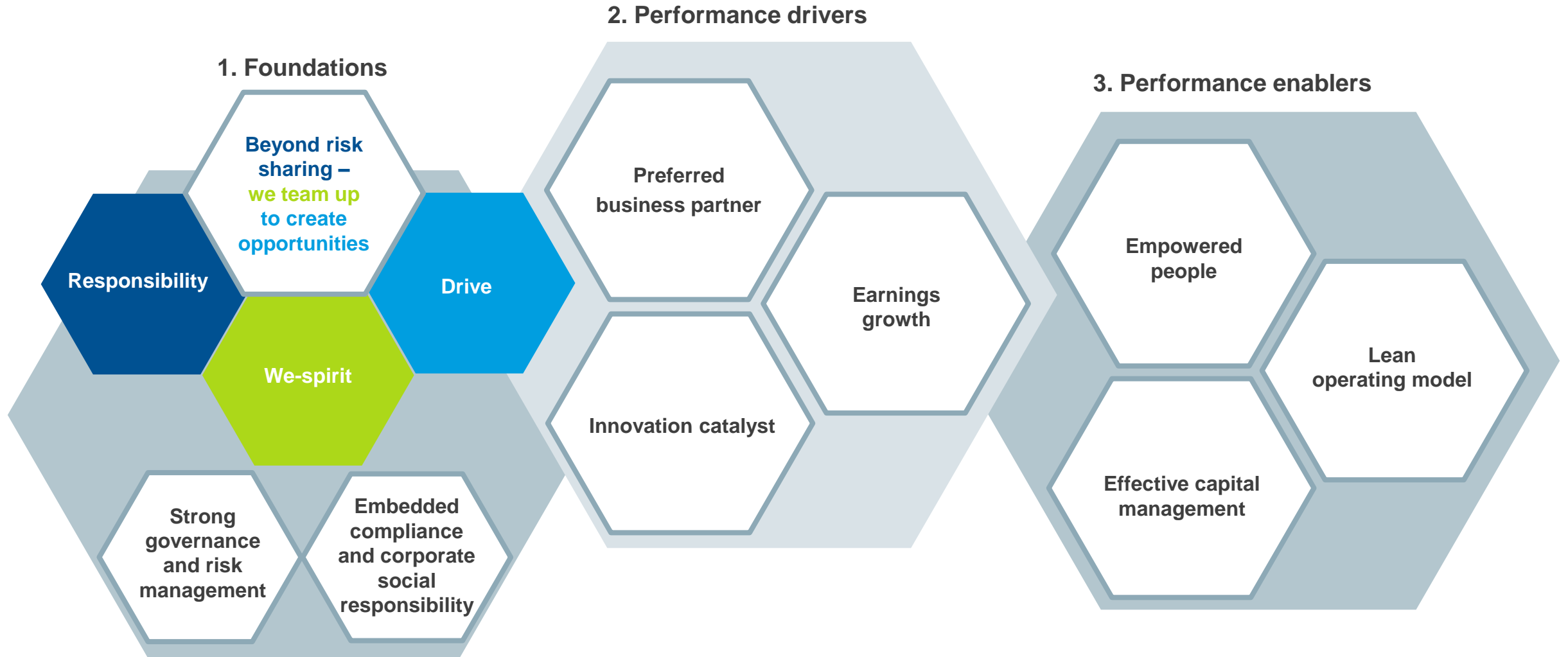
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Our Group strategy 2021 - 2023:
striving for sustainable outperformance

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Striving for sustainable outperformance

Group strategy map 2021 - 2023



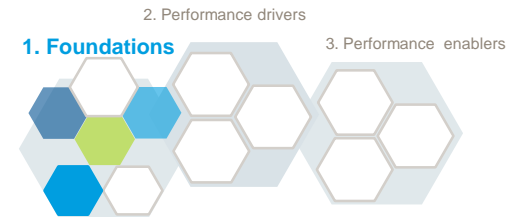
Strategy is purpose-driven and relies on a strong corporate culture

Our purpose statement and values emphasise partnership spirit



Foundations of our operating model

Strong capital position and financial flexibility



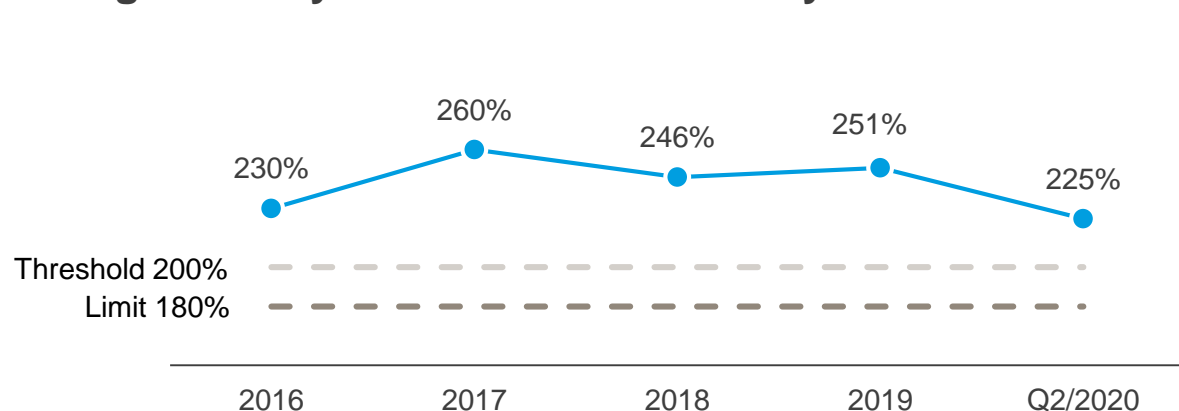
Excellent financial strength ratings

Standard & Poors
AA- (outlook stable)

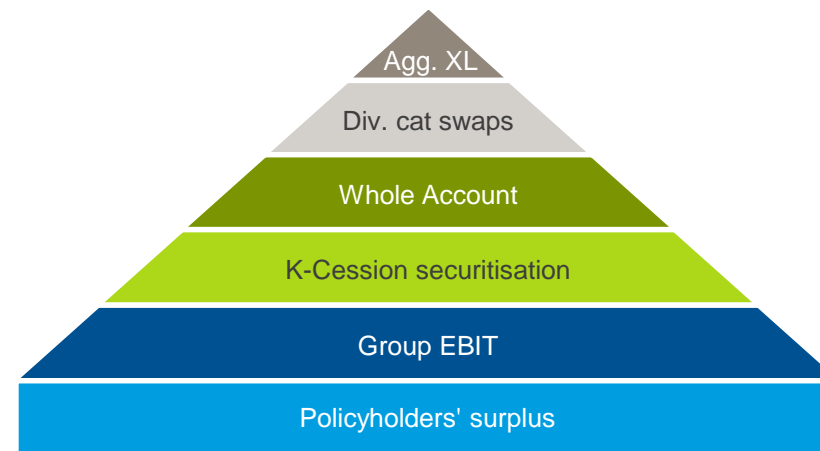
incl. sub-rating 'very strong'
for our risk management

A.M. Best
A+ (outlook stable)

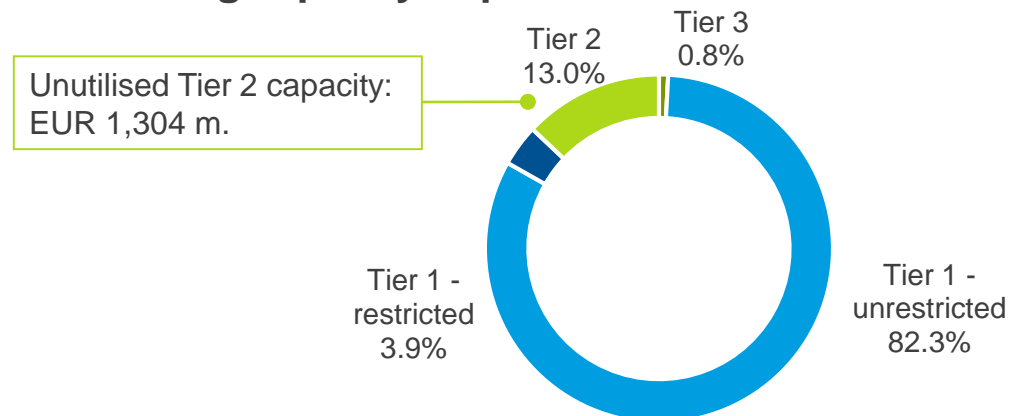
Strong solvency levels across market cycles



Proven retrocession strategy

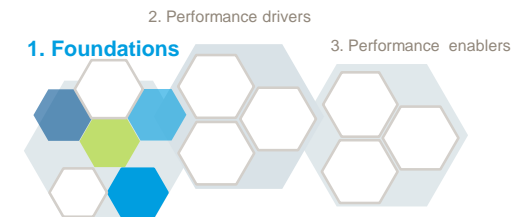


Flexible and high-quality capital base



Foundations of our operating model

Strengthen our commitment to high ESG standards



- Climate change
- Stakeholder dialogue
- Human rights
- Good Governance

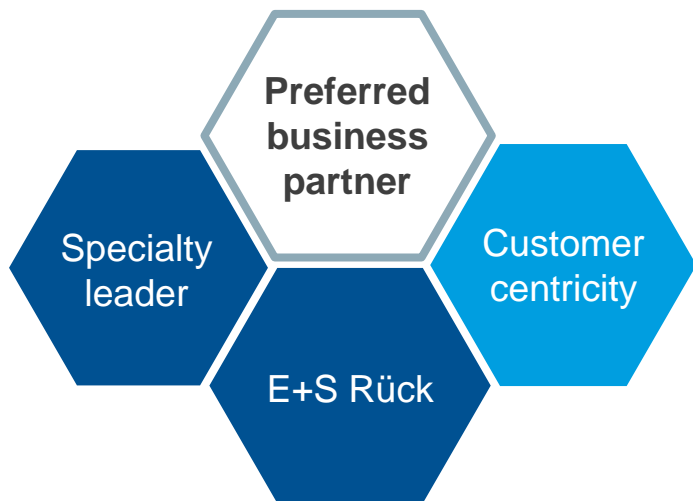
- Sustainable protection
- ESG in asset management
- ESG in underwriting



- Attractive employer
- Health and wellbeing
- Learning & development
- Diversity & equal opportunities

- Social engagement
- Environmental management

We are a preferred business partner



Proven strengths

- One of the market leaders in **Marine, Aviation and Credit & Surety**
- JV with **HDI Global Specialty** provides attractive growth opportunities

e+S rück

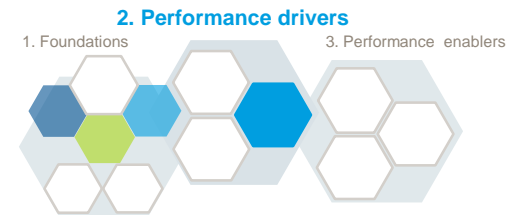
- **Unique partnership** and access to German business



Strategic focus area: customer centricity

Seek leadership in customer excellence and broaden client relationships

- **Enhance earnings growth**, margin and profit contribution of key clients (EUR 100 m. EBIT contribution by 2023)
- **Introduce** new **CRM system** to drive customer engagement
- **Leverage full potential** with key customers by focusing on cross-business opportunities
- Enhance **capital prioritisation and allocation** based on customer segmentation



We aim for outperformance in earnings growth



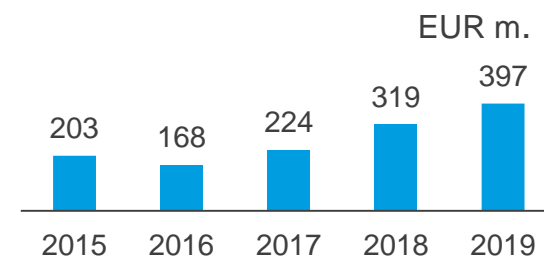
Strategic focus area: Asia-Pacific (APAC)

Seize opportunities in the world's fastest growing region and offer value to our clients beyond pure risk transfer

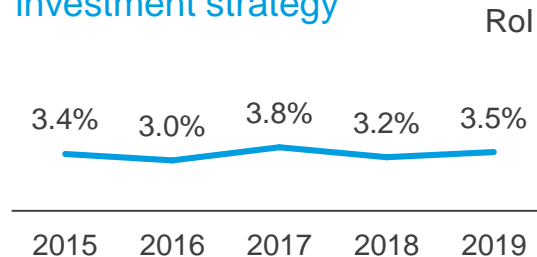
- Follow the **demographic development** in APAC region
- **Help to close the protection gap** in countries with low insurance penetration by bringing product know-how to the region
- Take advantage of business opportunities driven by the dynamics of the **digital transformation** in the region

Proven strengths

EBIT contribution from Financial Solutions 2015-19: EUR 1.3 bn.

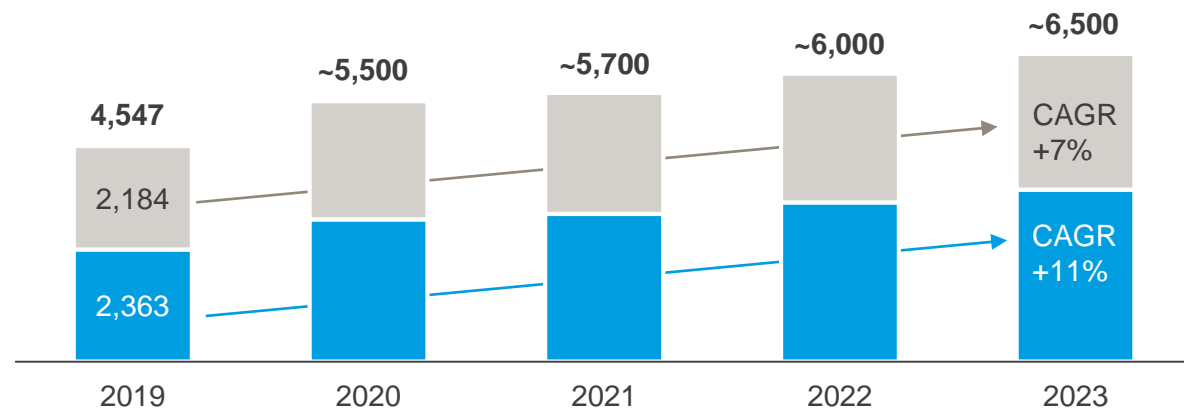


Strong operating cash flow and growing AuM support **successful investment strategy**



APAC initiative is a catalyst for accelerated earnings growth

APAC: Expected GWP development P&C / L&H in m. EUR



Key figures APAC

■ P&C	Gross premium growth	11% ¹⁾
	Combined ratio ²⁾	≤96%
■ L&H	Gross premium growth	7% ³⁾
	Value of New Business (VNB) ⁴⁾	100 EUR m.

1) On average throughout the R/I cycle at constant f/x rates

2) Incl. large loss budget

3) Organic growth only; target: annual average growth over a 3-year period, at constant f/x rates

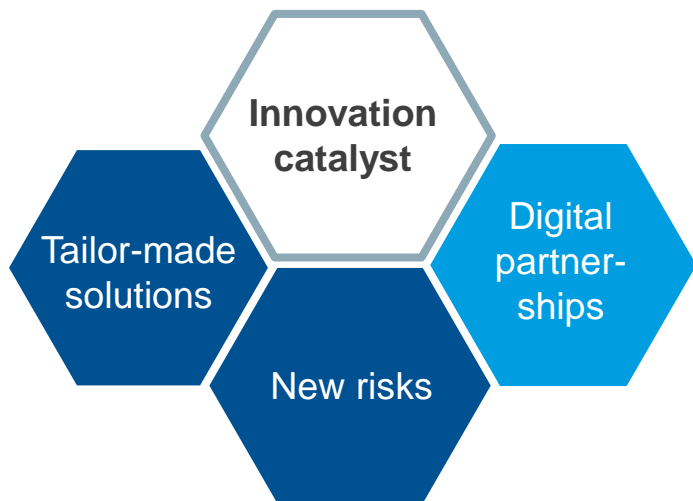
4) Based on Solvency II principles; pre-tax reporting

APAC initiative: key objectives

- Implement 16 business growth initiatives in P&C and L&H
- Build on long-standing client relationships
- Empower local teams and increase market presence
- Preserve unique Hannover Re culture
- Keep lean operating model and fast decision-making



Strengthening our capabilities to thrive in the digital world



Strategic focus area: digital partnerships

- “Think bigger” about opportunities: leveraging commercial excellence in our business centres to scale opportunities globally / regionally
- Establish an **agile framework for innovation** that allows fast and flexible decision-making across the Group
- Increase management focus on promising innovation activities and add **new capabilities to accelerate innovation**

Proven strengths

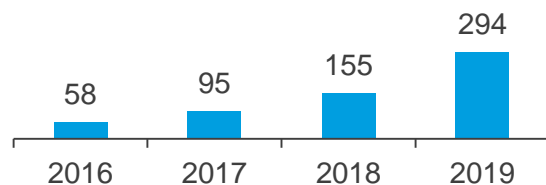
Go-to-partner for **innovative tailor-made solutions**

GWP Structured R/I and ILS, EUR bn.

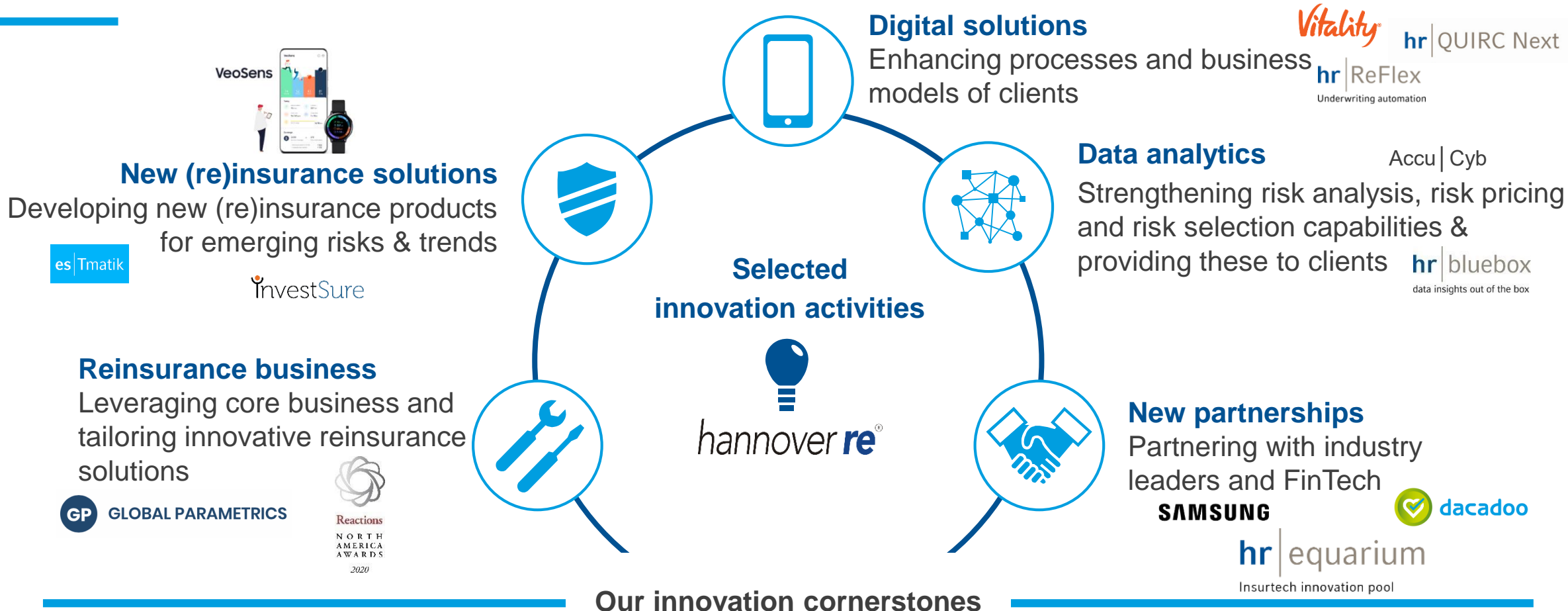


Strong player in growing **cyber** business

GWP Cyber, EUR m.



We will build on our track record of innovation to add value to our business partners



Focus on business opportunities

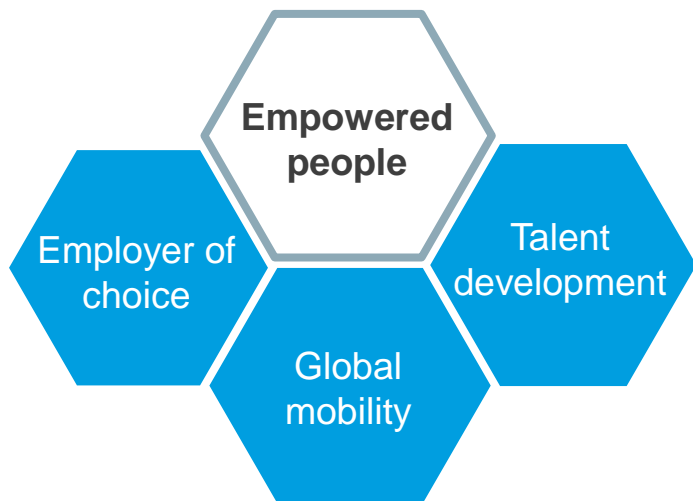
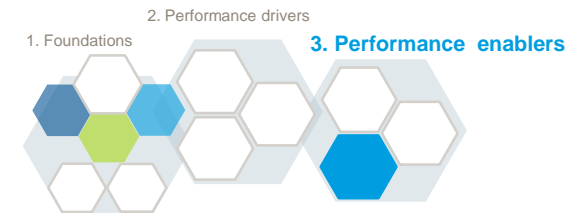


Help clients solve their challenges



Build new partnerships

Delegation of responsibilities and accountability are deeply embedded in our company's culture



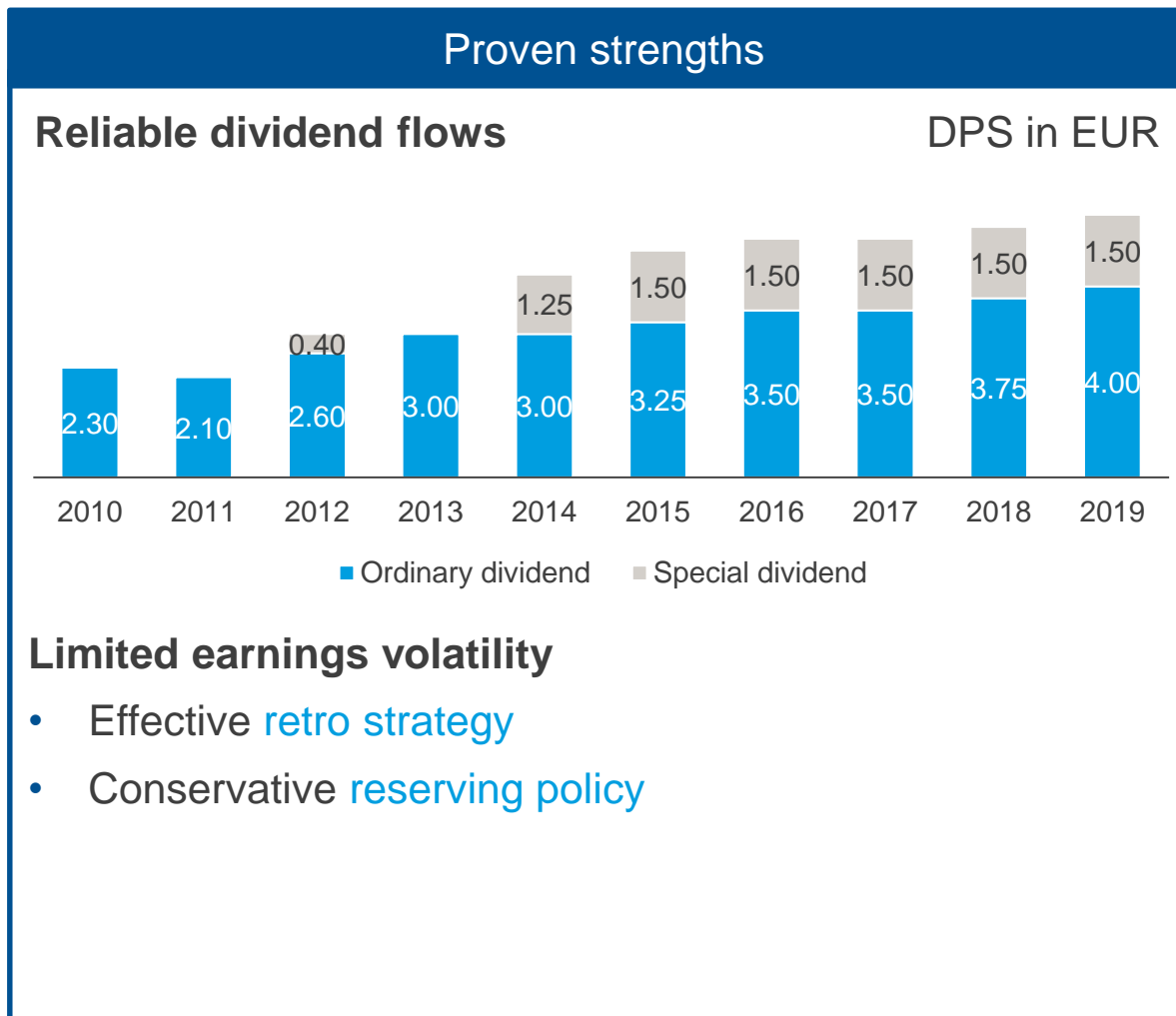
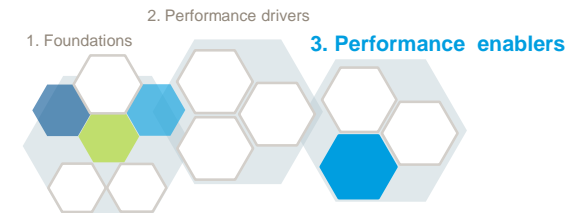
Strategic focus area: talent management

Proven strengths


- High level of **delegation** to operating units
- Accountability and ownership are strong part of **company culture**
- High **staff retention and loyalty**



Our capital management is aimed at ensuring reliable dividends

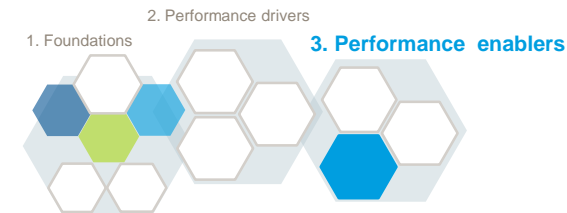
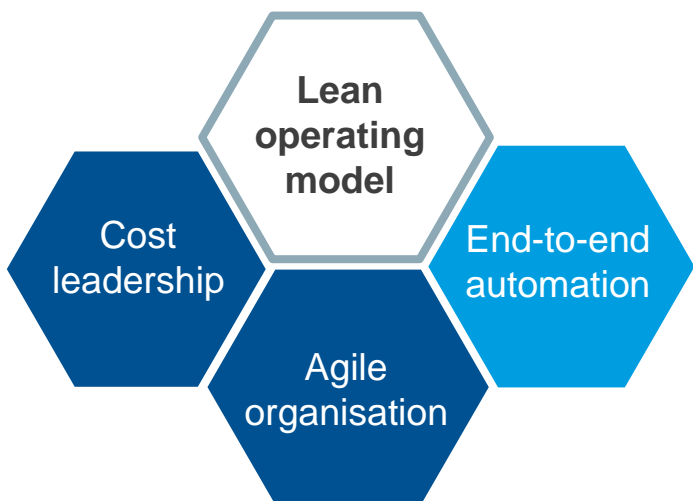


Strategic focus area: inforce management



Systematic implementation to enhance value of our portfolio and to actively manage value-destroying segments and treaties

Our lean operating model is an essential competitive advantage



Proven strengths

Cost leadership is a tangible competitive advantage

- Mix of cultural and organisational factors that are **hard to replicate**
- **Investments** in strategic focus areas **are always connected to future profits**

Strategic focus area: end-to-end automation

- We continuously analyse, optimise and automate our core processes end-to-end
- “End-to-end” includes our internal processes as well as the interfaces to our business partners
- Using advanced data analytics technology we exploit opportunities for automated decision-making

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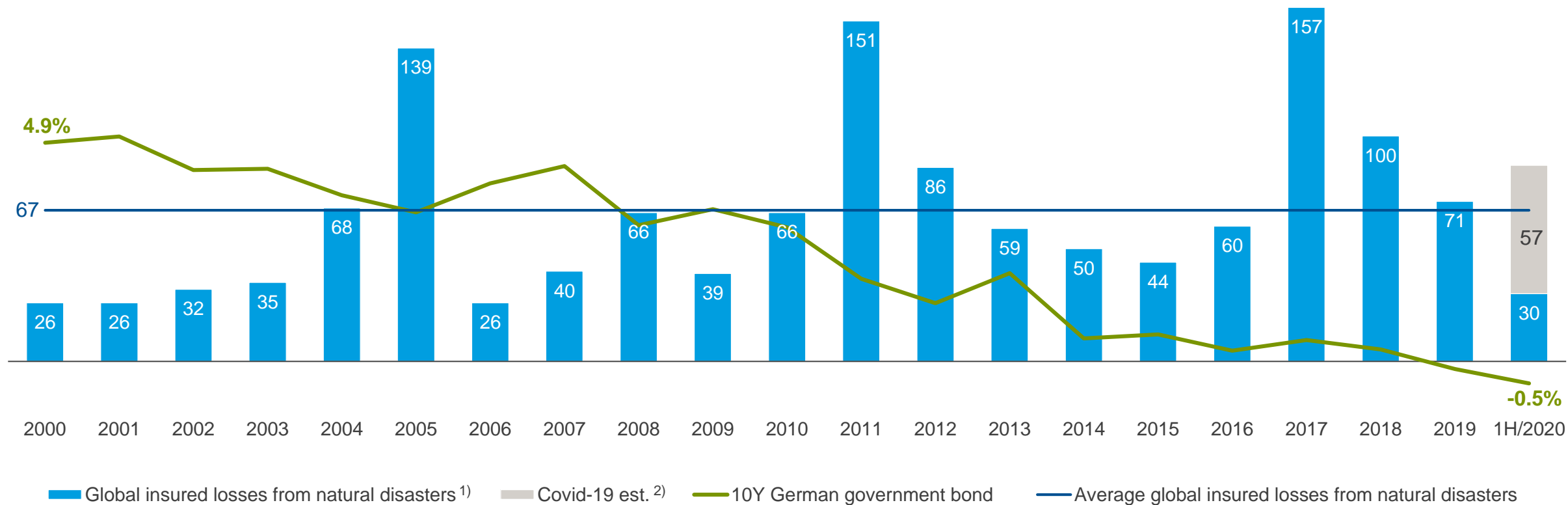
Outlook: improving market momentum

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Material price increases and further flight to quality expected in P&C

Driven by Covid-19, drop in interest rates and large losses in the last four years

in USD bn.



1) Source: AON
 2) Average of mid-point estimates from Autonomous, Barclays, Bank of America, Berenberg, Dowling & Partners, Willis Towers Watson

Covid-19 impact is material but manageable

Potential business opportunities are arising in P&C und L&H reinsurance



Impact Covid-19

P&C claims:

- EUR 600 m. estimated impact in 1H/2020
- Additional reserving expected in Q3/2020 (materially smaller than in prior quarters)

L&H claims:

- EUR 63 m. impact on mortality and morbidity in 1H/2020
- Expected 2H/2020 impact at least at the 1H/2020 level

Business opportunities

- Increased demand for reinsurance, additionally supported by flight to quality
- Significant price increases expected in 2021
- Additional demand for balance sheet / solvency relief solutions
- Accelerated digitalisation in insurance
- Development of new products, e.g. parametric solutions

Target Matrix

Strategy cycle 2021 - 2023

Business group	Key figures	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 m.
	xRoCA ⁵⁾	≥ 2%

1) After tax; risk-free: 5-year average return of 10-year German government bonds

3) Average annual growth at constant f/x rates

5) Excess return (one-year economic profit in excess of the cost of capital) on allocated economic capital

2) According to our internal capital model and Solvency II requirements

4) Average annual growth; based on normalised EBIT 2020

6) Based on Solvency II principles; pre-tax reporting

Key take-aways



We are well positioned for continued profitable growth



We will absorb the impact of the Covid-19 pandemic and seize arising opportunities

Our Group strategy 2021 - 2023 will ensure further value creation for our shareholders, clients and employees



- Building on proven strengths and successful business model
- Strategic focus areas are the basis for continued and sustainable success for all our stakeholders

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Update on investments and capitalisation

Clemens Jungsthöfel, Chief Financial Officer
23rd International Investors' Day 2020
Hannover, 21 October 2020

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Agenda

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Investment update

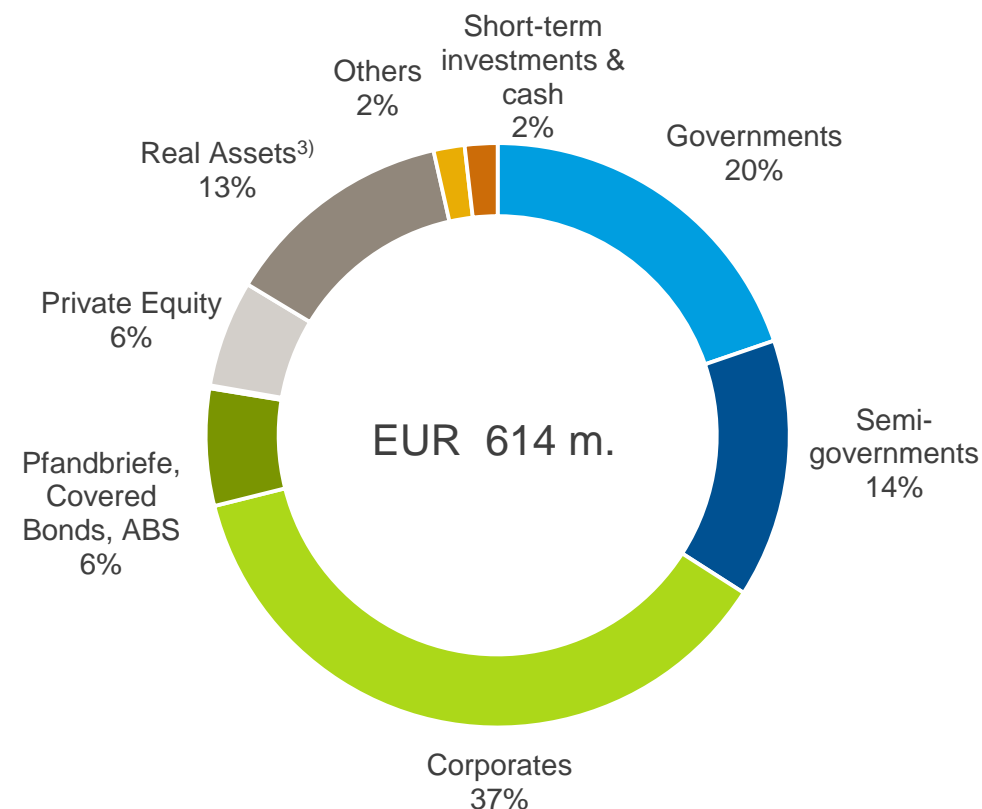
Ordinary return in comparison to asset class weightings

Credit profile fairly stable; modest re-entry into listed equities in Q1

Asset allocation¹⁾

Investment category	2016	2017	2018	2019	Q2/2020
Fixed-income securities	87%	87%	87%	87%	87%
- Governments	28%	30%	35%	35%	35%
- Semi-governments	18%	17%	16%	15%	15%
- Corporates	33%	32%	29%	31%	30%
Investment grade	28%	27%	25%	26%	25%
Non-investment grade	4%	5%	4%	4%	5%
- Pfandbriefe, Covered bonds, ABS	9%	8%	7%	7%	6% ²⁾
Equities	4%	2%	2%	3%	3%
- Listed equity	2%	<1%	<1%	<1%	1%
- Private equity	2%	2%	2%	2%	2%
Real Assets	5%	5%	6%	5%	5%
Others	1%	1%	1%	2%	2%
Short-term investments & cash	4%	4%	4%	3%	3%
Total market values in bn. EUR	42.3	40.5	42.7	48.2	49.3

Ordinary income split YTD



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 1,390.0 m. (EUR 1,429.9 m.) as at 30 June 2020

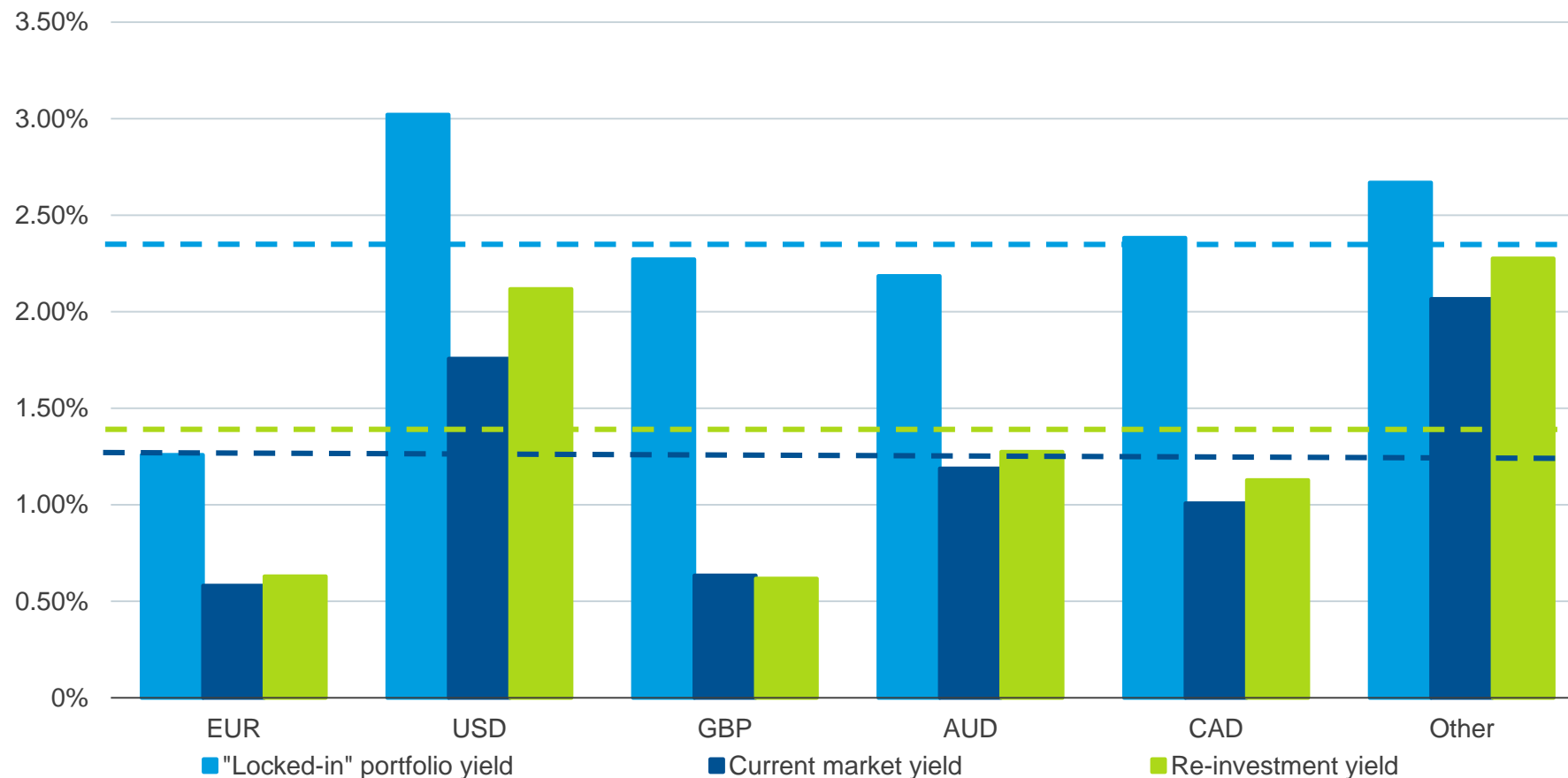
2) Of which Pfandbriefe and Covered Bonds = 67.0%

3) Before real estate-specific costs. Economic view based on market values as at 30 June 2020

Return on Investment still benefitting from comfortable “locked-in” yields

Re-investment yields and inflation hedge to leave a mark

Current analysis per currency of fixed-income portfolio¹⁾



Average yield levels:

- 2.35% “Locked-in” portfolio yield
- 1.31% Current portfolio market yield
- 1.45% Actual re-investment yield

Current year:

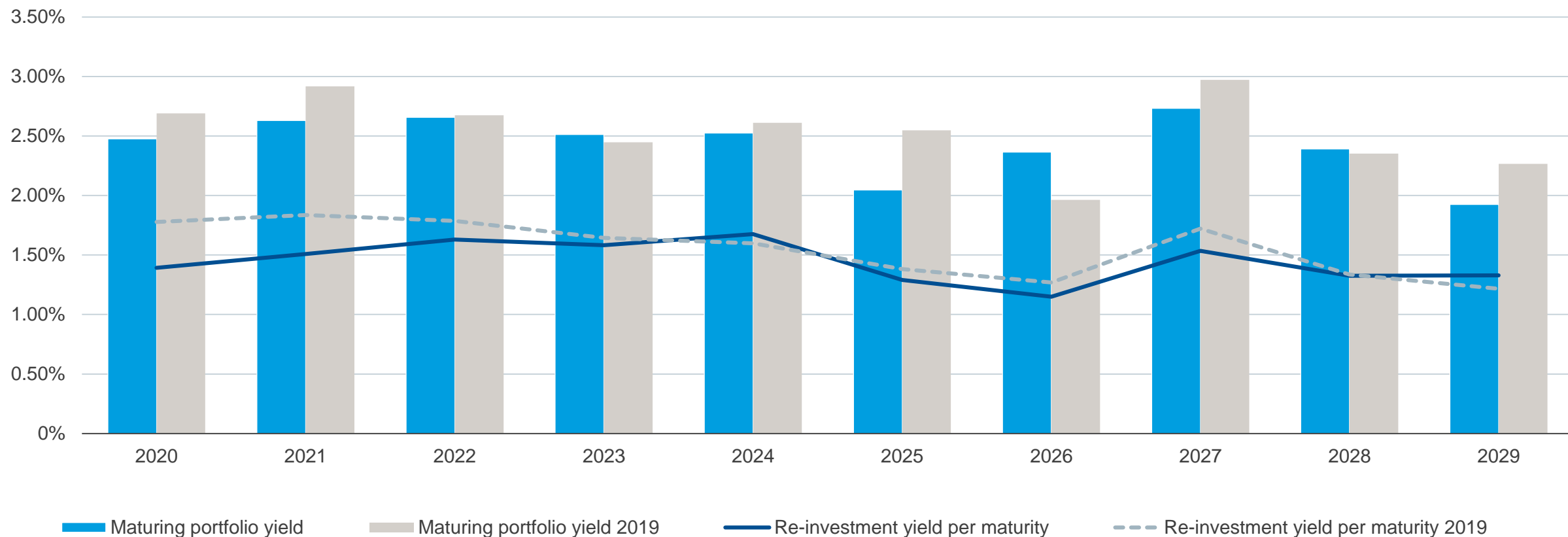
- Reinvestments in 2020 occur on even more challenging yield levels than anticipated at beginning of year
- Ordinary income from inflation linkers is driven by CPI inflation
- Worldwide shift in CPI by +/-100 bps would increase/decrease the total ordinary income by ~10 bps

1) As at 15 July 2020, excluding short-term investments and cash

Increased challenge of locked-in versus re-investment returns

Increasing relevance of alternative investments in light of fixed-income trends

Projection of maturing portfolio yield vs. re-investment yield of fixed income portfolio¹⁾

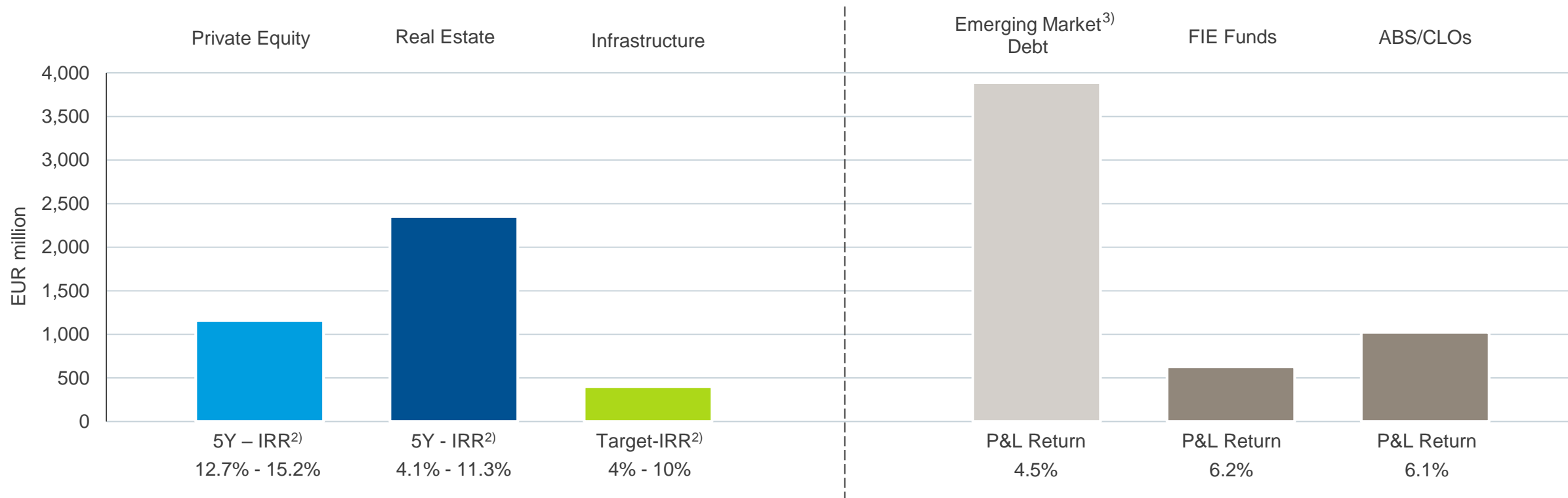


1) Analysis as at 15 July 2020, excluding short-term investments and cash

Invested asset spectrum will be more colourful

Current return expectation of alternative asset strategies

Volume and returns¹⁾ of main alternative asset strategies



1) Volumes as of 15 July 2020; returns as a 5Y average as of Q4/2019

2) Range due to several investment structures with different risk-return profiles

3) w/o HR-entities located in emerging markets

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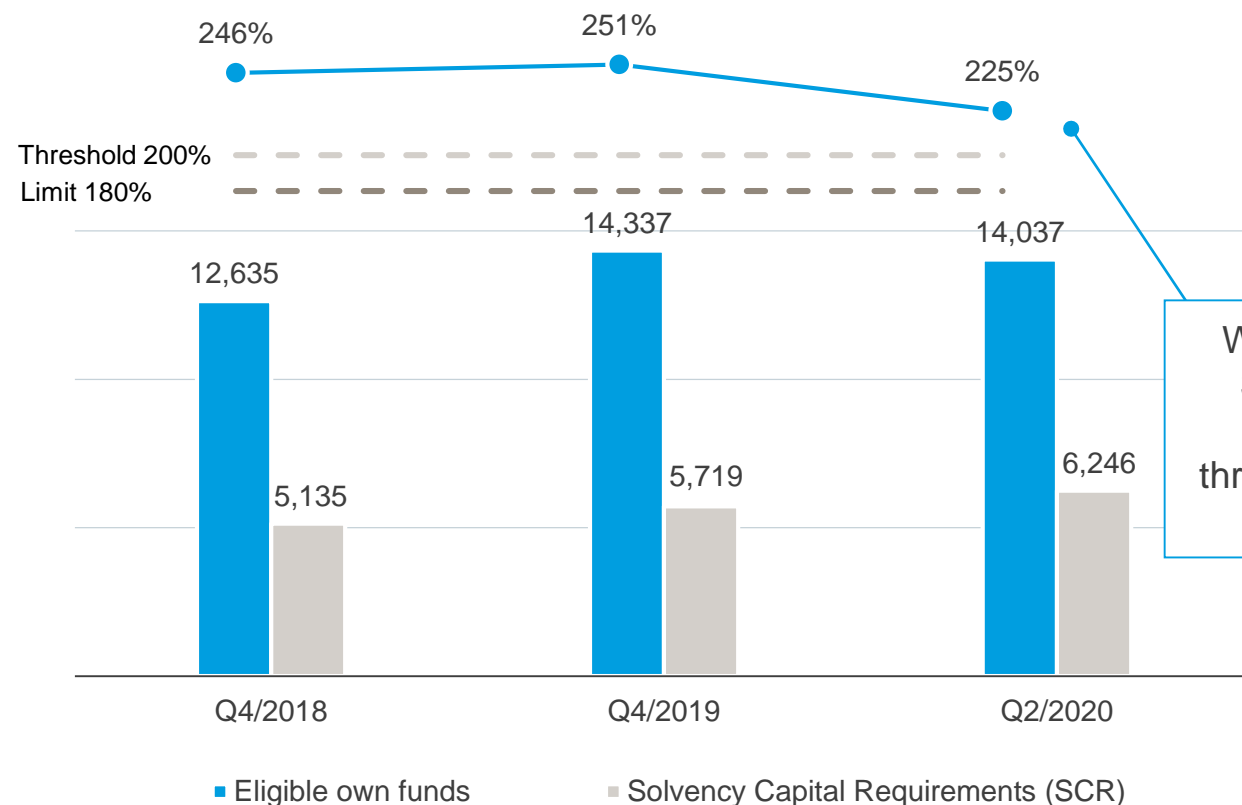
Capitalisation and reserving

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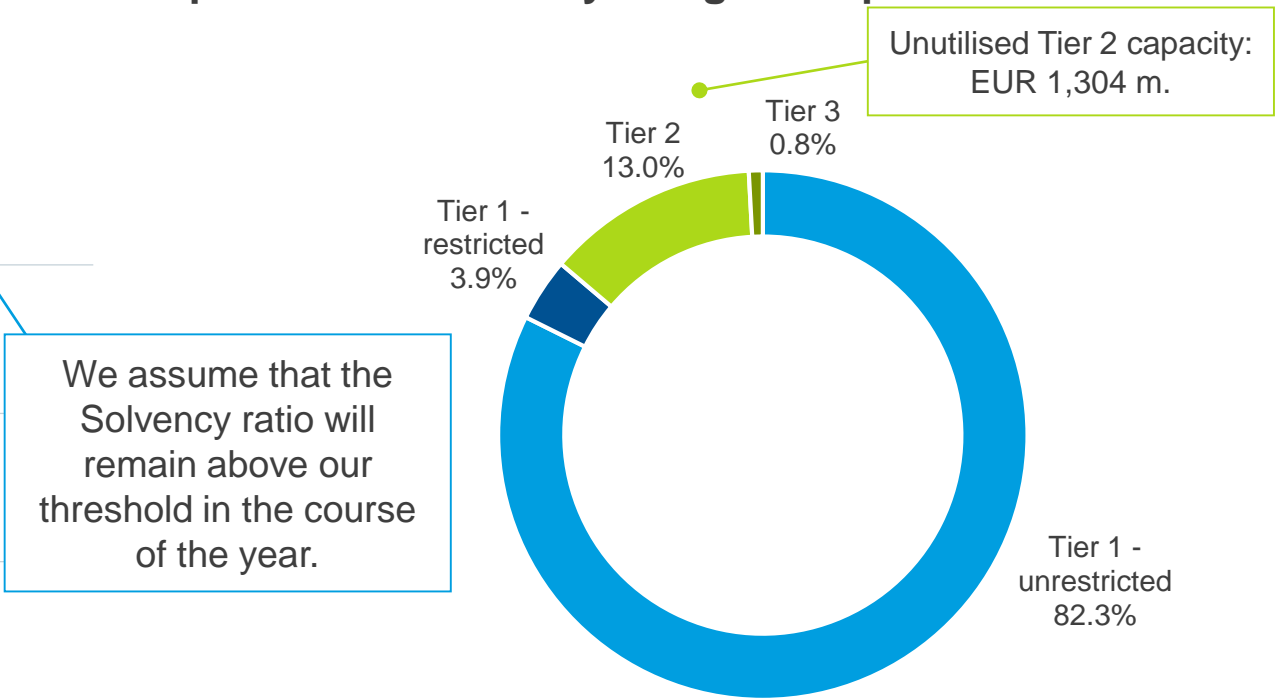
Solvency ratio remains above capital targets

Despite significant capital market movements

Development of Solvency II capital adequacy ratio



Composition of Solvency II eligible capital¹⁾

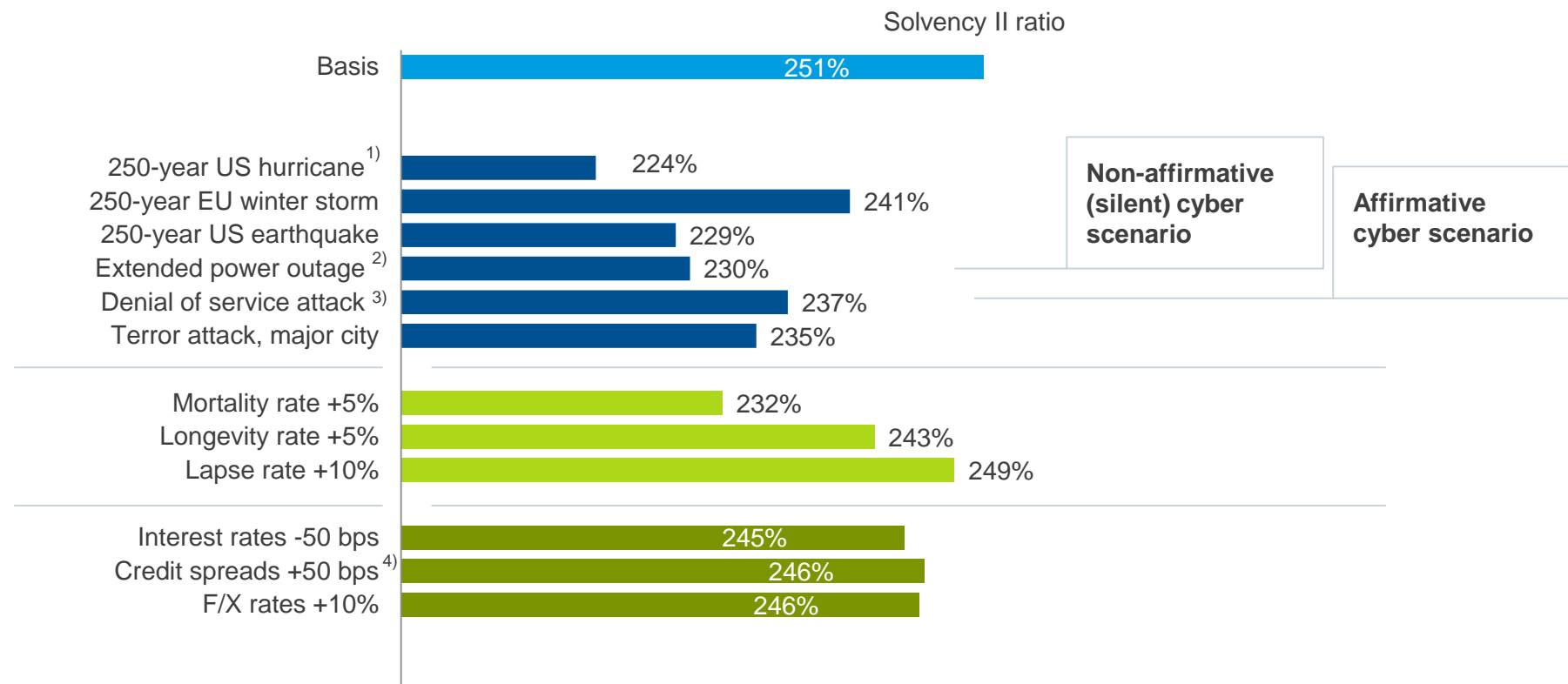


Figures in m. EUR
1) As at Q2/2020

Individual risks with limited impact on Solvency ratio

Solvency ratio remains above targets in all relevant stress events

Sensitivities and stress tests



As at 31 December 2019, in m. EUR; post-tax

1) A return period of 250 years is equivalent to an occurrence probability of 0.4%; based on the aggregate annual loss. Car – Caribbean

2) Approx. 3 weeks of power outage in a larger area of a developed country

3) Distributed denial-of-service-attack on main DNS provider

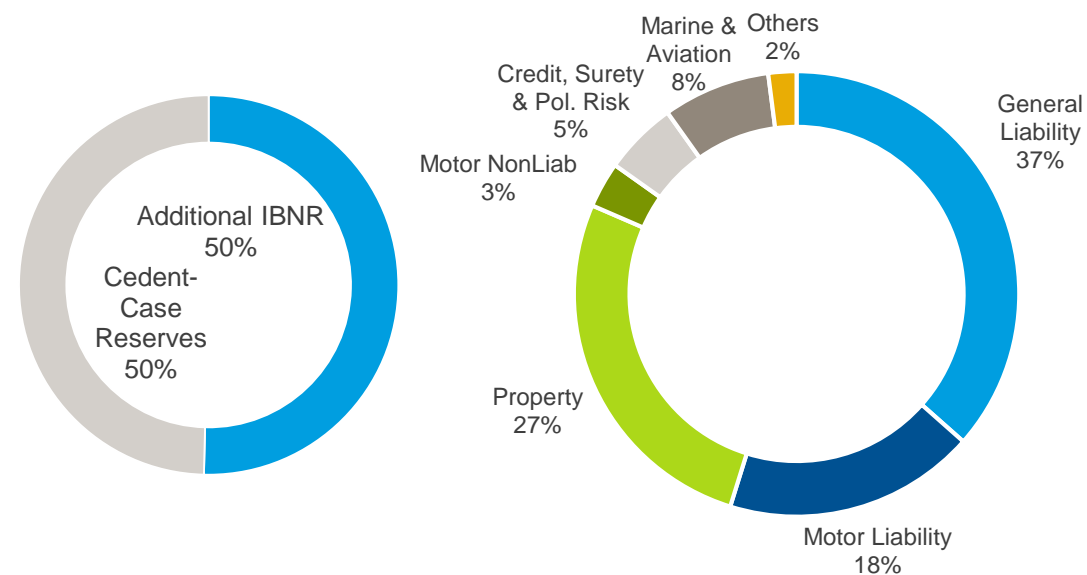
4) +50bps for Hannover Re average portfolio bucket. Point-in-time stress level differs by rating. Includes impact of changes in dynamic volatility adjustment.

Reserve redundancy reduced but remains at high level

Level of additional IBNR at 50%

Year end ¹⁾	Redundancy ²⁾	Change	Impact on loss ratio	P&C premium (net earned)
2009	867	276	5.3%	5,230
2010	956	89	1.6%	5,394
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

Property & Casualty gross loss reserves³⁾ EUR 28,364 m.



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

2) Redundancy 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. Willis Towers Watson reviewed these estimates - see appendix

3) As at 31 December 2019, consolidated, IFRS, IBNR – Incurred but not reported

Risk management focus areas in Group strategy 2021 - 2023

1

Further strengthen climate change risk management



2

Improve cyber exposure management



3

Review systemic risk management processes (e.g. pandemic)



4

Further strengthen our commitment to high ESG standards



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Key take-aways


Key take-aways



Low-yield environment is challenging but manageable



Unchanged conservative reserving approach with comfortable reserve buffer



Strong capitalisation enables Hannover Re to take advantage of improving P&C market environment



Further strengthen emerging risk management

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Appendix



Details on reserve review by Willis Towers Watson

- The scope of Willis Towers Watson's work was to review certain parts of the held loss and loss adjustment expense reserve, net of outwards reinsurance, from Hannover Rück SE's consolidated financial statements in accordance with IFRS as at each 31 December from 2009 to 2019, and the implicit redundancy margin, for the non-life business of Hannover Rück SE. Willis Towers Watson concludes that the reviewed loss and loss adjustment expense reserve, net of reinsurance, less the redundancy margin is reasonable in that it falls within Willis Towers Watson's range of reasonable estimates.
- Life reinsurance and health reinsurance business are excluded from the scope of this review.
- Towers Watson's review of non-life reserves as at 31 December 2019 covered 98.0% / 99.0% of the gross and net held non-life reserves of €28.4 billion and € 26.5 billion respectively. Together with life reserves of gross €4.6 billion and net €4.5 billion, the total balance sheet reserves amount to €33.0 billion gross and €30.9 billion net.
- 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 Willis Towers Watson'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.
- The results shown in Willis Towers Watson'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.
- Willis Towers Watson's analysis was carried out based on data as at evaluation dates for each 31 December from 2009 to 2019. Willis Towers Watson's analysis may not reflect development or information that became available after the valuation dates and Willis Towers Watson's results, opinions and conclusions presented herein may be rendered inaccurate by developments after the valuation dates. As a consequence, Willis Towers Watson has not included specific reserve estimates in for claims which are related to the Covid-19 developments.
- As is typical for reinsurance companies, claims reporting can be delayed due to late notifications by some cedents. This increases the uncertainty in the estimates.
- Hannover Rück SE has asbestos, environmental and other health hazard (APH) exposures which are subject to greater uncertainty than other general liability exposures. Willis Towers Watson's analysis of the APH exposures assumes that the reporting and handling of APH claims is consistent with industry benchmarks. However, there is wide variation in estimates based on these benchmarks. Thus, although Hannover Rück SE's held reserves show some redundancy compared to the indications, the actual losses could prove to be significantly different to both the held and indicated amounts.
- Willis Towers Watson 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, Towers Watson'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.
- In accordance with its scope Willis Towers Watson's estimates are on the basis that all of Hannover Rück SE's reinsurance protection will be valid and collectable. Further liability may exist for any reinsurance that proves to be irrecoverable.
- Willis Towers Watson's estimates are in Euros based on the exchange rates provided by Hannover Rück SE 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.
- Willis Towers Watson has not attempted to determine the quality of Hannover Rück SE's current asset portfolio, nor has Willis Towers Watson reviewed the adequacy of the balance sheet provisions except as otherwise disclosed herein.
- In its review, Willis Towers Watson has relied on audited and unaudited data and financial information supplied by Hannover Rück SE and its subsidiaries, including information provided orally. Willis Towers Watson relied on the accuracy and completeness of this information without independent verification.
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Insights into Property & Casualty reinsurance

Natural catastrophe protection and social inflation within US Casualty treaty business

Sven Althoff, Member of the Executive Board
23rd International Investors' Day 2020
Hannover, 21 October 2020

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Agenda

1	Natural catastrophe protection 2020	3
2	Social inflation within US Casualty treaty business	11
3	Key take-aways	21

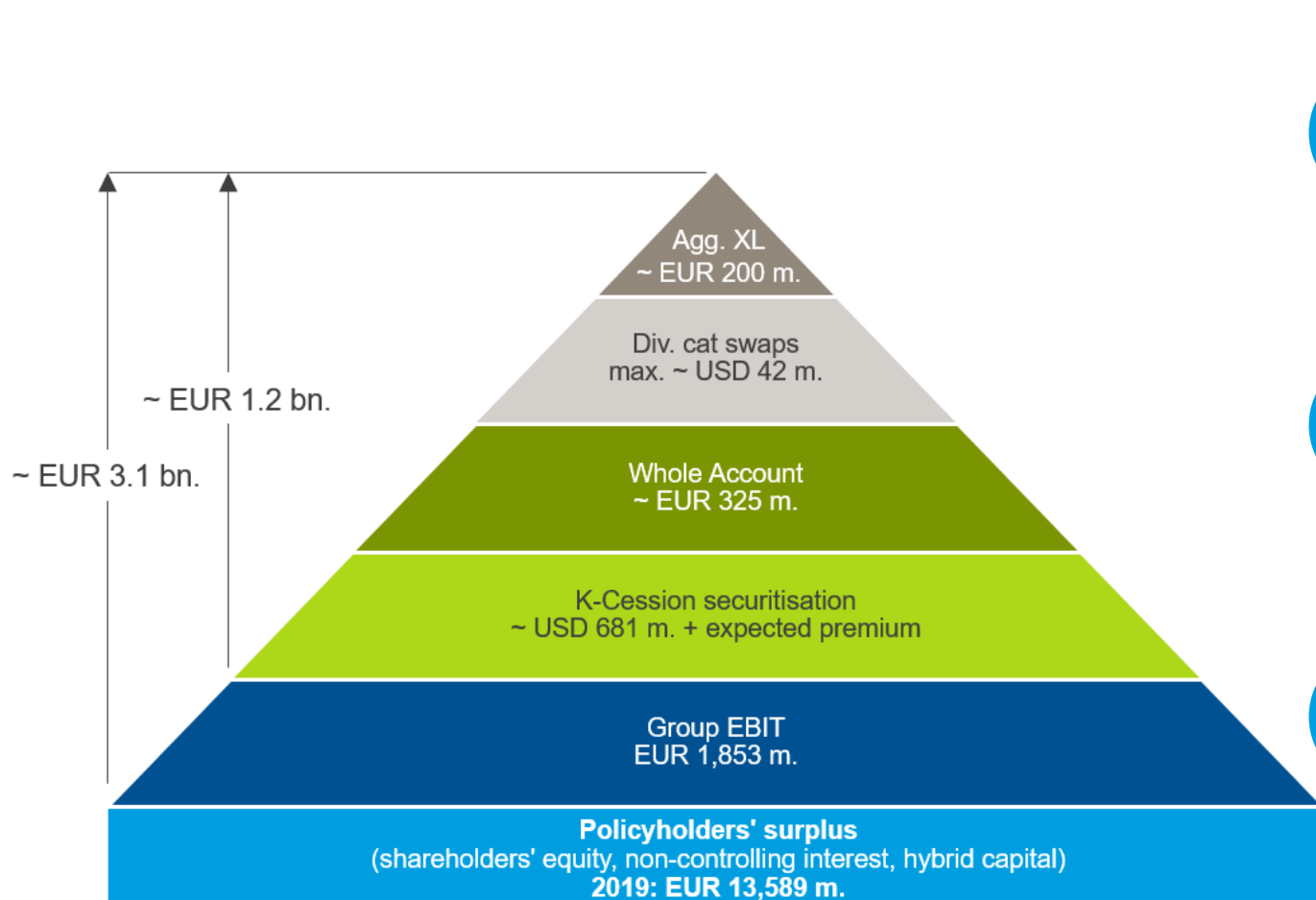
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1

Natural catastrophe protection 2020

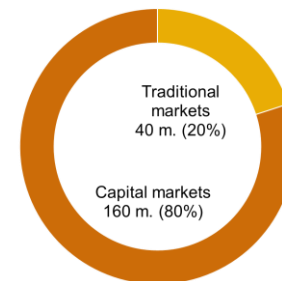
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Multiple levels of protection provide more NatCat capacity and thus create additional earnings at a defined risk appetite



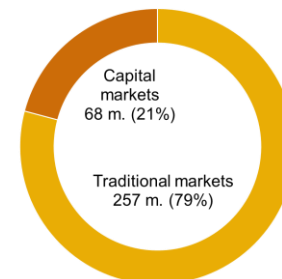
Large Loss Aggregate XL worldwide

Structure: EUR 200 m. xs 650 m.
Participants: 10
Collateralised: EUR 153 m. (77%)



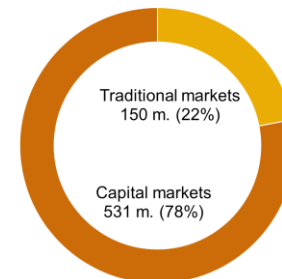
Whole Account worldwide

Structure: EUR 325 m. xs 250 m./350 m.
Participants: 59
Collateralised: EUR 81 m. (25%)



K-Quota share

Cat XL / stop loss / specific territories
Participants: 24
Collateralised: USD 681 m. (100%)



Higher GWP and optimised technical result due to retrocessions (1)

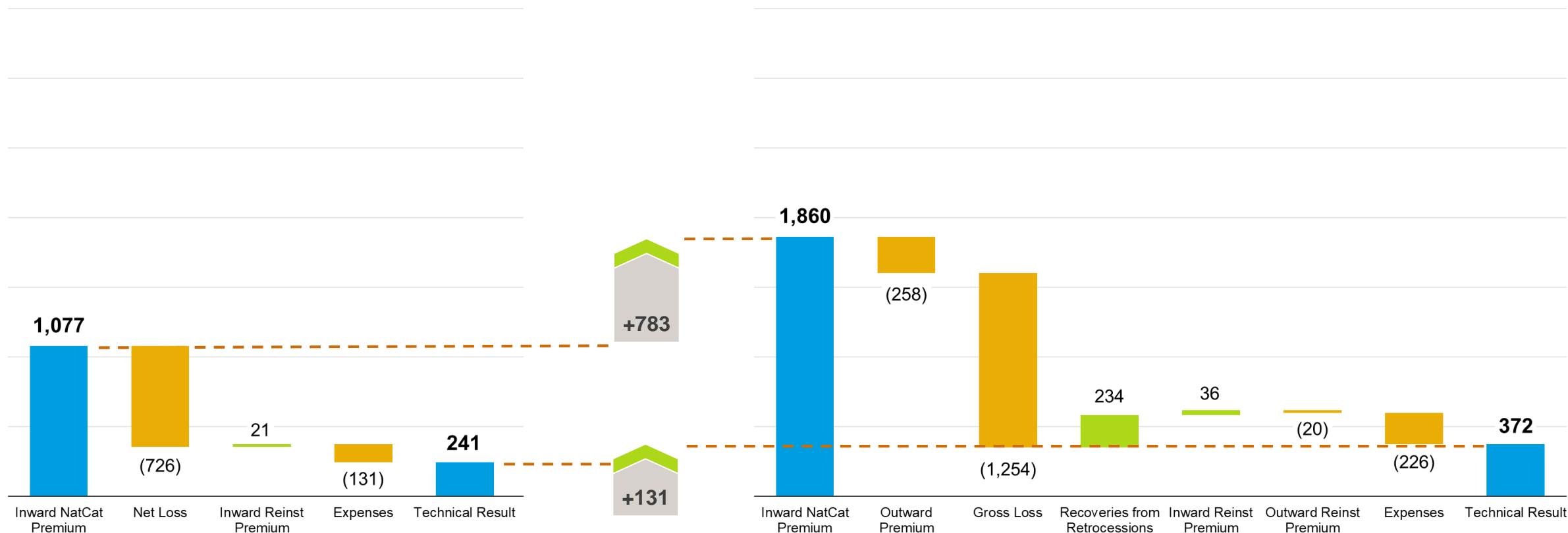
Based on modelled expected loss at same level of risk appetite

2016 w/o retrocessions

in m. EUR

2016 incl. retrocessions as is

in m. EUR



Note: calculated figures based on Hannover Re's total NatCat portfolio and retrocessions as of 1 April 2016 (premium allocated to NatCat, including Cat XL premium, expected gross/net loss including all losses below EUR 10 m.)

Higher GWP and optimised technical result due to retrocessions (2)

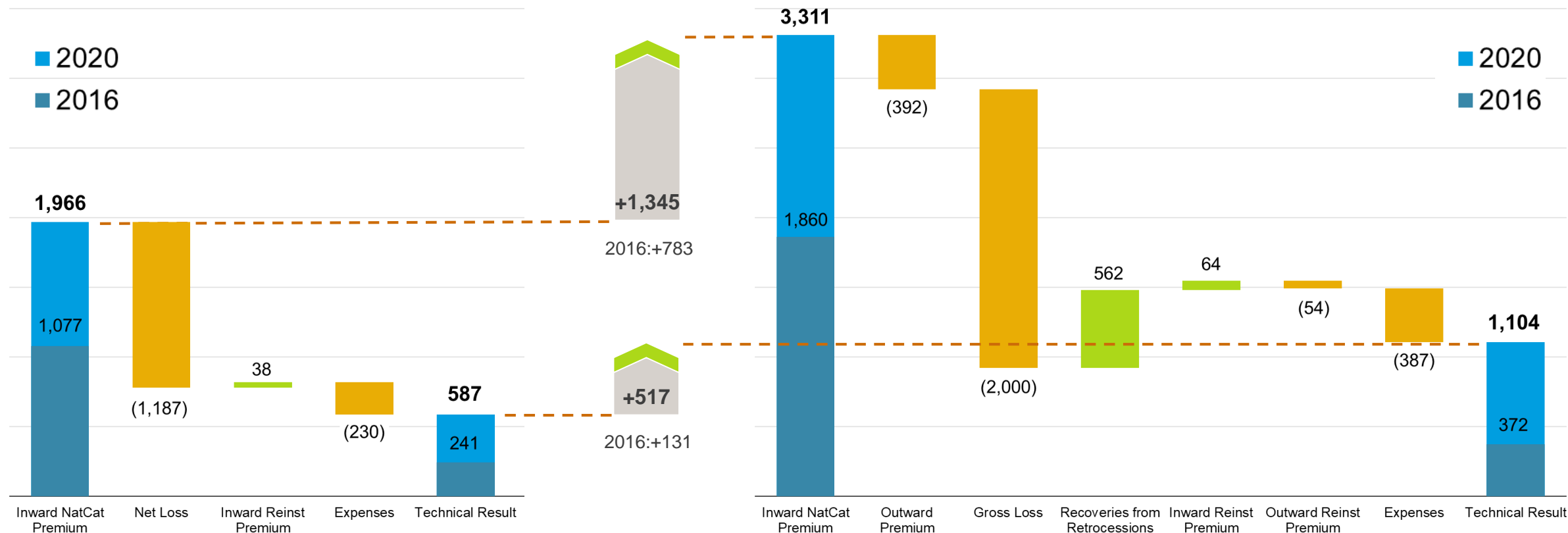
Based on modelled expected loss at same level of risk appetite

2020 w/o retrocessions

in m. EUR

2020 incl. retrocessions as is

in m. EUR



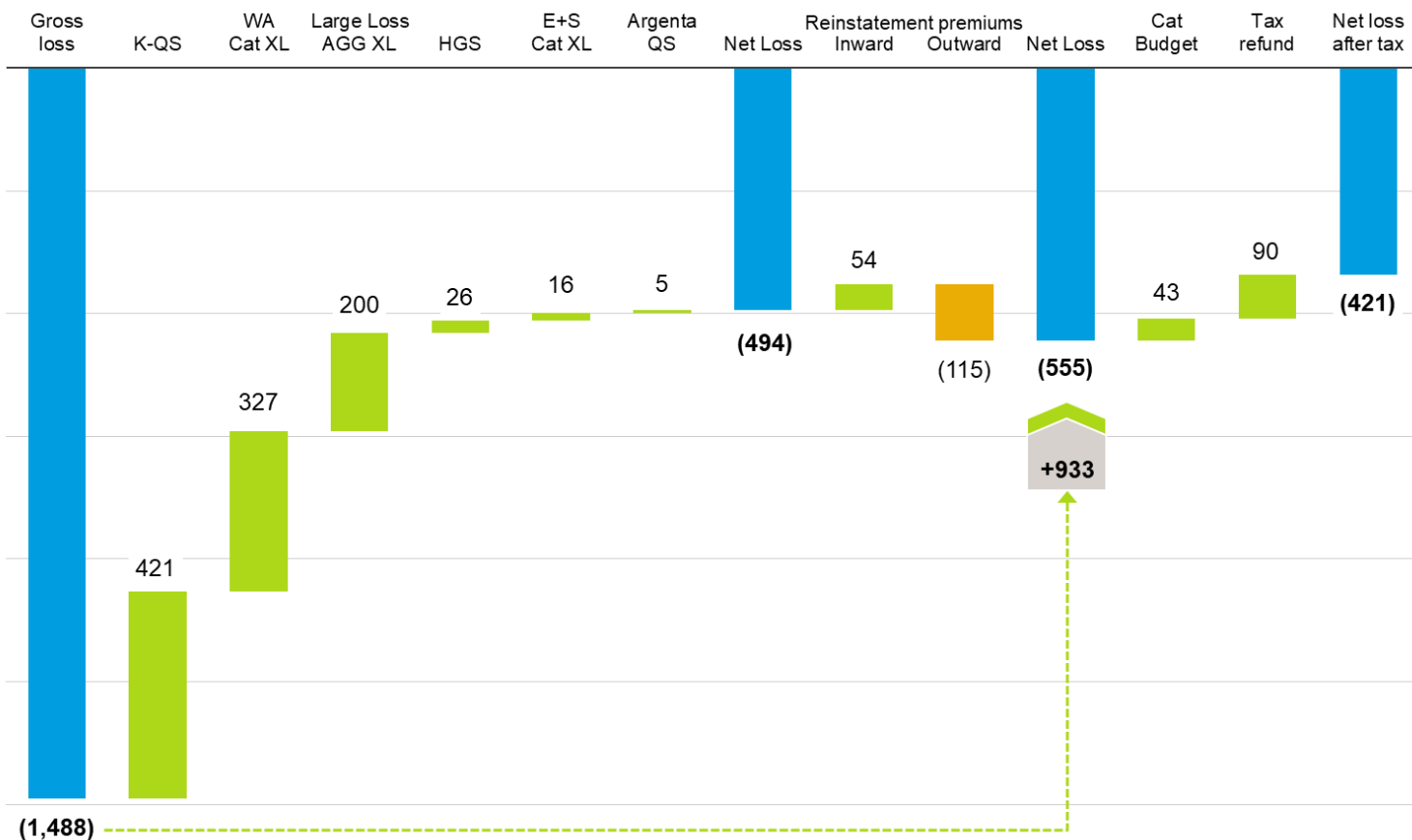
Note: calculated figures based on Hannover Re's total NatCat portfolio and retrocessions as of 1 April 2020 (premium allocated to NatCat, including Cat XL premium, expected gross/net loss including all losses below EUR 10 m.)

Retrocessions significantly reduce net NatCat exposures (1)

Gross / net impacts for the scenario EU winter storm

250y event (market loss of EUR 31 bn.)

in m. EUR



Retrocession structure reduces market share of loss¹⁾ from 4.8% to 1.4%

- Gross loss based on aggregates as of 1 Jan 2020, FX rates as of 31 Dec 2019
- Retrocessions as of 1 Jan 2020, Large Loss AGG XL with net occurrence limit of EUR 650 m.
- Results (incl. market loss) are based on the average of 21 events around the 250y event on the annual occurrence loss curve (min. / max. market loss: EUR 20.9 bn. / EUR 50.2 bn.)

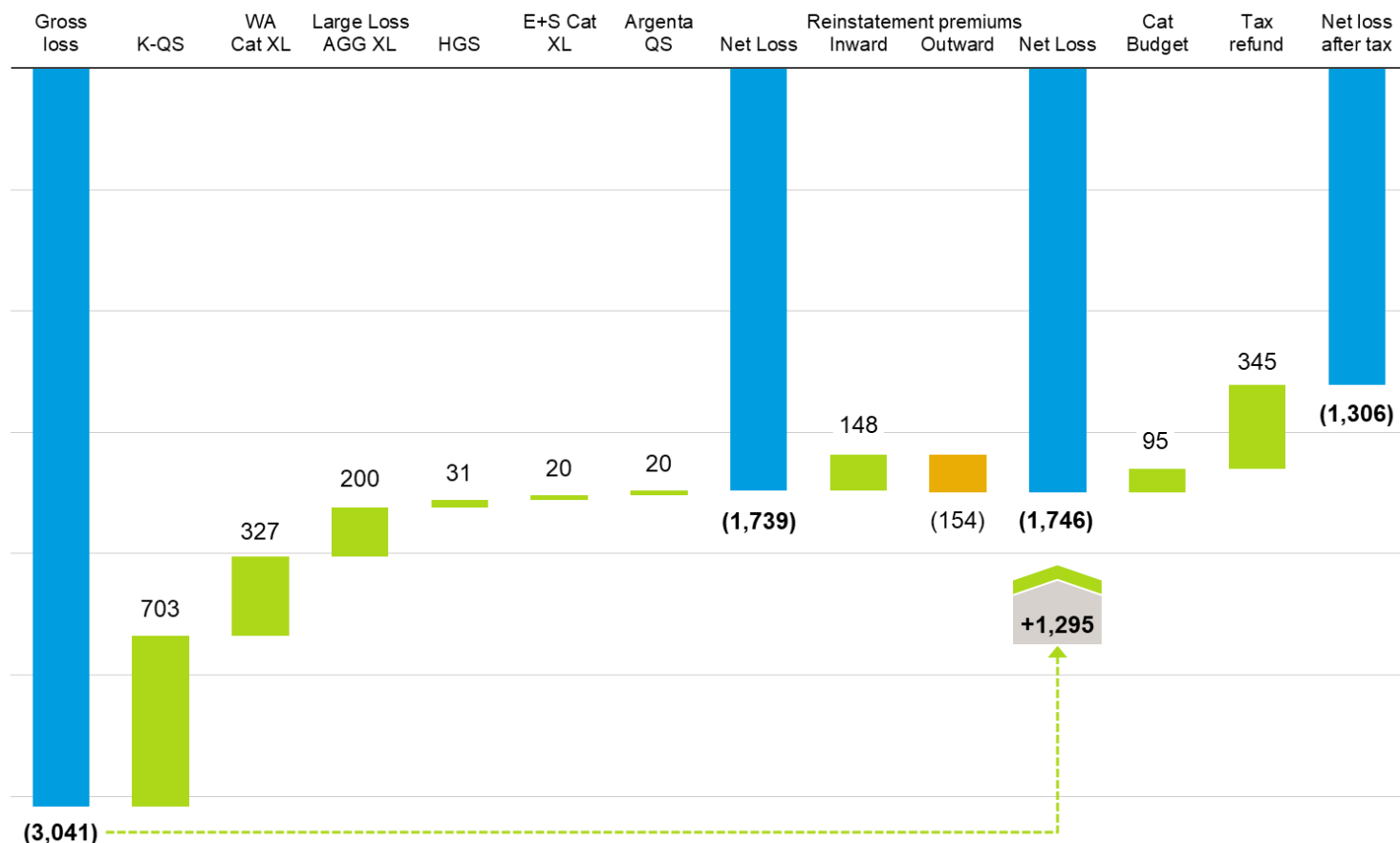
1) Based on modelled figures. Market share of loss is the proportion of the gross loss (respectively net loss after tax) of the market loss.

Retrocessions significantly reduce net NatCat exposures (2)

Gross / net impacts for the scenario US tropical cyclone

250y event (market loss of EUR 202 bn.)

in m. EUR



Retrocession structure reduces market share of loss¹⁾ from 1.5% to 0.7%

- Gross loss based on aggregates as of 1 Jan 2020, FX rates as of 31 Dec 2019
- Retrocessions as of 1 Jan 2020, Large Loss AGG XL with net occurrence limit of EUR 650 m.
- Results (incl. market loss) are based on the average of 21 events around the 250y event on the annual occurrence loss curve (min. / max. market loss: EUR 96.8 bn. / EUR 365.9 bn.)

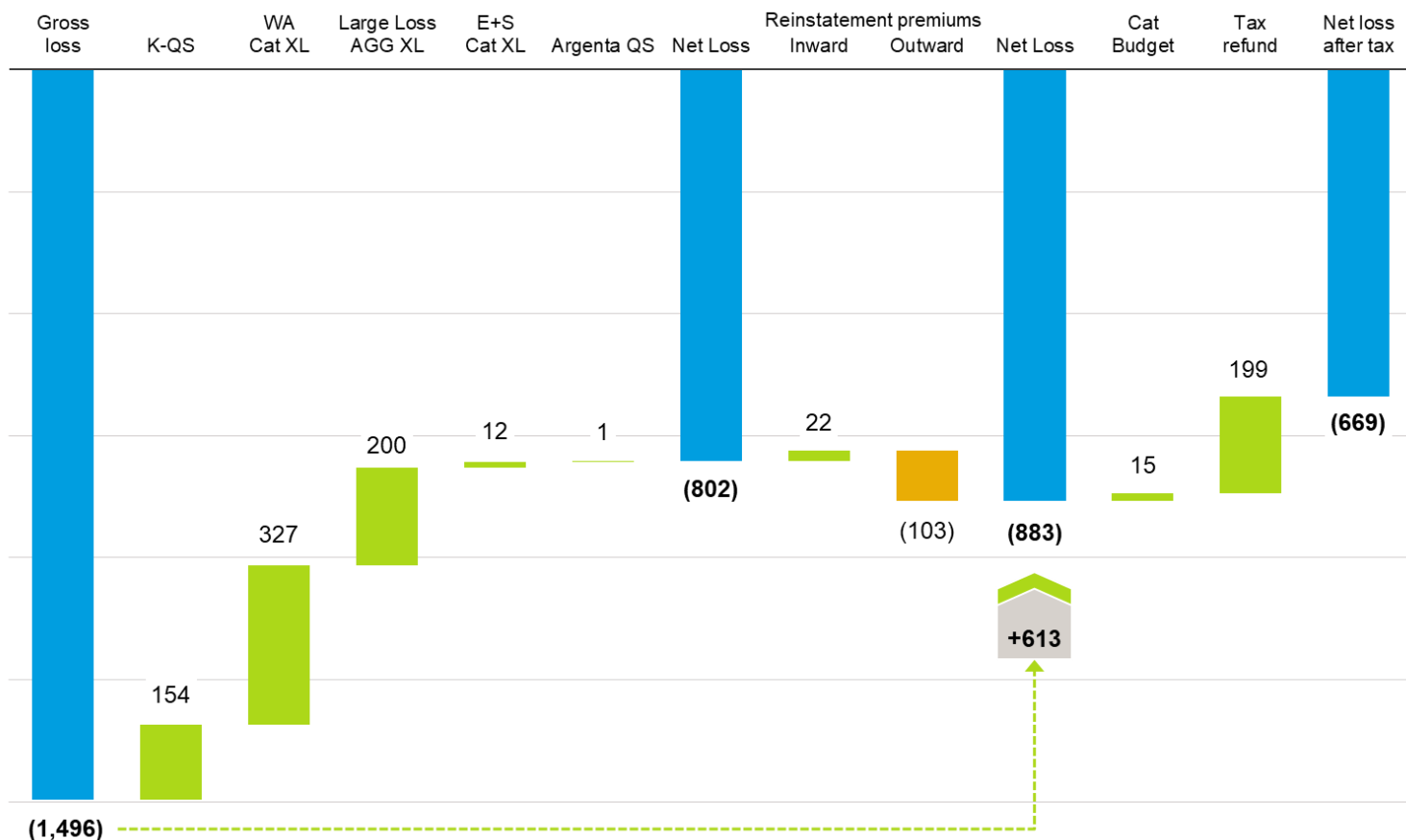
1) Based on modelled figures. Market share of loss is the proportion of the gross loss (respectively net loss after tax) of the market loss.

Retrocessions significantly reduce net NatCat exposures (3)

Gross / net impacts for the scenario Chile earthquake (largest non-peak scenario)

250y event (market loss of EUR 13 bn.)

in m. EUR



Retrocession structure reduces market share of loss¹⁾ from 11.5% to 5.1%




- Gross loss based on aggregates as of 1 Jan 2020, FX rates as of 31 Dec 2019
- Retrocessions as of 1 Jan 2020, Large Loss AGG XL with net occurrence limit of EUR 650 m.
- Results (incl. market loss) are based on the average of 21 events around the 250y event on the annual occurrence loss curve (min. / max. market loss: EUR 10.0 bn. / EUR 19.4 bn.)

1) Based on modelled figures. Market share of loss is the proportion of the gross loss (respectively net loss after tax) of the market loss.

Strategic objectives and measures of our NatCat protections







Strategic objectives and thresholds

- **Capital protection** 
 - Protections shall ensure that the Hannover Re Group is in a position to fully profit from hard markets, i.e. that there is sufficient capital available after a market-changing event
- **Risk tolerance** 
 - Risk appetite based on 200y net underwriting result (max. 90% of risk budget NatCat)
- **Financial threshold** 
 - The 50-year net loss from the largest single event shall not exceed the EBIT P&C Plan



Measures

- **Balance of gross earnings with ceded margins** 
 - Placements at adequate pricing level
- **Sufficient risk transfer** 
 - >40% for non-proportional protections
- **Independence from reinsurers** 
 - Overall retro involvement per reinsurer shall be limited to a maximum of EUR 200 m. (EUR 250 m. per reinsurer group)
- **Independence from retrocession products** 
 - Access various sources of retro capacity by making use of traditional reinsurance and capital market products

All targets met in 2020

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**Social inflation within
US Casualty treaty business**

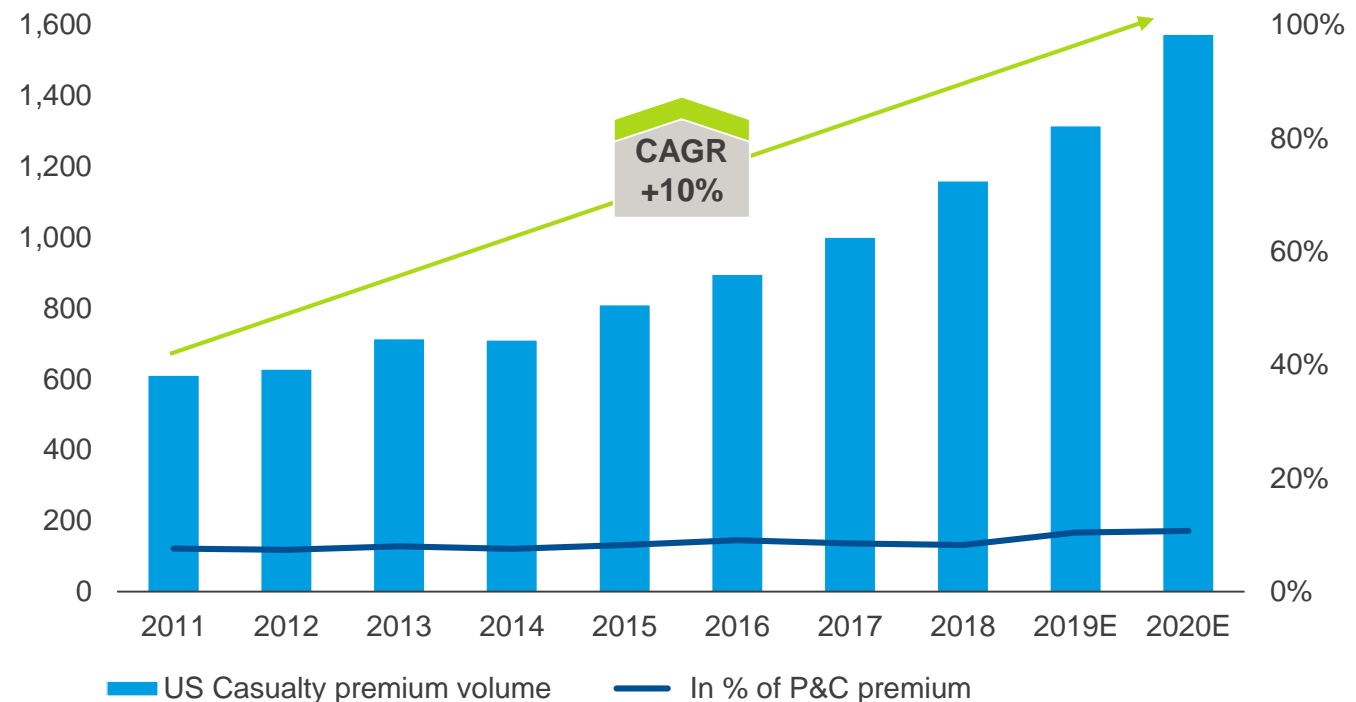
US Casualty treaty business: continuity and solid growth

We steer our portfolio with a client-centric and long-term focus

Building blocks of our US Casualty underwriting



Gross written premium by UY¹⁾



US Casualty consistently at ~8% to 10% of total P&C premium

1) Business from US cedents only; excluding Advanced Solutions and Facultative business; underwriting years (UY) 2011 - 2018 booked IFRS figures; UY 2019 - 2020 estimated figures; as at September 2020

“New” market dynamics as a result of social inflation?

The challenges are well known to Hannover Re

- The term **social inflation** is often used, but a marketwide standard definition does not exist
- Social inflation is a phenomenon characterised by changed juries’ opinions and thus **higher verdicts by courts**, mainly in the US
- Hannover Re’s actuarial reinsurance pricing has **always taken social inflation into account** through the use of superimposed inflation assumptions

Several factors contribute to social inflation

- Litigious culture (e.g. third party litigation funding)
- Erosion in the trust of Corporate America
- More liberal treatment of claims
- Erosion of the tort reforms build into the legal system during the last century
- Populistic media coverage
- Society's desensitisation to large jury verdicts and settlements

Social inflation ultimately leads to an increased number and higher liability of insurance claims

Exemplary claims complexes (1)

Opioid Litigation

What is insured?

The insured defendants involved in opioid litigation purchased various different types of liability insurance coverage over an extended period of time.



What is the issue?

Allegations by claimants against a multitude of defendants including

- pharmaceutical manufacturers
- distributors
- retailers and drugstores

for false marketing and violating various acts and common law.



Effects on Hannover Re?

The opioid litigation constitutes an important threat to the insurance and reinsurance industry and could result in major claims. Hannover Re may have exposure to this claim complex although we have always had a limited appetite for pharmaceutical risks and for Fortune 1,000 companies.



Exemplary claims complexes (2)

Medical Malpractice

What is insured?

The insureds are healthcare professionals and/or organisations in the US. This includes hospitals, which generally tend to purchase larger limits than e.g. physicians. As such, hospital insurance programs are more likely to be targeted by the plaintiff's bar and are more susceptible for large verdicts.



What is the issue?

US medical malpractice insurance experienced a record year in terms of large court verdicts in 2019. Two verdicts for single claims, for example, exceeded the USD 100 m. mark.

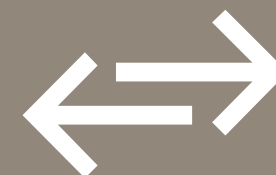
Main drivers are high life care plans for individual claimants given more sophisticated medical treatment methods developed over time in combination with social inflation.



Effects on Hannover Re?

We only reinsure US medical malpractice insurance if it is written on a strict "claims-made" basis. Also, we avoid high excess layer business.

We further structure our reinsurance contracts in such a way as to safeguard against the severity potential inherent in this class.



Exemplary claims complexes (3)

Public D&O

What is insured?

Publicly traded companies generally purchase public D&O (Directors & Officers) insurance to indemnify the company and its directors and officers for losses or defence costs arising out of alleged wrongful acts committed by the respective directors and officers.



What is the issue?

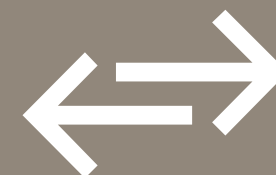
D&O insurance policies have seen a strong rise in claims frequency and severity trends in the last several years.

This also includes a rise in federal court securities fraud class action filings by investors.



Effects on Hannover Re?

Hannover Re has a stronger appetite for private and not-for-profit D&O insurance relative to public D&O and considers public D&O to be a rather cyclical business segment.



Impact of social inflation on Hannover Re is well addressed

HR has limited exposures to certain loss complexes due to our underwriting strategy

We **focus** on strong relationships

- Building and growing long-term relationships with loyal ceding companies and brokers leads to Hannover Re being amongst their number one choices for reinsurance capacity
- We are 100% dedicated to distribution through reinsurance brokers
- We deliver solutions that fit our clients' needs and act quickly thanks to our efficient communication
- We show continuity, transparency & predictability in our decisions because our underwriting and management staff has a very low staff turn-over rate and all underwriting is centrally located in Hannover, Germany

We **avoid** the following business segments

- Fortune 1000 companies
- Stand-alone commercial auto and trucking/transportation
- Non-standard auto
- Pharmaceutical business
- Life sciences business
- MGA-driven business
- Fronted business

We have a **conservative** underwriting policy

- We avoid writing large limits and manage our involvement via maximum line sizes of 50%
- Depending on the line of business we lead or follow the market
- We avoid large “take it or leave it” whole account treaties as we have individual strategies per line of business

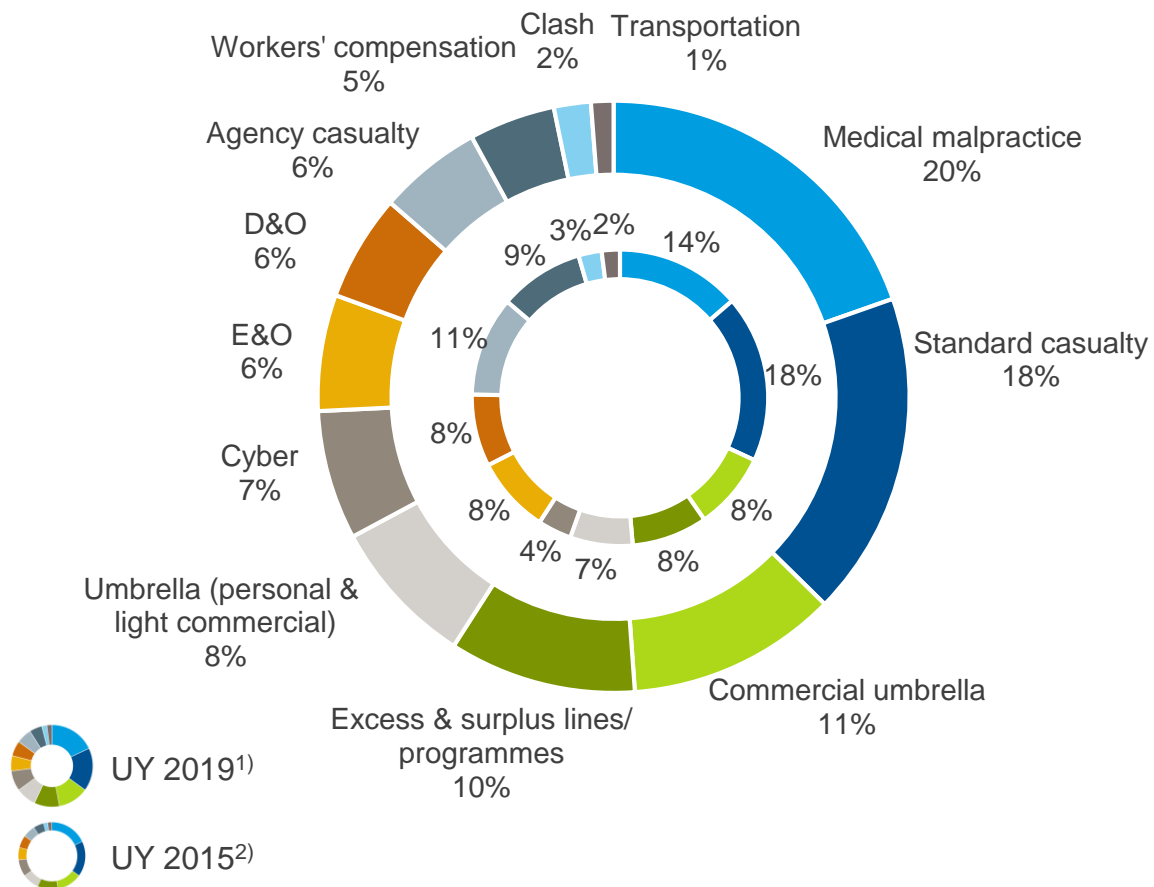
We are **cautious** regarding

- Start-up books and digital start-ups in long-tail lines of business
- Clients with an aggressive growth strategy in a declining market
- Cedents without a meaningful net retention

Highly diversified portfolio mitigates possible effects from social inflation

Being selective leads to stability and long-term focus ensures continuity

Lines of business in our US Casualty book



UY 2019 portfolio split: 49% proportional and 51% non-proportional

Less than 2% of total US Casualty premium from excess casualty business with Fortune 1000 companies

We achieve a very high diversification by line of business and by type of client

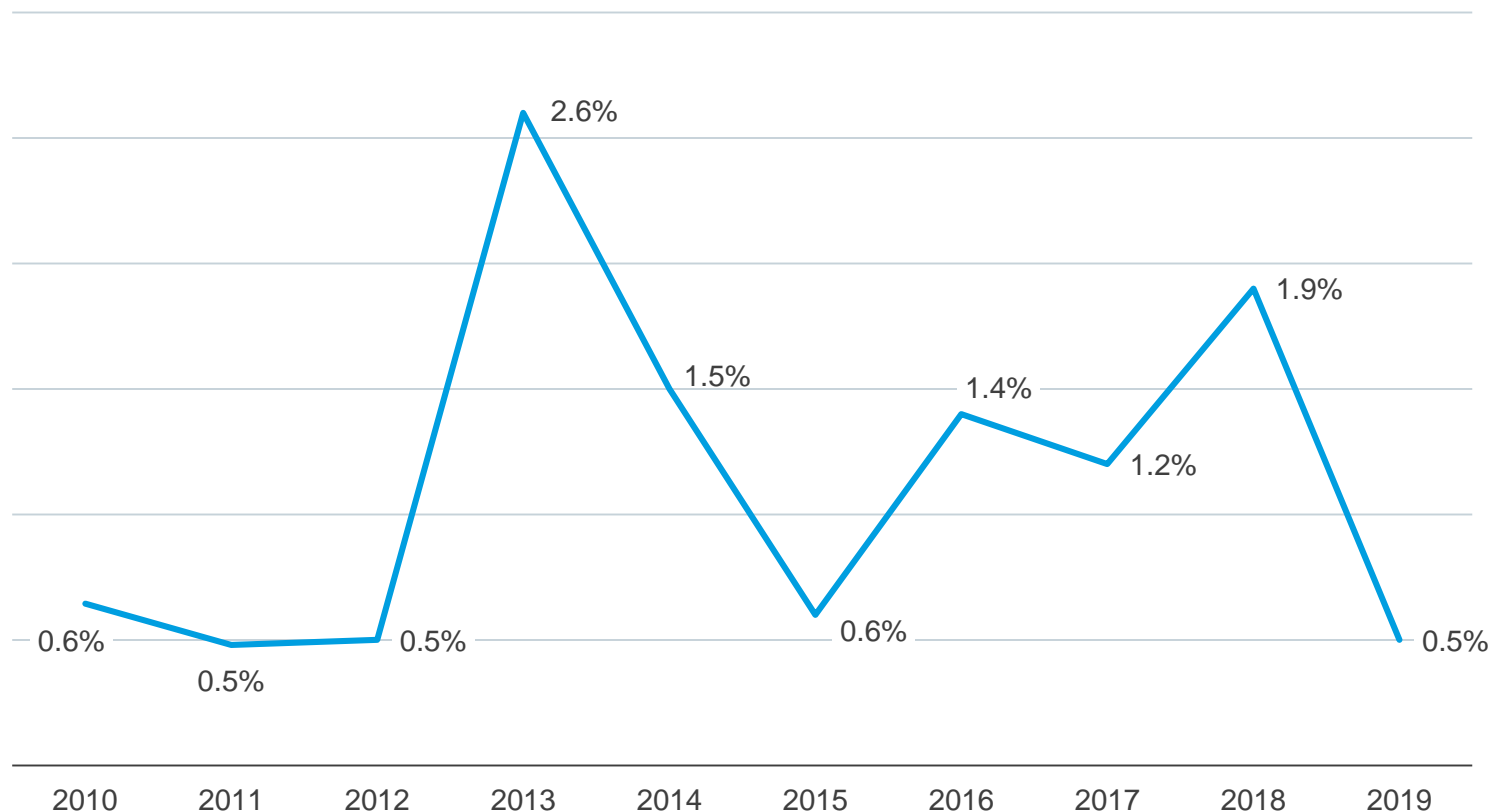
Comparison over the years: consistently diversified portfolio

1) UY 2019: estimated figures
 2) UY 2015: booked IFRS figures as at September 2020

Reserving policy and reserve development

Conservative reserving enables positive actuarial run-off

Positive actuarial run-off by FY¹⁾



- Total US Casualty reserves: EUR 4.5 bn. (thereof EUR 3.7 bn. derive from 2010 - 2019)
- Conservative reserving with high level of IBNR contributes well to Hannover Re's reserve redundancies
- Social inflation is taken into account in our reserving approach, avoiding negative actuarial and financial effects

IBNR = Incurred But Not Reported

1) FY = Financial Year; based on underwriting years 2000 - 2019; basis earned premium and actuarial ULR

Outlook: Hannover Re is well positioned to benefit from market developments

Social inflation is and has been reflected within our US Casualty underwriting

Market Environment



Original rates are increasing

Important drivers:
loss activity and social inflation



Reinsurance terms and conditions are hardening



Competitive environment is generally less stable and less consistent than Hannover Re's approach

Hannover Re's positioning

- Hannover Re's very experienced team is **driven by continuity**, an unchanged risk appetite and underwriting discipline but there are many more opportunities that fit as a result of the current market developments
- US Casualty is a specific segment we aim to **grow where the rate development supports even better profitability** and is in line with our margin requirements
- In order to manage the volatility of the results, our **cautious underwriting approach** has proven to be of paramount importance

The risk of rising social inflation is obvious, but well considered in our underwriting strategy and pricing approach

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Key take-aways

Key take-aways



- We use retrocessions to significantly reduce our NatCat net exposure
- At the same time we create additional earnings due to increased gross capacity at the defined risk appetite



- The risk of rising social inflation is obvious, but well considered in our underwriting strategy and pricing approach
- We benefit from an experienced, stable team with continuity in risk appetite and underwriting discipline
- We grow only where the rate development supports even better profitability

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Insights into Life & Health reinsurance

Earnings growth drivers for the coming years

Claude Chèvre, Member of the Executive Board
23rd International Investors' Day 2020
Hannover, 21 October 2020

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Agenda

1 Strategy and past performance

2 Earnings growth drivers

3 Expected COVID impact

4 Key take-aways

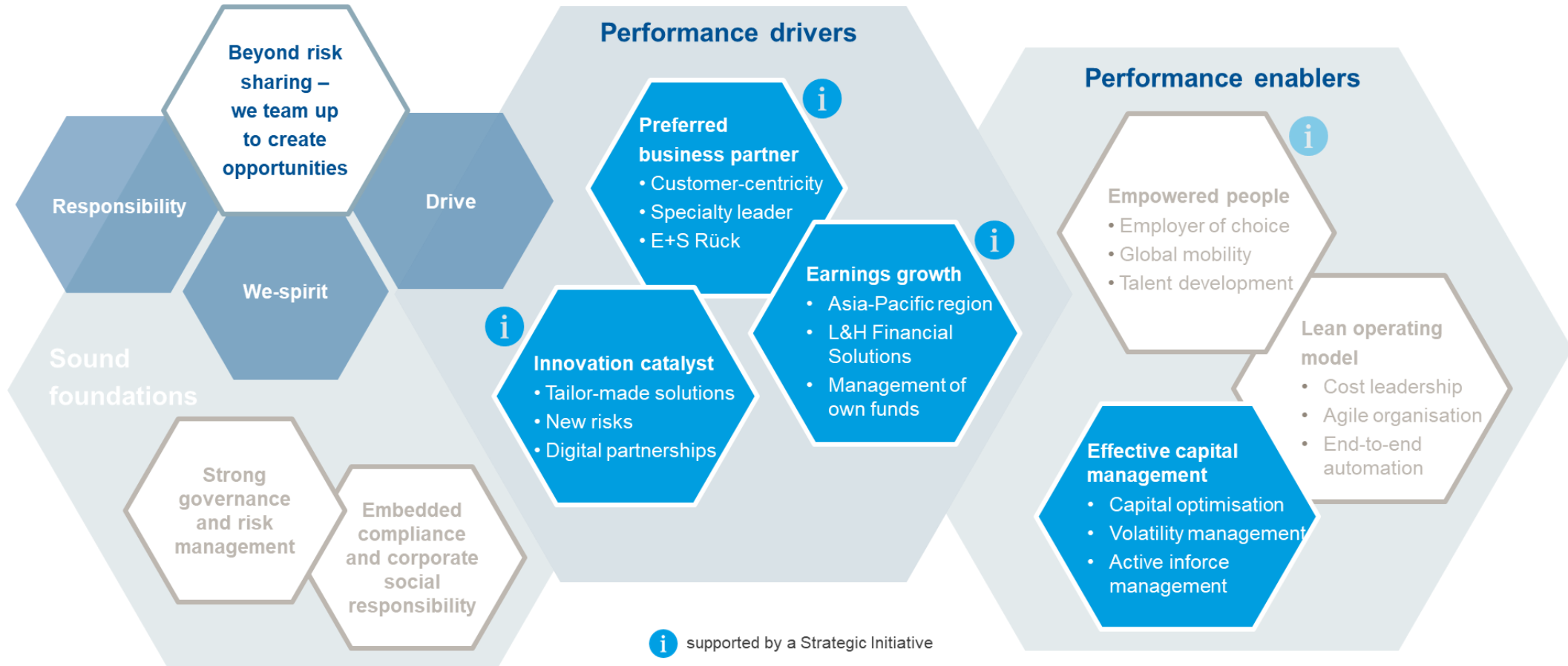
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1

Strategy and past performance

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① Support our clients in optimising consumer experience and risk segmentation

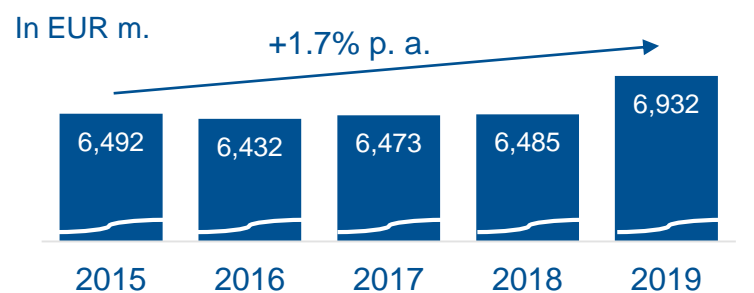
② Provide our clients with tailored risk-transfer solutions beyond our core expertise

③ Outperform the competition in the fastest growing L&H markets

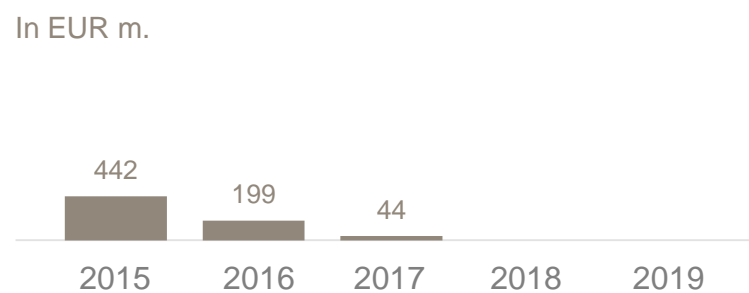
④ Identify and actively manage value-destroying risks in our portfolio

Life & Health: NPE (net premium earned)

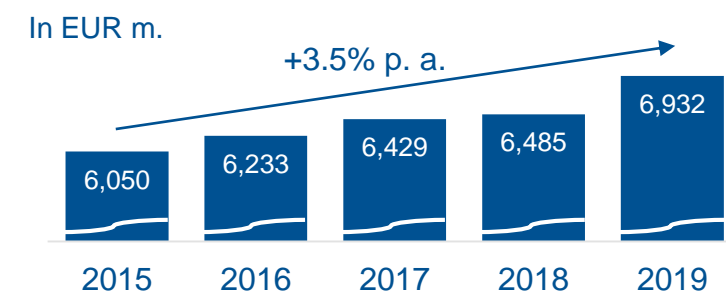
NPE



NPE special effects

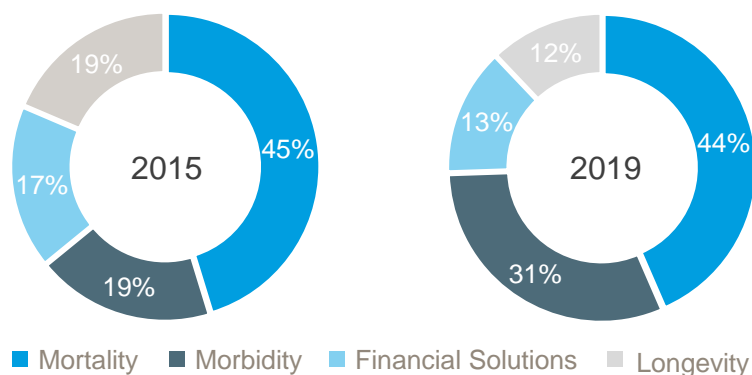


Normalised NPE



NPE split per reporting category

In %

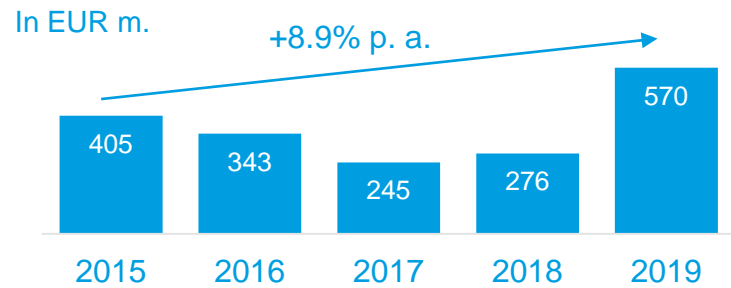


- Switch from single to annual premium payment for large longevity block (2015)
- Large single premium longevity block closed for new business (2015 - 2016)
- Impact of new C-ROSS solvency regime in China (2015 - 2017)

- Normalised NPE growth (2015 - 2019): EUR +882 m.

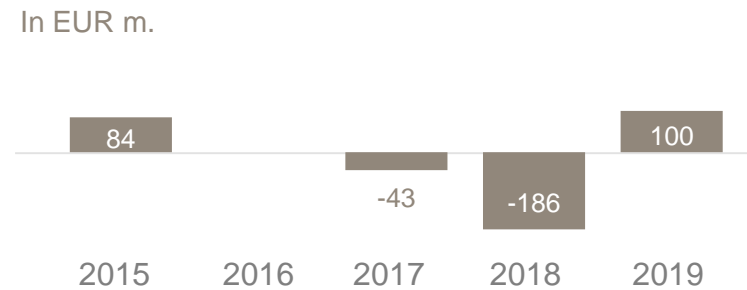
Life & Health: EBIT

EBIT



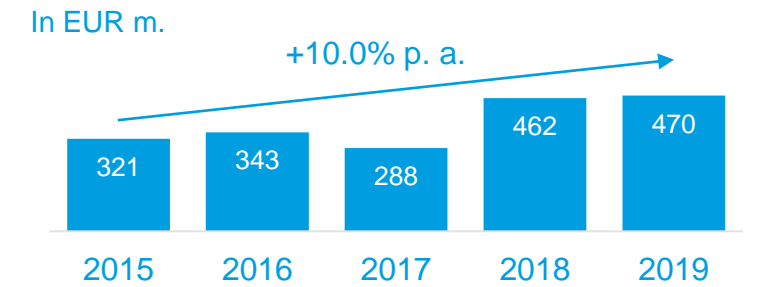
- Strong EBIT growth over period 2015 - 2019
- EBIT volatility due to one-off effects

EBIT one-off effects



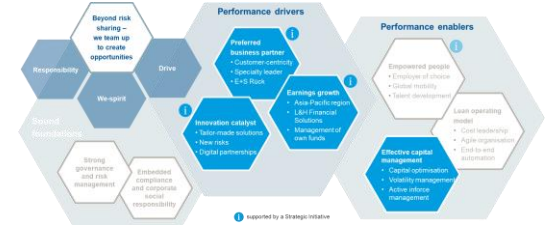
- Recapture of two FinSol treaties (2015)
- Recaptures after premium increases for former ING Re portfolio (2017 - 2018)
- Revaluation of Viridium investment (2019)

Normalised EBIT



- Absolute amount of one-off effects (positive & negative): EUR 413 m.
- Normalised EBIT growth (2015 – 2019): EUR +149 m.

Life & Health: Strategy



1

Support our clients in optimising 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

3

Outperform the competition in the fastest growing L&H markets

- Expand our offering in Asia, Longevity and Financial Solutions

2

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

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

4

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

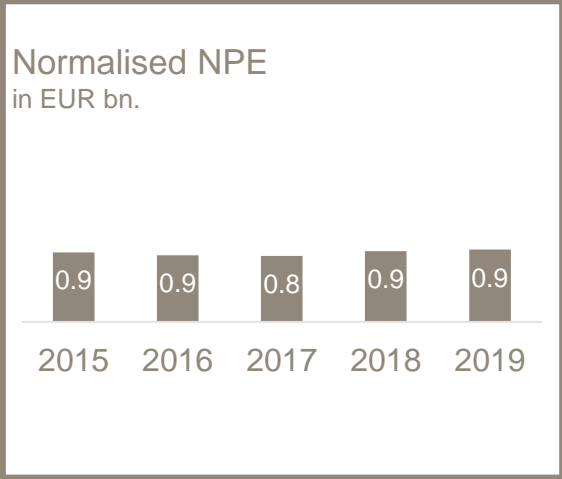
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Earnings growth drivers

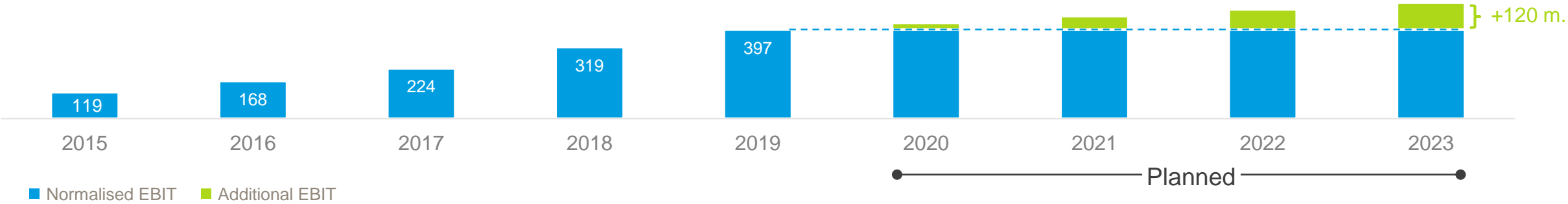
Earnings growth drivers

Financial Solutions



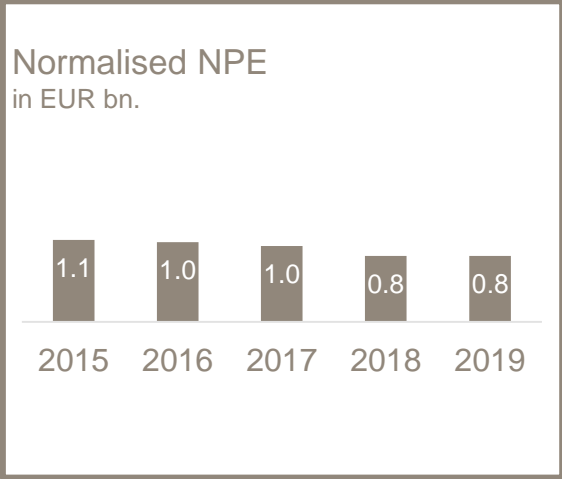
- Providing Financial Solutions to our clients has been one of our most successful growth areas
- Bottom line growth has been very strong with the US as a significant contributor
- Premium has been flat. However, this is not a relevant indicator since many deals do not show any IFRS premium
- For the future, we still see a lot of opportunities in the US and also expect to further grow in other markets
- **Expected additional EBIT by 2023: EUR 120 m.**

Normalised EBIT in EUR m.



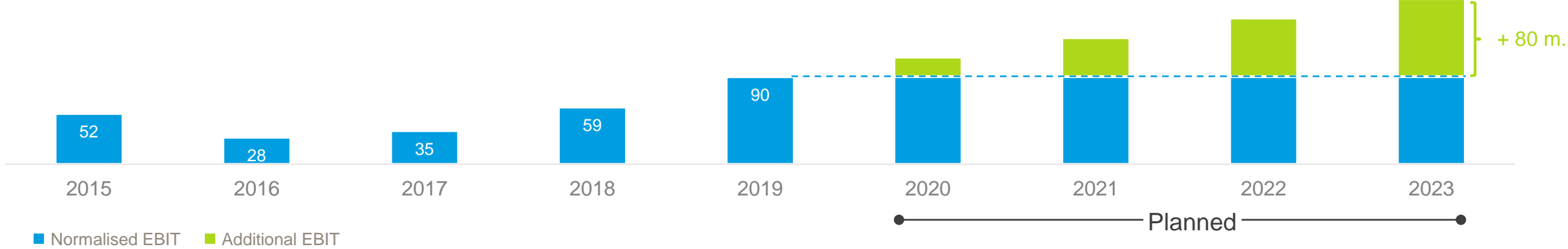
Earnings growth drivers

Longevity



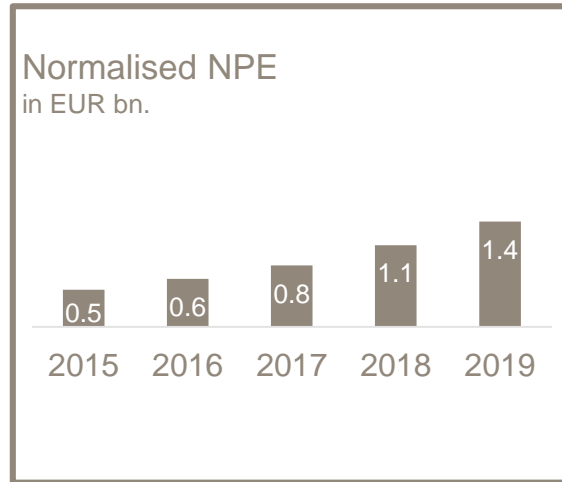
- Hannover Re has been very successful in longevity markets over many years
- In the last years, we have seen strong bottom line growth with slight consolidation on the premium side
- We expect strong growth both in new regions and in new solutions
- **Expected additional EBIT by 2023: EUR 80 m.**

EBIT in EUR m.



Earnings growth drivers

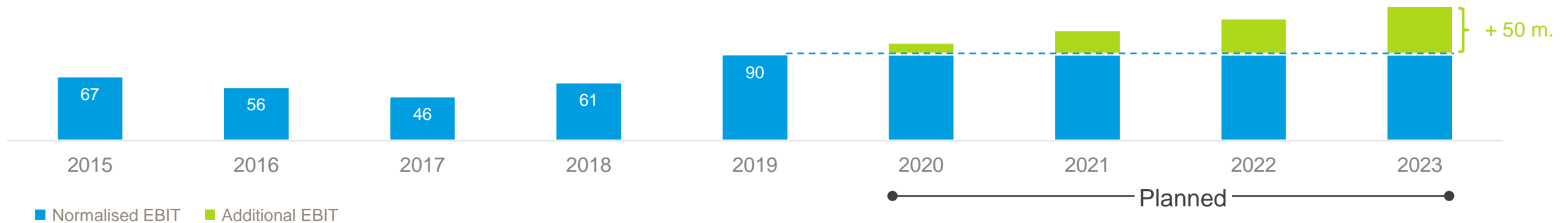
Asia



- Hannover Re has seen strong top and bottom line growth in Asia
- We expect above-average growth potential for Asia

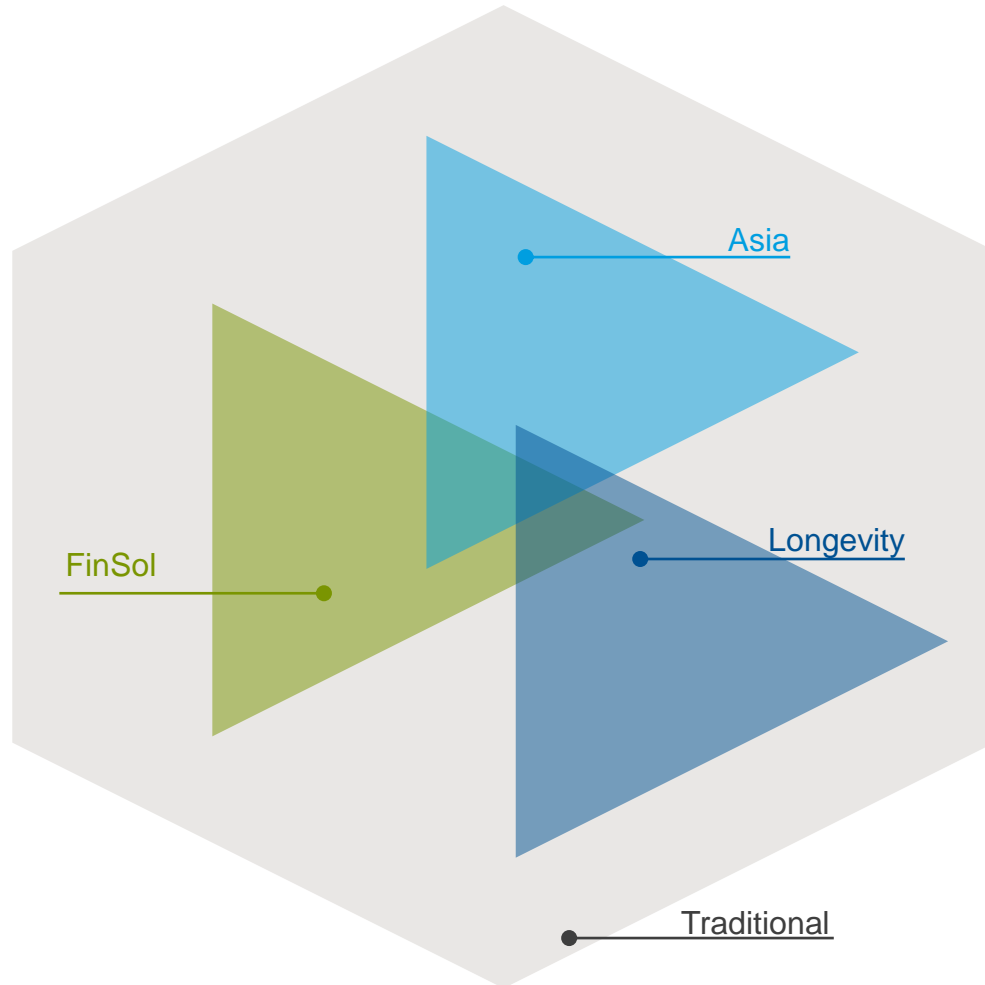
- Expected additional EBIT by 2023: EUR 50 m.

EBIT in EUR m.



Earnings growth drivers

Illustrated



Life & Health earnings growth drivers

- Our most relevant earnings growth drivers for the coming years will be Financial Solutions, Asia and Longevity
- These drivers are interrelated and there is naturally some degree of overlap

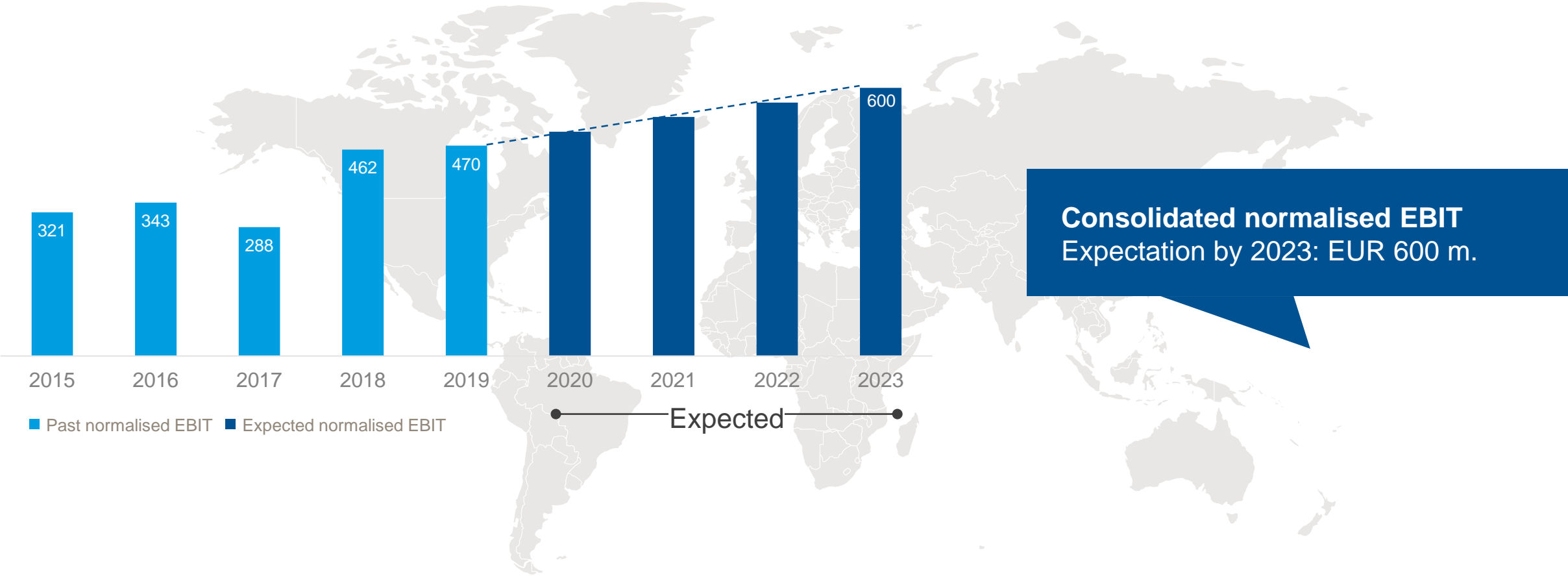
Traditional business

- A large part of our book still consists of traditional business outside of the main growth drivers
- We expect stable results here

Life & Health: Consolidated expected EBIT

Before Covid-19 impact

In EUR m.



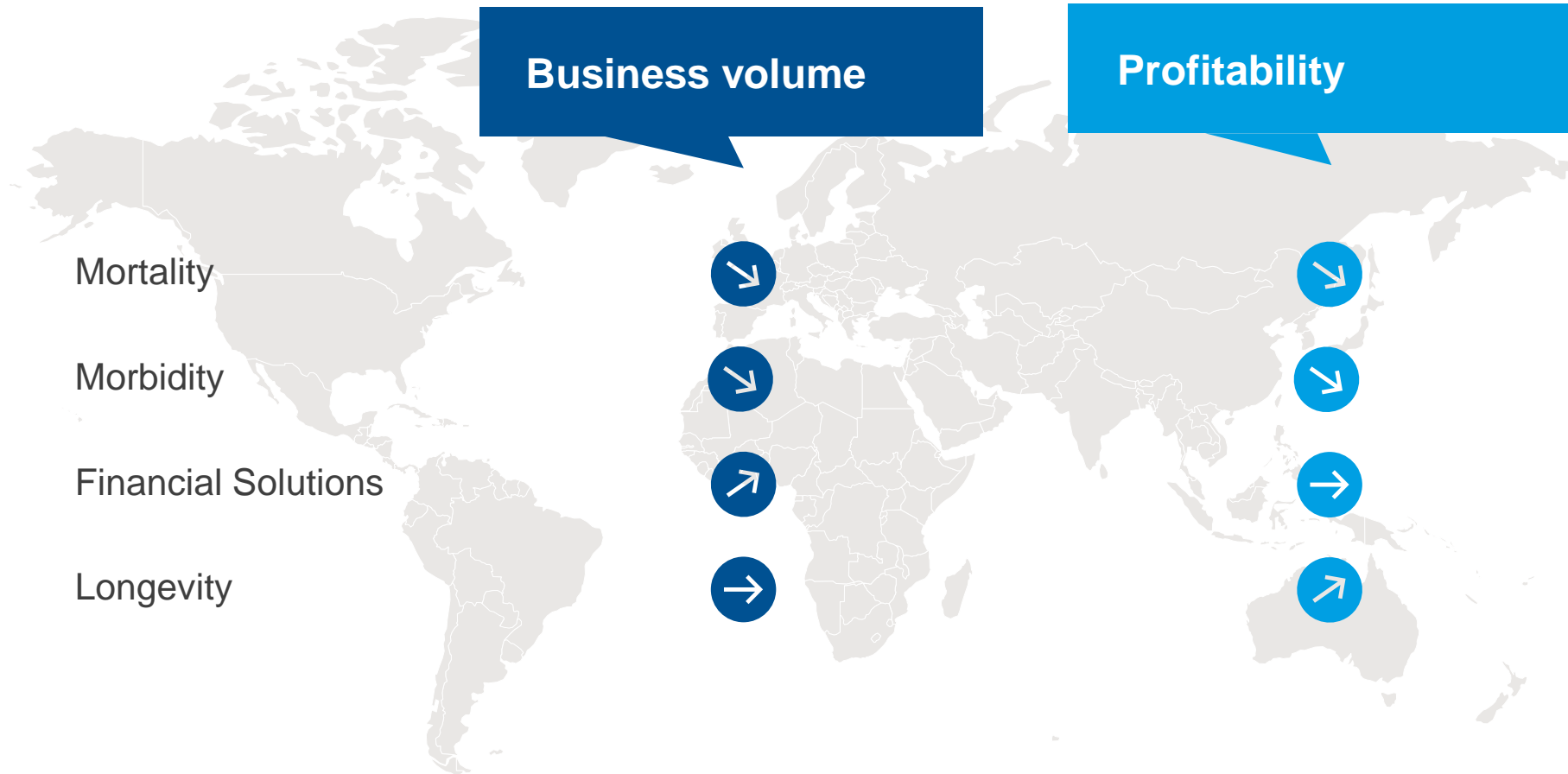
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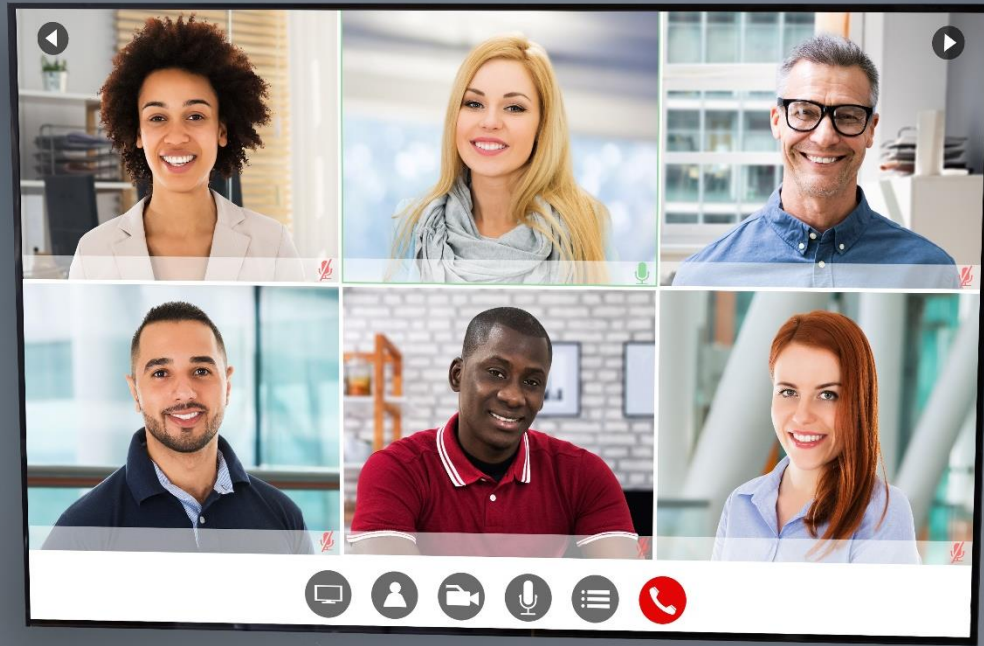
Expected COVID impact

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Expected COVID-19 impact in 2020/21



somewhat
different



4

Key take-aways

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Key take-aways

Since
2015

Strong annual normalised EBIT
growth of 10%



EBIT expected to grow to EUR 600 m.



Key earnings growth drivers

- Financial Solutions
- Longevity
- Asia



Covid-19 expected to impact 2020/21
results, 2023 targets might be
delayed by one year

Disclaimer

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*somewhat
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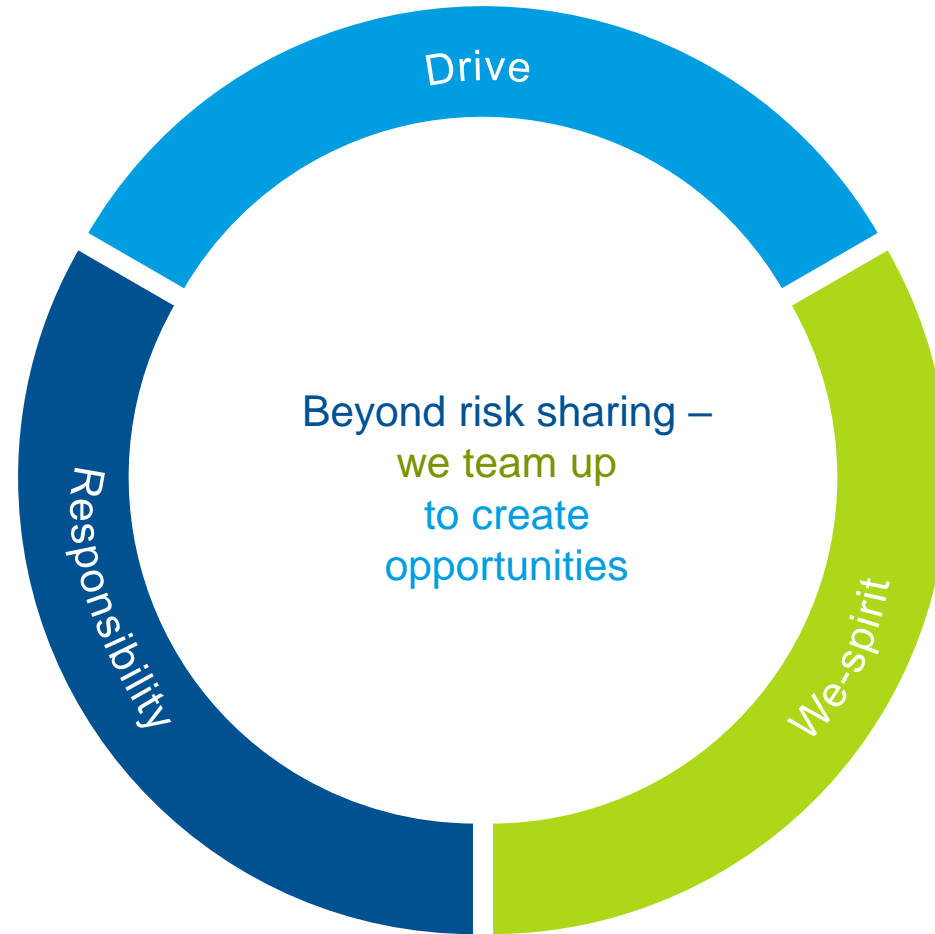


Concluding remarks

Jean-Jacques Henchoz, Chief Executive Officer
23rd International Investors' Day 2020
Hannover, 21 October 2020

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A purpose-driven strategy building on Hannover Re's proven strengths



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