20th International Investors' Day

Frankfurt, 19 October 2017

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Content

somewhat different

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Creating value through reinsurance

Strategy cycle 2018 - 2020

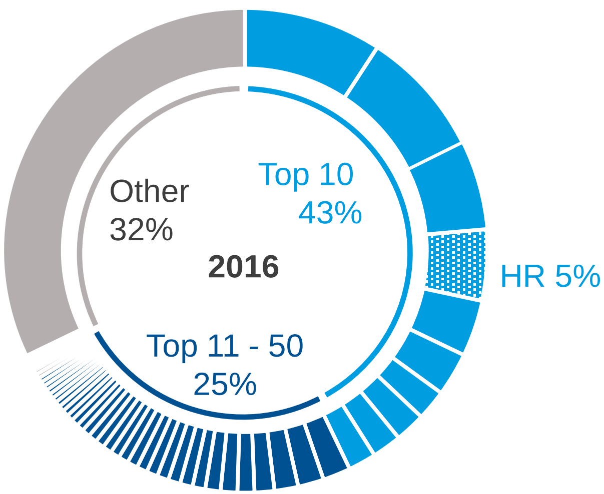
Ulrich Wallin, Chief Executive Officer

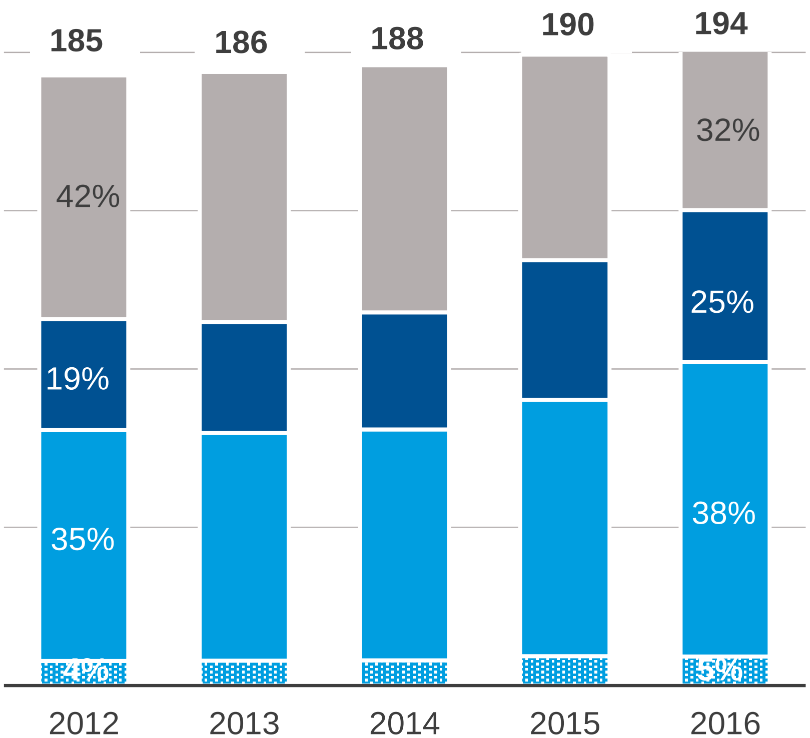
20th International Investors' Day
Frankfurt, 19 October 2017

HR improved market position to No. 4 in P&C reinsurance

Market size and concentration

in bn. EUR





4-year CAGR

Market	**+1.2%**
Other	-5.2%
Top 11-50	+8.6%
Top 10	+3.3%
HR	**+4.5%**

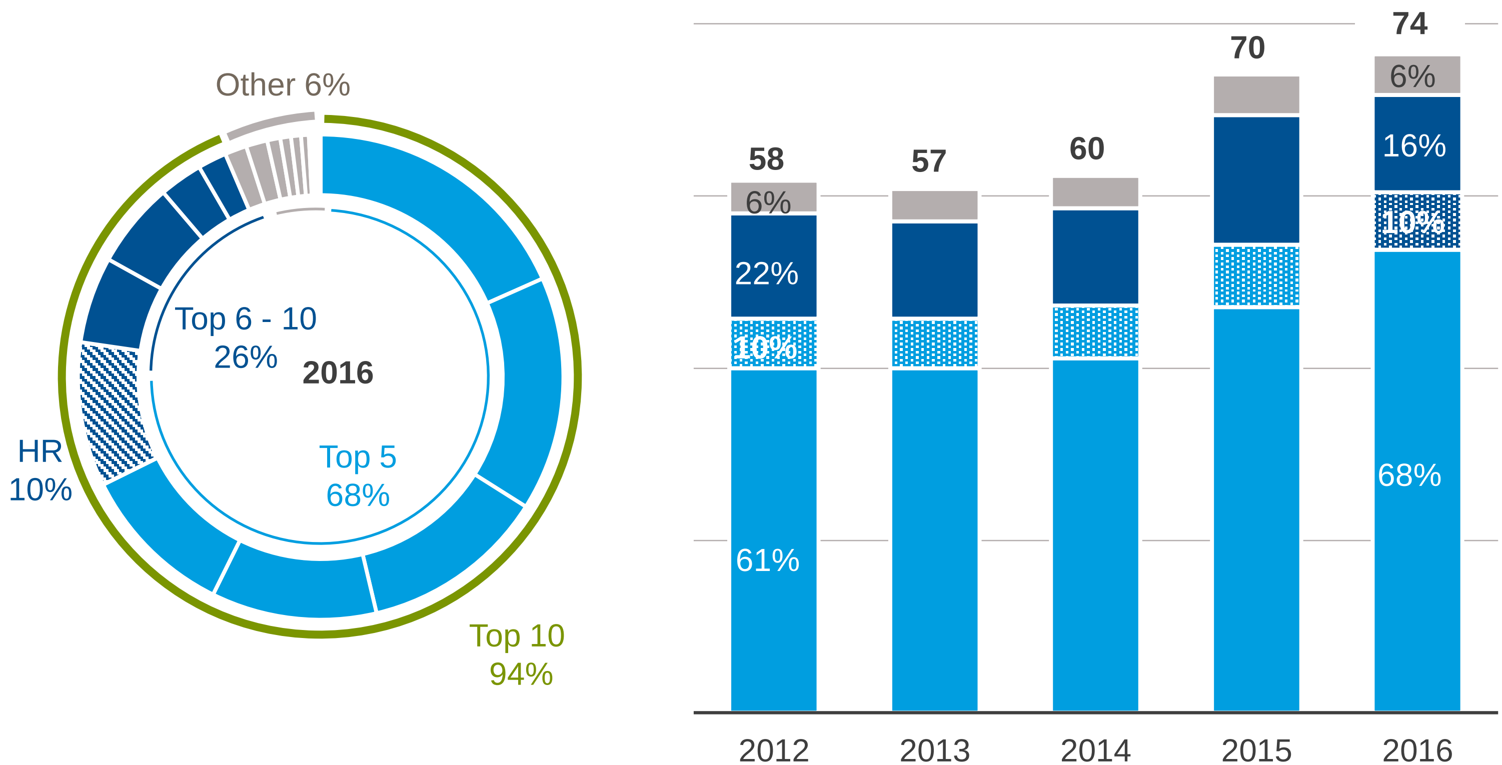
Source: own research (global market size based on estimate of total ceded premiums by primary insurers); as at April 2017
Top 10 in 2016: Munich Re, Swiss Re, Lloyd's, Hannover Re, Berkshire Hathaway, SCOR, Everest Re, Alleghany, Partner Re, XL Catlin
Top 10 ranking for each year

HR in 2016 number 6 of worldwide L&H business (2015: No. 5)

Market position in L&H influenced by volatile premium disclosure

Market size and concentration

in bn. EUR



4-year CAGR

Market	**+6.5%**
Other	+7.9%
Top 6-10	+10.7%
Top 5	+5.0%
HR	**+4.2%**

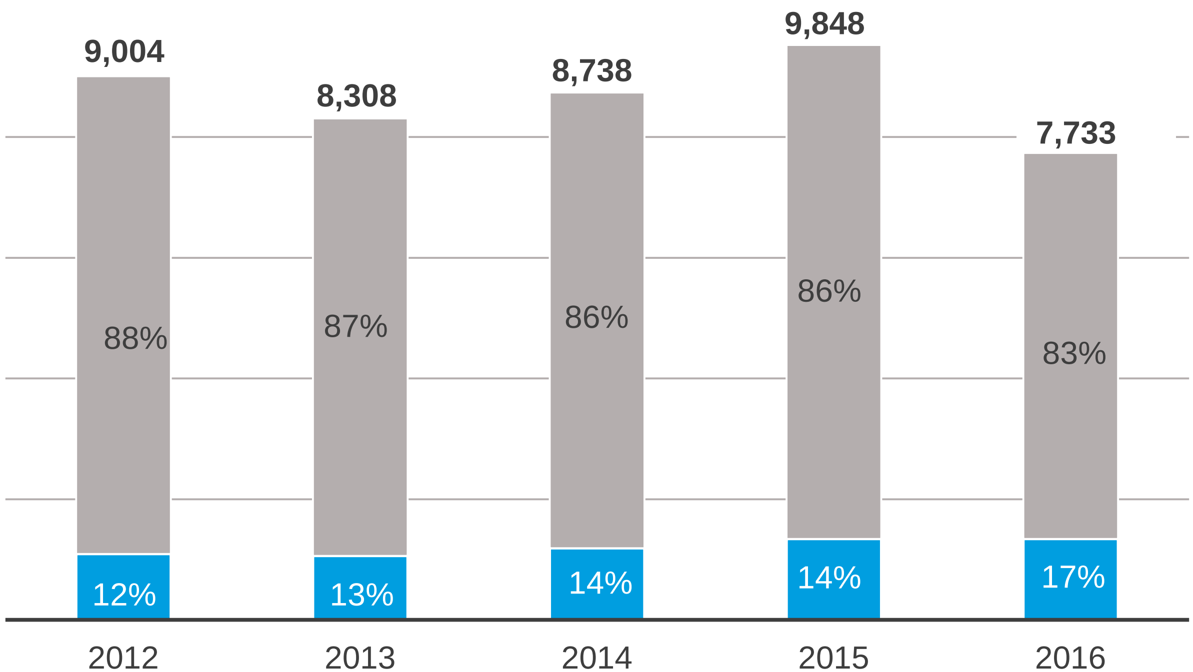
Source: own research; as at April 2017
Top 10: Munich Re, Swiss Re, RGA, SCOR, Great-West Lifeco, Hannover Re, China Re, Berkshire Hathaway, Korean Re, Pacific Life
Top 10 ranking for each year

Hannover Re: increasing P&C EBIT share within Top 5 ...

... and less volatile than peers

Market share of TOP 5 P&C EBIT

in m. EUR



CAGR of EBIT (absolute)

Total	**-3.7%**
Peers	-5.2%
Hannover Re	**+5.3%**

- Entire market EBIT of ~EUR 20 - 25 bn.

Source: own research and calculation
Peers: Munich Re, Swiss Re, SCOR, Everest Re

Stronger earnings growth than top peers

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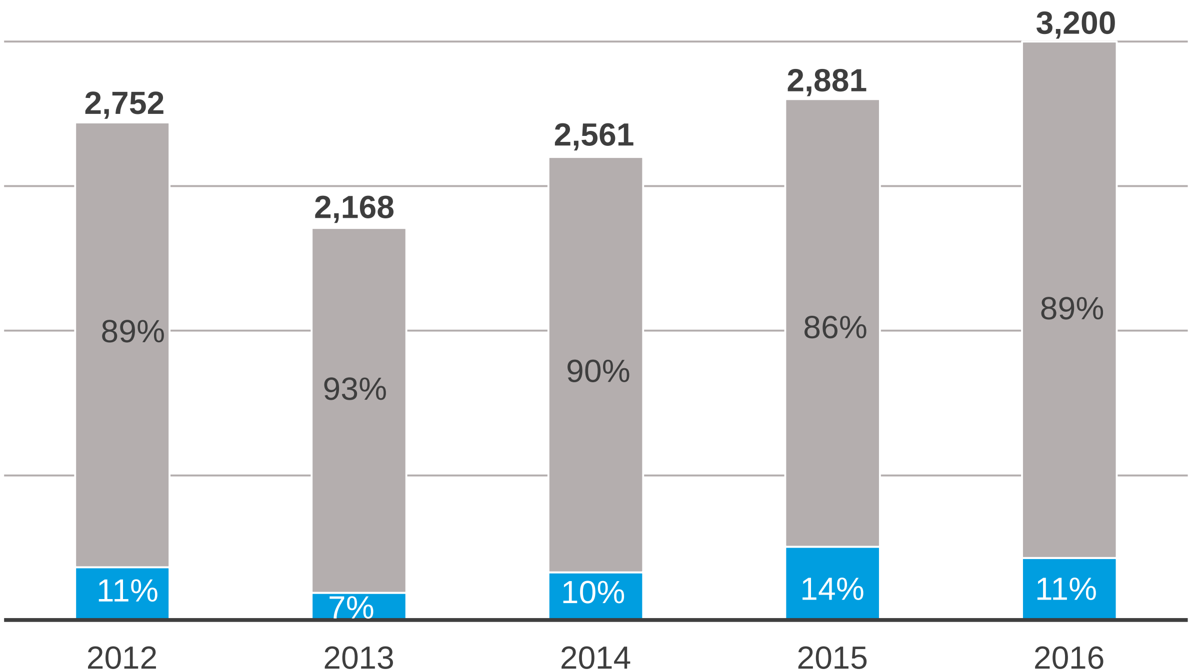
Hannover Re: L&H EBIT growth in line with market development

Market share of TOP 5 L&H EBIT

in m. EUR



CAGR of EBIT (absolute)	
Total	**+3.8%**
Peers	+3.8%
Hannover Re	**+4.2%**

- Entire market EBIT of ~EUR 4 - 5 bn.

Source: own research and calculation
Peers: Munich Re, Swiss Re, SCOR, RGA

Earnings growth in line with market and top peers

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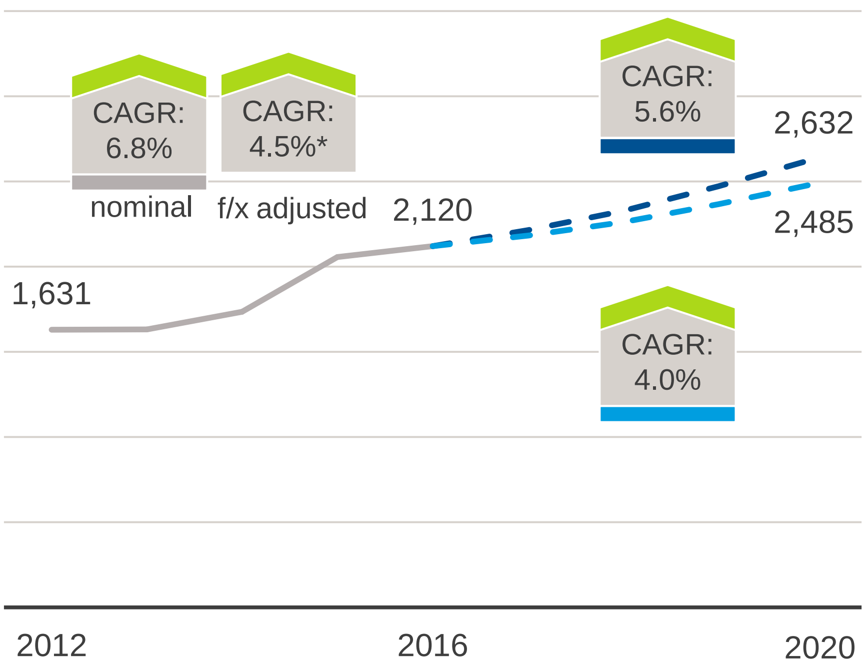
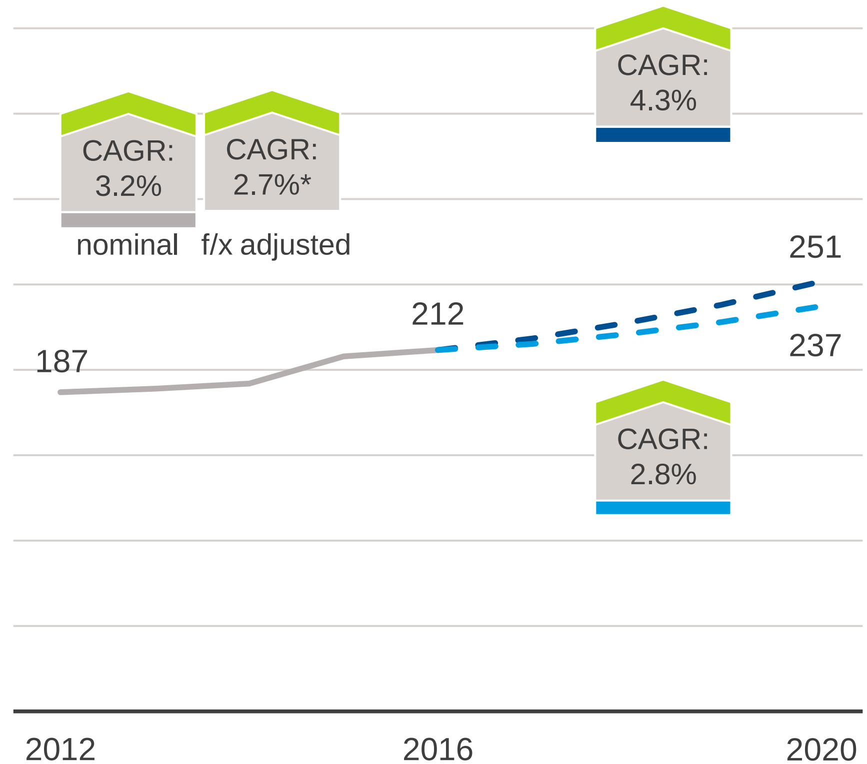
There will be further growth in the P&C R/I market ...

... but less pronounced than in the primary insurance market

Primary insurance in EUR bn.



Reinsurance in EUR bn.



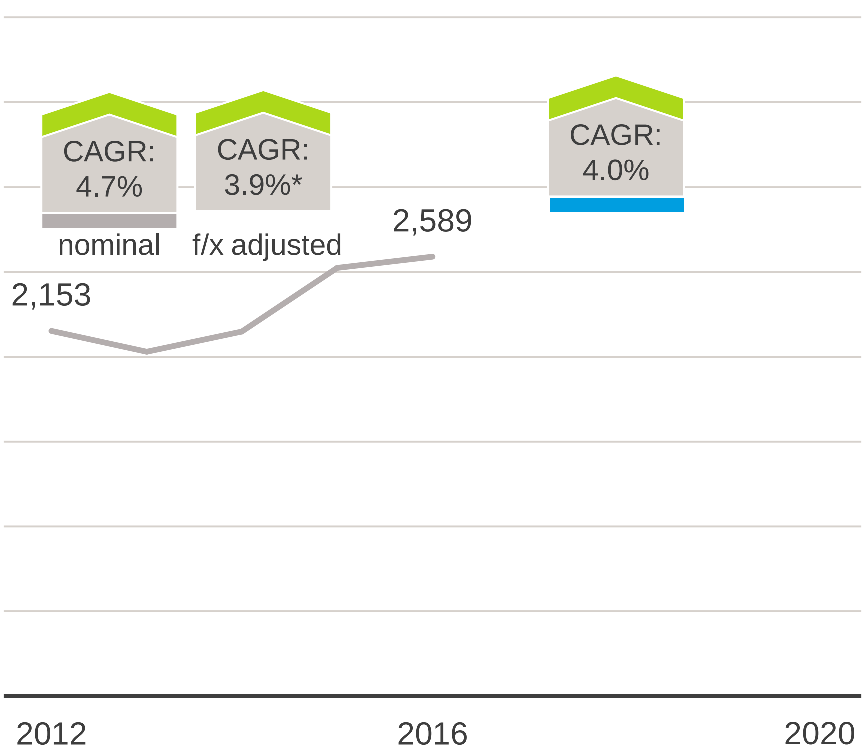
Based on IMF macroeconomic forecast
Based on IMF macroeconomic forecast incl. haircut

* Own estimates; as at October 2017

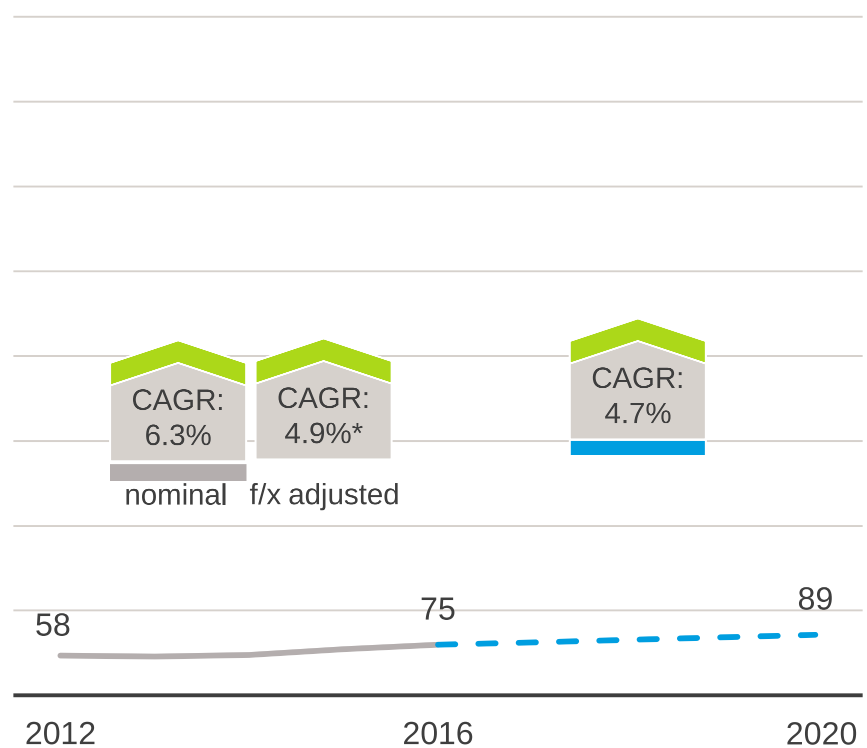
L&H reinsurance market to grow faster than primary market

Driven by service and capital management transactions

Primary insurance in EUR bn.



Reinsurance in EUR bn.



* Own estimates; as at October 2017

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General considerations going into the strategy review

Increase competitive advantage!

Focus on primary insurance?

„Ryanair“ in reinsurance?

Digitalisation and automation!

Niche player?

Concentration in the reinsurance industry?

Cost efficiency!

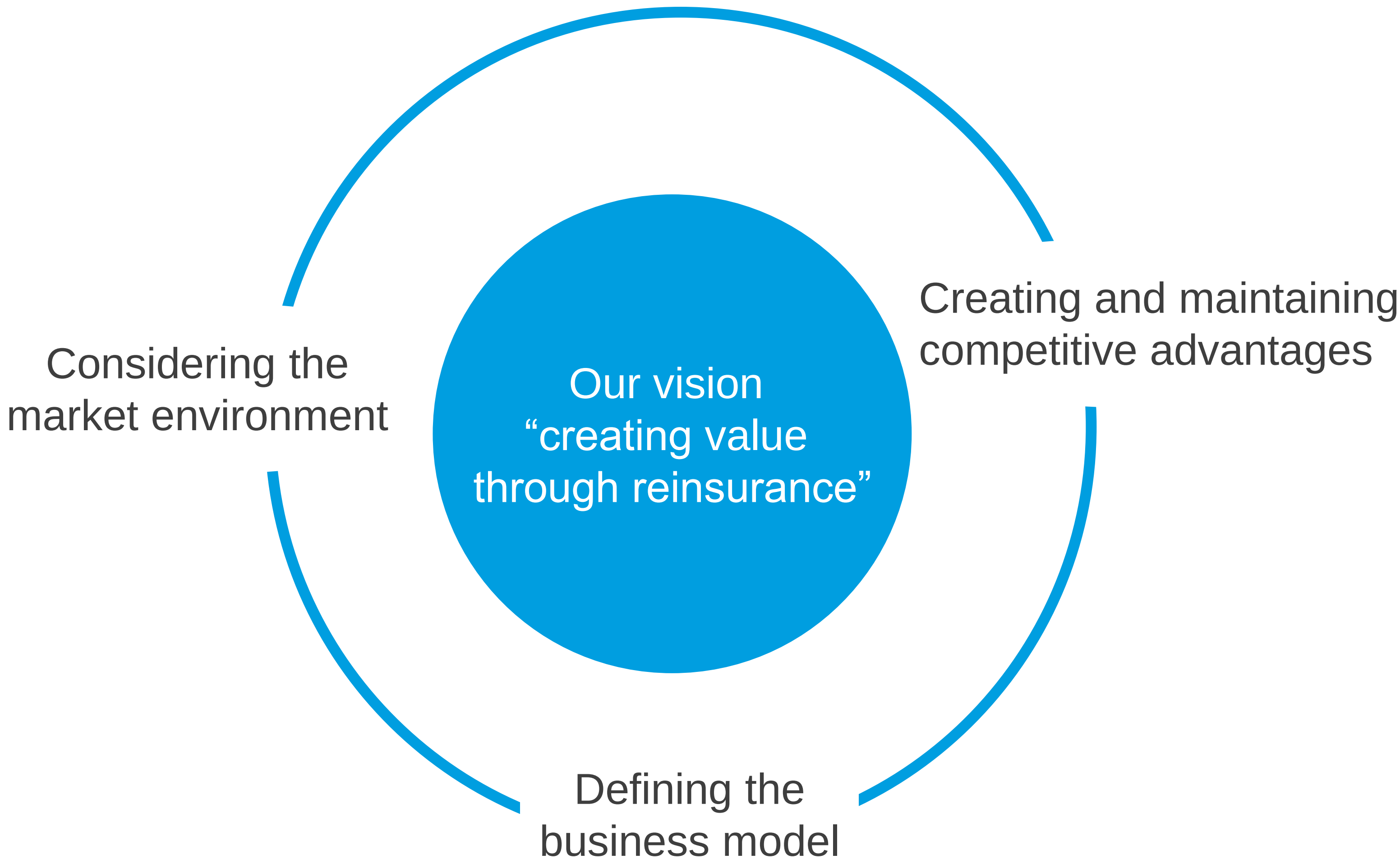
Less diversification?

Thoughts on the traditional reinsurance business model!

Smaller structures – reduced business scope?

Strategic options to be reflected in the strategy

Strategy review 2018 - 2020



Our vision: creating value through reinsurance

Q: Will reinsurance business continue to be an attractive field of activity for market players going forward?

- Reinsurance creates value for insurance companies, particularly when it comes to the management of capital and earnings volatility
- Reinsurance premiums will grow, albeit at a smaller pace than in primary insurance
- Market structure will remain competitive: margins continue to be under pressure
- However, almost all capacity is provided by publicly-listed companies or investment funds (ILS), which cannot tolerate negative results for an extended period
- Consequently, we can anticipate that market conditions will improve following deteriorating results of the market (rational competition)

A: Market players, that are able to develop a competitive advantage relative to the average have the opportunity for profitable growth

Our vision: creating value through reinsurance

Q: Why can HR be successful in the competitive reinsurance business?

- As 3rd largest reinsurer Hannover Re is a lead market/Top-Tier player
- Lower expense ratio than our competitors
- Consistent U/W approach (no surprises for our clients)
- Long-dated client relationship
- Positive diversification effect between P&C and L&H
- Efficient offering of tailor-made services

A: HR well positioned to compete successfully in the reinsurance business

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Our vision: creating value through reinsurance

Q: Should we follow the vast majority of our competitors by putting our activities in primary insurance on an equal footing to those on the reinsurance side?

- We continue to see good opportunities for Hannover Re to generate earnings growth in reinsurance business in the coming years
- We wish to avoid competing with our clients and with the primary insurance activities of our sister companies of the Talanx primary group

A: Reinsurance remains our core business. As a complement to our core business, we write a limited amount of primary business on a co-insurance basis on large commercial risks and selected niche markets with partners

What does this mean for the business model?

Positive outlook for the market

- We can expand our position as a leading reinsurer
- We emphasize the focus on reinsurance
- We have a broad-based approach (all regions and lines of business)
- Primary business in selected niche markets only

We differentiate from competitors

- We continue with both business groups (P&C, L&H) to create diversification benefits
- We maintain our competitive cost advantage
- We are perceived as solution-oriented and innovative reinsurer

We defined our approach in digitalisation & automation

- Enabling us to generate new business and increase efficiency

We create value for clients, shareholders and employees

Our strategic principles

1. We pursue ambitious economic growth targets
2. We are a preferred business partner
3. We aim for successful employees
4. We strive for an optimal balance between stability and yield of our investments
5. We manage risks actively
6. We maintain an adequate level of capitalisation
7. We conduct our business with lower costs than our competitors due to our high efficiency
8. We support our business through efficient information technology and take advantage of digitalisation and automation
9. We are committed to sustainability, integrity and compliance
10. We strive for Performance Excellence and continuous improvement

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1. We pursue ambitious economic growth targets

Amended Target Matrix

Business group	Key figures	2017		2018
Group	Return on investment[1)]	>2.7%		≥ 2.7%
	Return on equity[2)]	≥9.7%	↘	≥ 9.5%
	Earnings per share growth (y-o-y)	≥6.5%	↘	≥ 5%
	Economic value creation[3)]	≥7.5%		≥ 6.5%
	Solvency ratio[4)]			≥ 200%
Property & Casualty R/I	Gross premium growth[5)]	3% - 5%		3% - 5%
	Combined ratio[6)]	≤96%		≤ 96%
	EBIT margin[7)]	≥10%		≥ 10%
	xRoCA[8)]	≥2%		≥ 2%
Life & Health R/I	Gross premium growth[9)]	5% - 7%	↘	3% - 5%
	Value of New Business (VNB)[10)]	≥ EUR 220 m.		≥ EUR 220 m.
	EBIT growth[11)]			≥ 5%
	xRoCA[8)]	≥3%	↘	≥ 2%

1) Excl. effects from ModCo derivatives
2) After tax; target: 900 bps above 5-year average return of 10-year German government bonds
3) Growth in economic equity + paid dividend; target: 600 bps above 5-year average return of 10-year German government bonds
4) According to our internal capital model and Solvency II requirements
5) On average throughout the R/I cycle; at constant f/x rates
6) Incl. expected net major losses
7) EBIT/net premium earned
8) Excess return on allocated economic capital
9) Organic growth only; annual average growth (3-year period), at constant f/x rates
10) Based on Solvency II principles and pre-tax reporting
11) Annual average growth (3-years period)

2. We are a preferred business partner

Ensure unrestricted access to business opportunities

- Maintain financial strength
  - AA- rating (S&P)
  - A+ rating (A.M. Best)
- Take advantage of enterprise size

Use know-how to create value

- Best execution
- Ability to transact complex treaties
- Delegation of decision-making power to our client-facing U/W
- Consistent U/W policy

Offer service

- Provide services which are clearly linked to specific reinsurance business relationships
- Offer tailor-made financial solutions to increase the clients' financial options

Best execution ability newly included in the strategy

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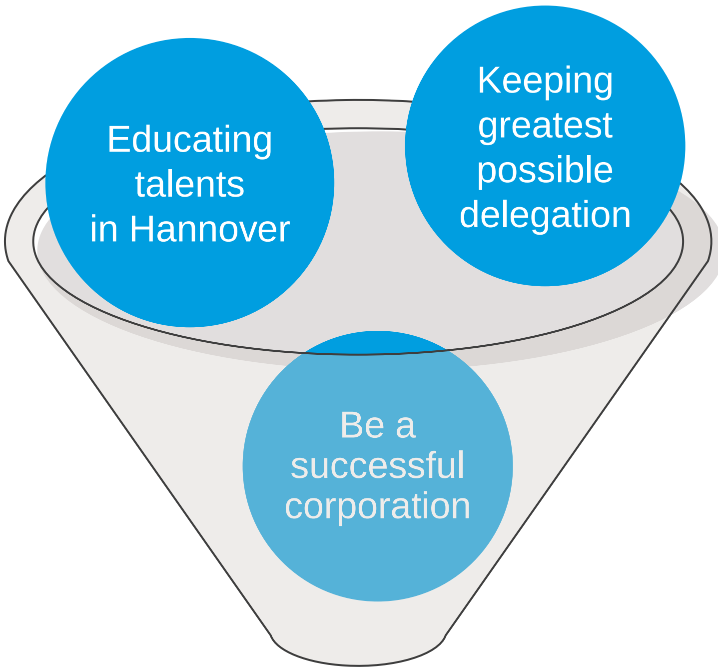
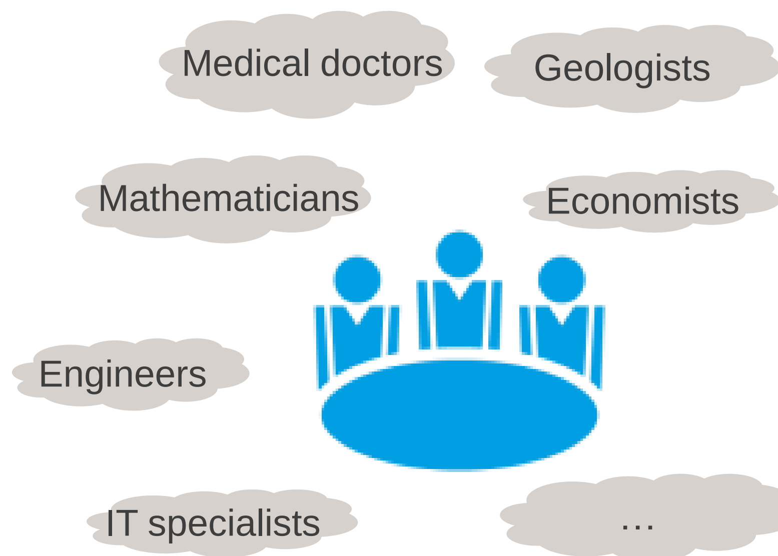
3. We aim for successful employees



High staff retention
(3.1%* fluctuation in 2016)

Consistent client relationship

Ensure that skill sets of workforce match requirements…



… in particular with regard to digitalisation & automation

* Home Office Hannover

Should we follow a conservative or a hedge fund approach?

4. We strive for an optimal balance between stability and yield of our investments

Hedge-fund style | Focus on | Traditional conservative approach

Hedge-fund style

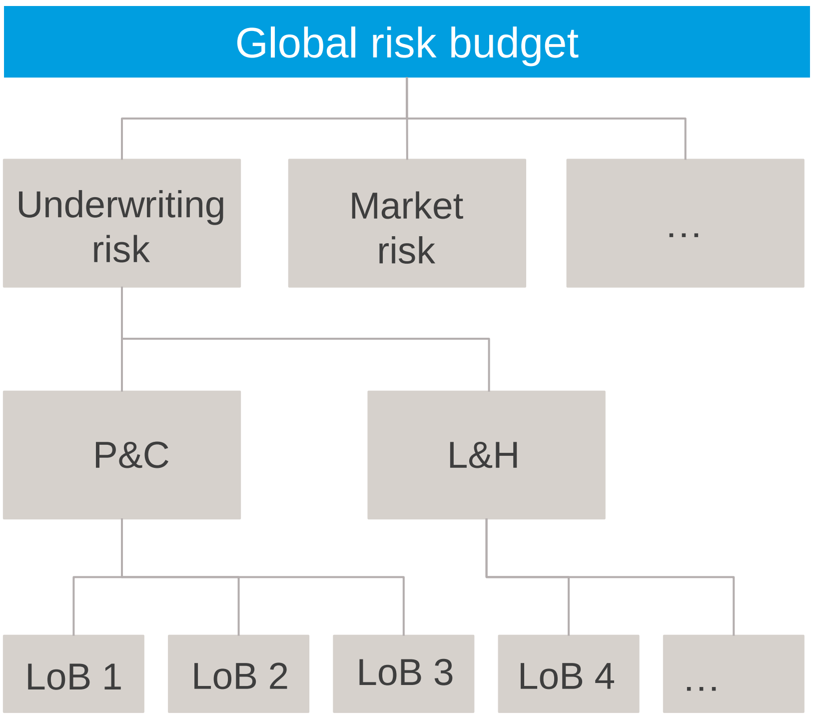
- Investment strategy targets to achieve „alpha“
- Major source of profits from taking investment risks
- Growing asset base without focus on underwriting profitability
- High earnings volatility

Traditional conservative approach

- Investment strategy governed by insurance liabilities
  - Liabilities are duration and currency matched
- Emphasis on risk-taking put on the reinsurance U/W risk rather than on the investment risk
- Major source of profits from underwriting reinsurance risks
- Growing asset base without sacrificing the U/W profitability
- Moderate earnings volatility

Hannover Re continues with a conservative, liability-driven investment policy

5. We manage risks actively



- We manage risk-taking through our internal capital model as approved by the regulator
- Apply the following quantitative values to determine our risk position: 90% probability p.a. of a positive net income / default probability of 0.03% p.a.
- Limit for Solvency II ratio of 180% with a threshold of 200%
- This level reflects our ambition to be considered as having a AA credit quality and defines our risk appetite for the total risk budget as well as broken down to LoBs

Integration of Solvency II targets regarding risk management

6. We maintain an adequate level of capitalisation

How can we achieve the inherently conflicting goals?

Achieve an above-average RoE | **Have adequate level of capitalisation**

- Meet expectations of capital market participants
- Be a successful corporation
- Have below-average cost of capital

- Use of capital substitutes (hybrid, retro) in order to strengthen capital through leverage
- Pay special dividends to balance equity and profit growth in order to manage capital growth downwards in favour of a high RoE

- Be able to act on available opportunities at all times
- Fulfil regulatory and rating requirements
- Meet expectations of clients

Special dividend policy integrated in new strategy

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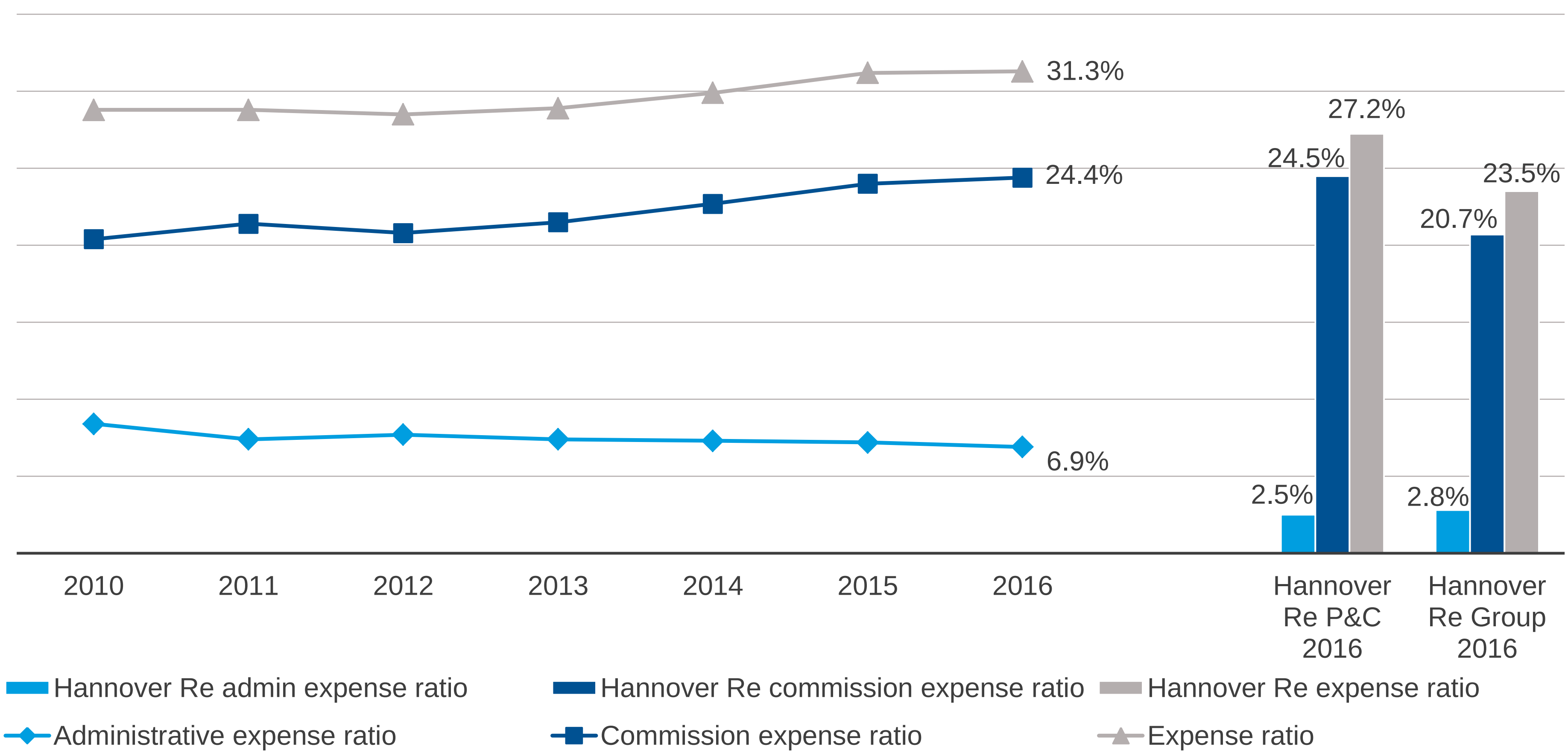
Low expense ratio is an important competitive advantage

Hannover Re largely maintained its ratio in contrast to increasing industry trend

Expense ratio (P&C reinsurance)*



* Source: S&P Global Reinsurance Highlights 2017 (TOP 27 global reinsurers' P&C reinsurance business); Hannover Re figures own calculation

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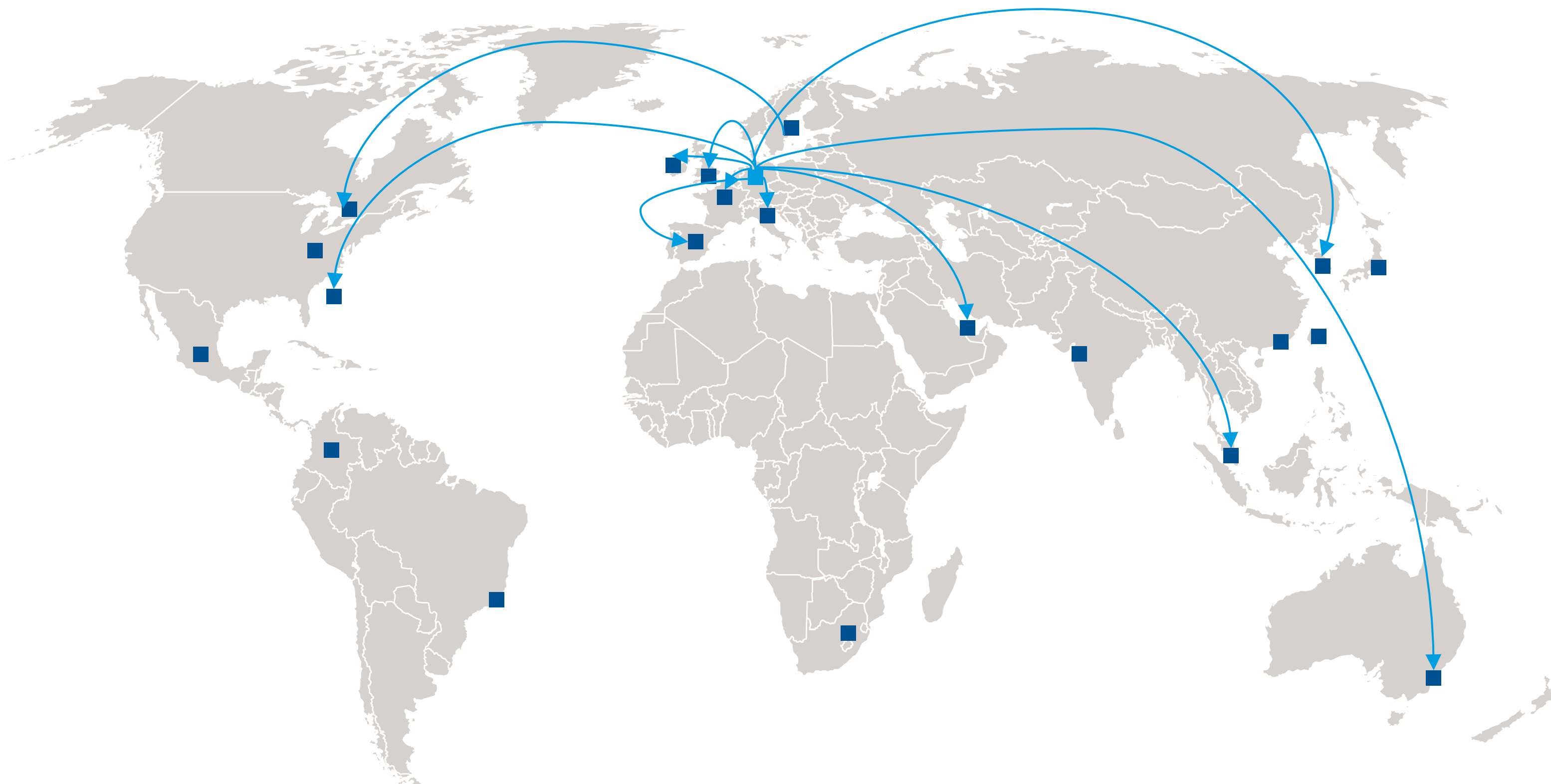
8. We support our business through efficient IT and D&A

Deliver state-of-the-art support to our business process at competitively low costs

Worldwide roll-out of standard contract administration system (currently 76% on one system) …



… leads to consistent high data quality, enabling Hannover Re to steer the business successfully

* Based on gross written premium

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8. We support our business through efficient IT and D&A

The goals of our Digital Strategy

Generate new business

- by reinsuring new start-up companies that operate digital business models
- by performing digital services for our clients along the entire value chain
- by writing new risks, such as the re-insurance of cyber insurance, as well as developing an understanding of the changing risk profiles of primary insurance & reinsurance risks through digitalisation

Increase our efficiency

- by automating our internal processes “end-to-end”
- by supporting and launching initiatives to automate the interaction at the interfaces to our clients, intermediaries and other partners
- by making use of all internal and external data legally available to us (Big Data) in a profit-generating way

We live up to the challenges of digitalisation

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9. We are committed to sustainability, integrity and compliance

- Fulfil the relevant compliance needs
- Able to meet clients' requirements
- Attract socially responsible-oriented investors
- Be an attractive employer

↪ **In order to adhere to the goals of our sustainability strategy we are prepared to forgo short-term profit opportunities**

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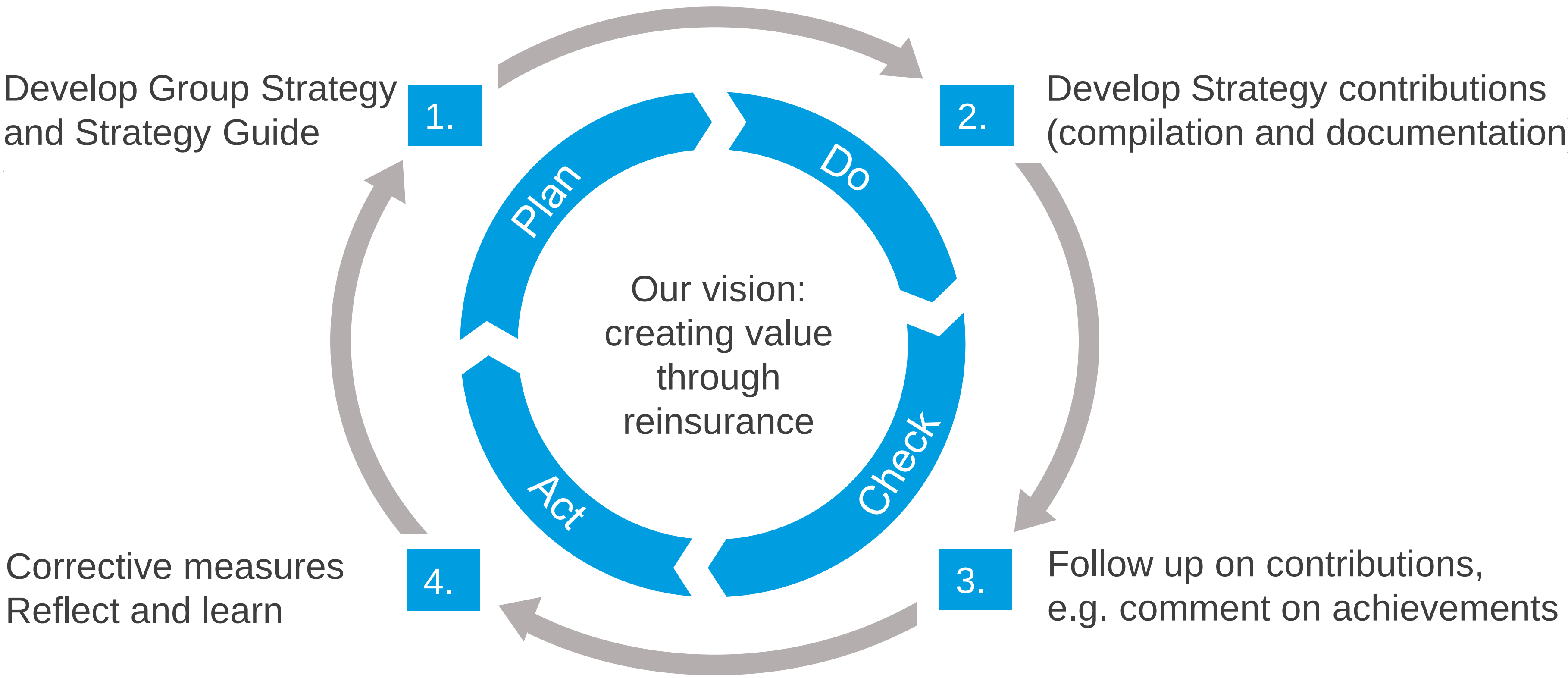
10. We strive for Performance Excellence and ...

... continuous improvement



Improve execution by more precisely defining the contribution and PDCA cycle

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Current issues on P&C and L&H reinsurance

Ulrich Wallin, Chief Executive Officer

20th International Investors' Day
Frankfurt, 19 October 2017

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Insurance market losses still very uncertain

Event	Date	Region	Insured market loss estimates (MLE) in bn. USD			
			AIR	RMS	Karen Clark	Core Logic
Hurricane "Harvey"	25. - 28. Aug	USA	>10	22 - 40	15.4	7.5 - 11 .5
Hurricane "Irma"	6. - 12. Sep	USA	25 - 35	25 - 35	18	22.5 - 35
		Caribbean	7 - 15	10 - 20	7	-
Hurricane "Maria"	19. - 22. Sep	Puerto Rico Caribbean	40 - 85	15 - 30	30	-
Earthquake Mexico 8.1	07. Sep	Mexico, Chiapas	0.8 - 1.1	-	-	-
Earthquake Mexico 7.1	19. Sep	Mexico, Puebla	0.7 - 2	< 1.2	-	-
Total			**49 - 183**			

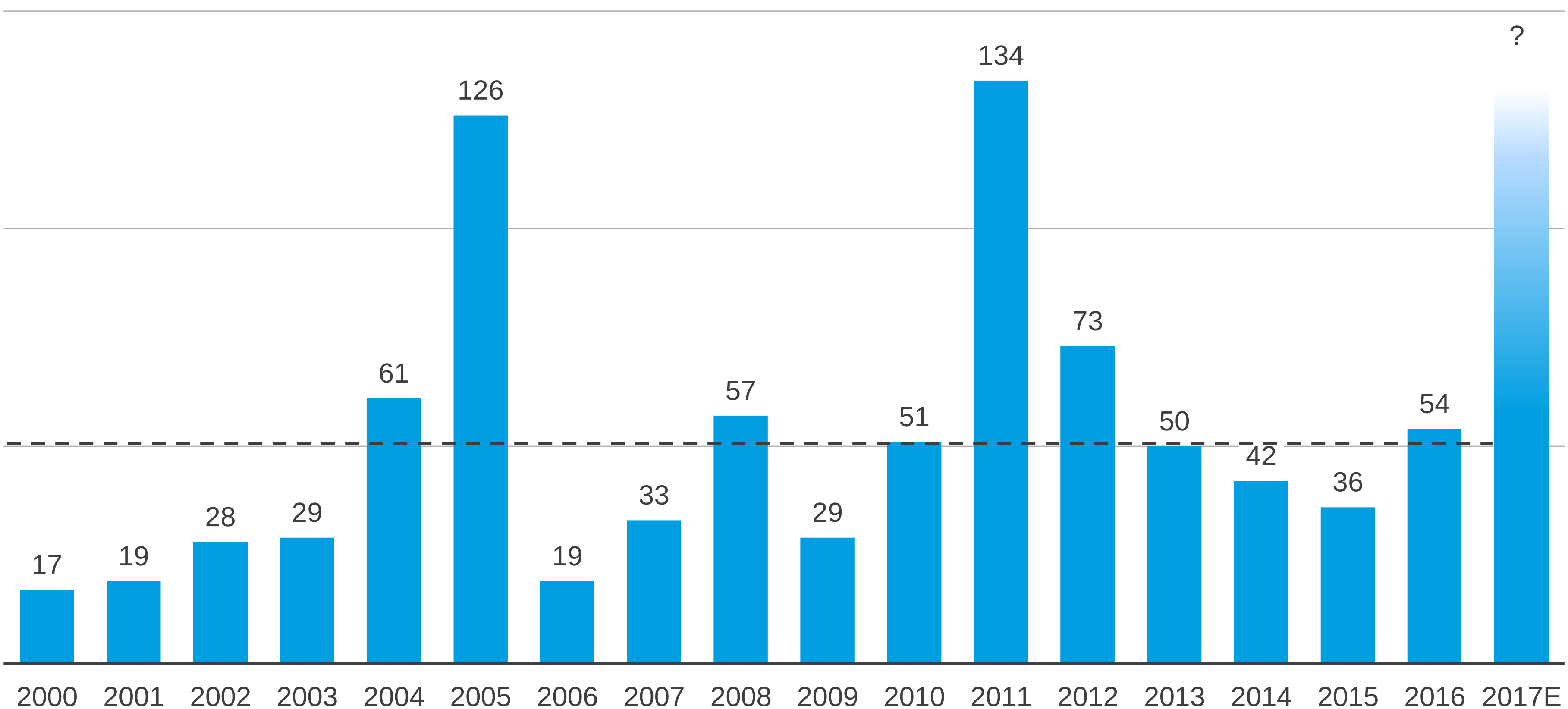
2017 cat losses potentially exceed the large loss budget

- Still too early to provide concrete numbers regarding Hannover Re’s involvement – however we will advice booked number with Q3 conference call
- Comprehensive retrocession covers will limit the impact of the losses
- Based on current assessment of the losses substantial cover continues to be available post the losses
- Hannover Re currently expects the losses to be an earnings rather than a capital event

2017 losses may reach levels similar to 2005 and 2011

Well above long-term average

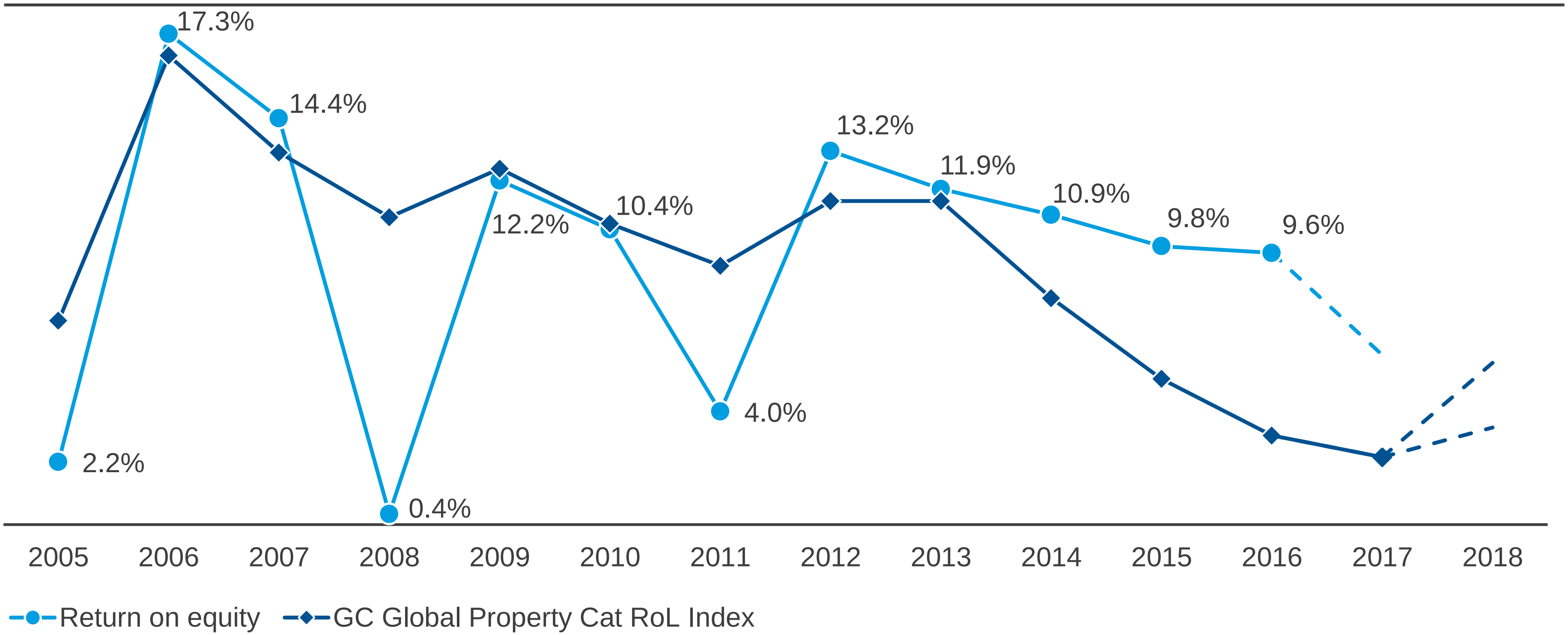
Global insured losses: all natural disasters in bn. USD



Source: AonBenfield 2016 Annual Global Climate and Catastrophe Report; 2017: own estimates

Will reinsurance market conditions improve?

Comparison of RoE and RoL

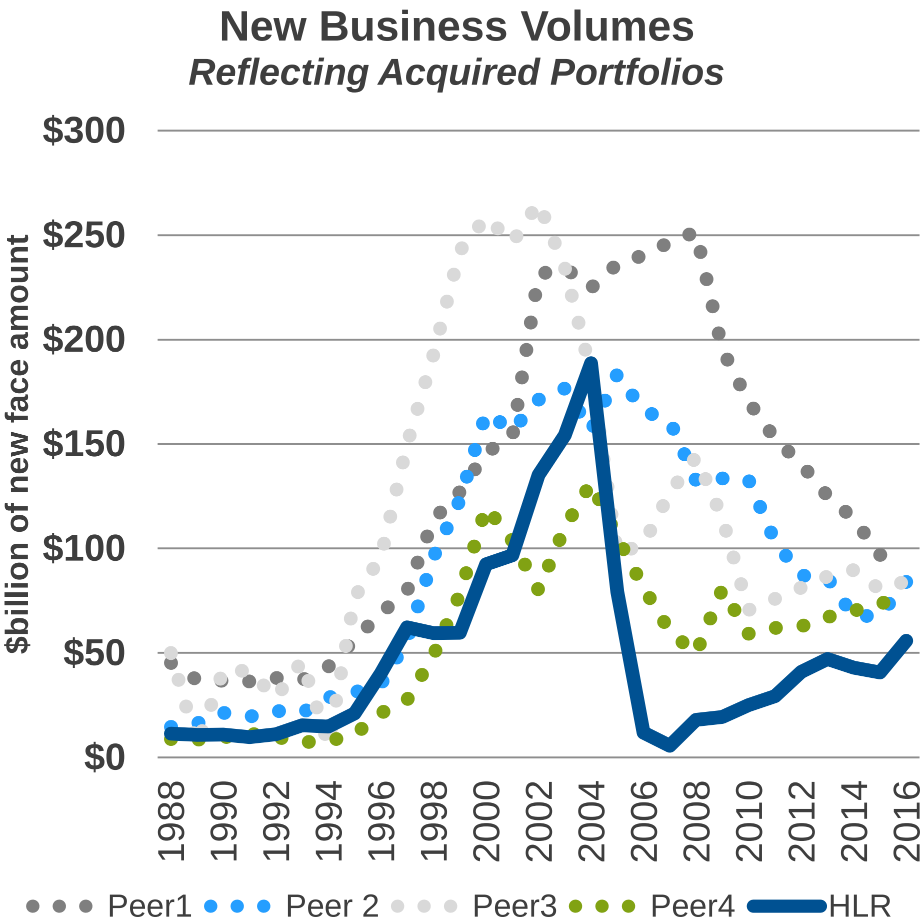


Source: Guy Carpenter
Return on equity based on company data (Top 10 of the Global Reinsurance Index (GloRe) with more than 50% reinsurance business 2005 - 2016), own calculation

Change in U/W sentiment should lead to improved conditions

US mortality results challenged by pre-2005 issue years

- As disclosed in 2nd quarter, US mortality results are challenged by issue years prior to 2005
- Much of Hannover Re's exposure to this era comes through the former ING Re portfolio acquired in 2009
- New business written since 2009 has grown robustly and profitably
- Overall US mortality portfolio is overweight on business from the mid-1990s to the mid-2000s



Source: SOA/Munich Re Surveys

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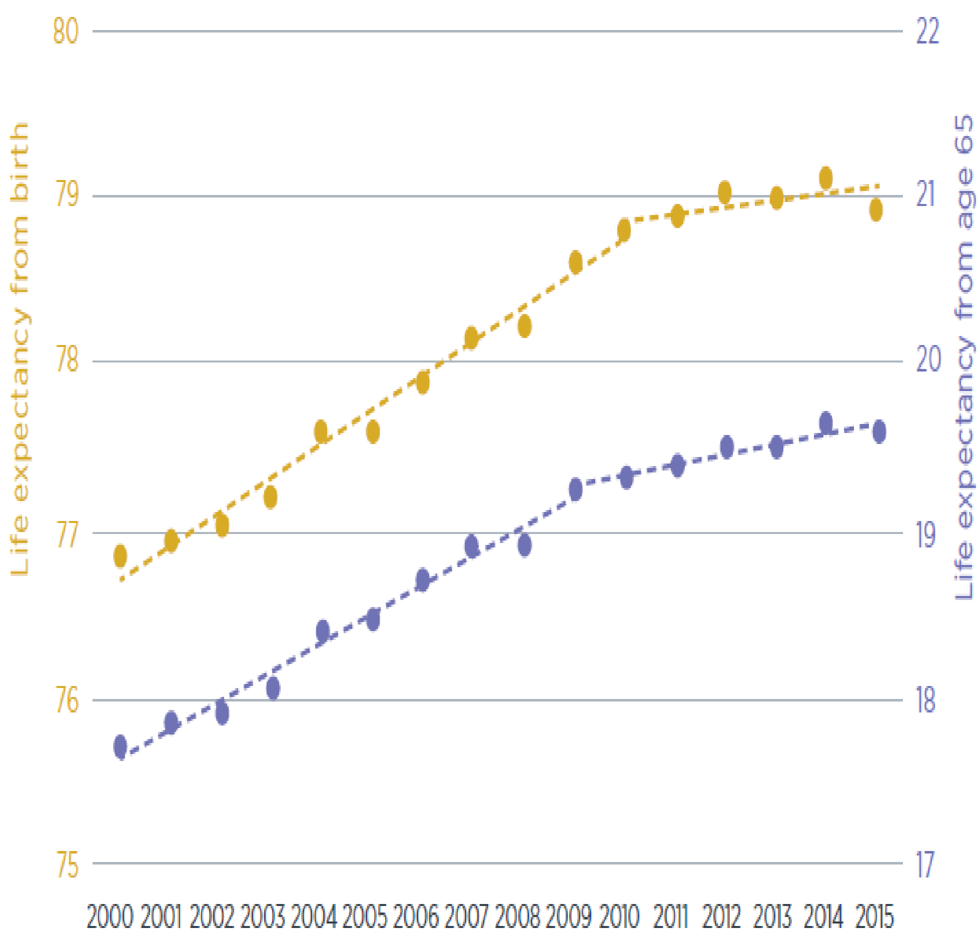
Initiatives to improve results

- Prior to 2016, total results were moderately impacted by lagging pre-2005 issues
  - Driven by post-level term dynamics and lagging performance on older YRT business
  - Pockets of poorly performing of YRT business addressed through inforce management
- IFRS accounting based upon US GAAP FAS60 “lock-in principle”
  - Reserves based upon original Purchase GAAP assumptions
- Since 2015 underperformance of older YRT business on permanent plans of insurance has accelerated significantly
- In late 2016, a coordinated initiative to improve results was launched
  - Two-year scope (2017 – 2018)
  - Phase 1 focused on improved models, analytics, and refined assumptions
  - Phase 2 focused on mitigating actions and inforce management

Pre-2005 issue years suffer from several challenges

Considerations in past eras	Purchase assumptions “locked-in”	Aggravated by multiple forces	Recent trends add to challenges
▶ Poor underwriting integrity in late 1990s to mid-2000s when exceptions and table shaving were common ▶ Older business has been through decades of anti-selective lapse and market forces including the significant reduction in prices related to fluid testing and preferred underwriting	▶ ING acquisition assumptions contemplated issues to some degree but not sufficiently for issues in remaining business ▶ Cost of underwriting slippage and degree of anti-selective lapsation has exceeded expectations ▶ IFRS reserves continue to reflect locked in Purchase GAAP assumptions	▶ Low interest rates have reduced interest crediting on permanent policies and increased proportion of mortality reinsured ▶ Activity in secondary market (more active in this era) increases anti-selective persistency ▶ Inforce actions of ceding companies in some cases add to challenges	▶ Post level term dynamics of premium increases, persistency, and resulting mortality proving adverse to original assumptions ▶ Recent mortality trend developments include effects from reduced or stalled mortality improvements for business in this era now further from original underwriting

Recent mortality trends suggest lag in improvements



Source: Joint Longevity Bulletin -IFA/SOA/CIA– July 2017

- US mortality improvements stalling in population since 2010 following decades of steady improvements
- The trends in mortality improvements are multifaceted
  - Rate of improvement is historically volatile across time periods
  - Jump in suicide rate since 2008 as well as drug-related deaths from growing epidemic of opiate overdose are among the contributing factors in the near term
- Long-term outlook remains positive
- Acquired ING portfolio correlates more closely with population trends than more recent business due to mix and duration from underwriting

Focus through 2018 on inforce management

Will contribute noise to 2018 results with improvements thereafter

- Majority of issues exist on YRT of permanent business
  - Primarily pre-2005 issue years
- Adding resources to inforce management to substantially address issues
- Will work with clients to take appropriate actions per treaty terms
- Plan will take through 2018 to execute
- Actions and resolution likely to create volatility in quarterly IFRS results
- Improved earnings profile in 2019 and beyond for US mortality and overall L&H

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From the CFO's desk

How to read the run-off result / Update on yield expectations

Roland Vogel, Chief Executive Officer

20th International Investors' Day
Frankfurt, 19 October 2017

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Strong 2016 Hannover Re Group result

Our performance figures demonstrate a solid business development

Combined ratio

93.7%

Run-off result

EUR 804 m.

Reserve redundancies*

EUR 1,865 m.
(2015: EUR 1,887 m.)

* Redundancy of loss and loss adjustment expense reserve for P&C insurance business against held IFRS reserves, before tax and minority participations.
Willis Towers Watson reviewed these estimates

Only a combined assessment enables the right conclusions to be drawn

Run-off result - two different perspectives

Understanding the data is crucial for interpretation, analysis and results!

	Balance sheet view	Actuarial view
Period	Run-off in the reporting period	Ultimate view
Perspective	Net after consolidation	Gross after consolidation
Year	Accident year	Underwriting year
Considered claims	Differentiation of current year and previous years' claims	Development of paid claims and claims reserves over lifetime
When do we see a run-off result?	Run-off result is the difference between change of claims reserves for previous years in the reporting period and the respective claims paid	Run-off is the result of a change of the ULR

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How is the run-off result determined?

	Opening Balance Claims reserves
-	Closing Balance Claims reserves (for previous years)
-	Claims paid (for previous years)
=	**Run-off result**

Net loss reserves and its run-off in P&C*

Net loss reserve and its run-off in the property and casualty reinsurance segment N53

in EUR million	31.12. 2006	31.12. 2007	31.12. 2008	31.12. 2009	31.12. 2010	31.12. 2011	31.12. 2012	31.12. 2013	31.12. 2014	31.12. 2015	31.12. 2016
Loss and loss adjustment expense reserve (from balance sheet)											
	13,646.5	13,017.0	13,882.1	14,179.4	15,465.5	16,823.2	17,439.3	18,029.3	19,859.1	21,851.1	**22,759.8**
Cumulative payments for the year in question and previous years											
One year later	2,643.2	2,569.4	3,041.8	2,832.7	2,521.3	3,220.0	2,999.0	3,265.1	3,587.9	3,353.0	
Two years later	4,446.5	4,427.5	4,721.7	4,086.3	4,202.5	5,002.4	4,654.5	5,096.2	5,364.9		
Three years later	5,826.6	5,576.2	5,494.2	4,923.5	5,220.5	5,954.9	5,872.9	6,233.0			
Four years later	6,654.7	6,133.3	6,092.3	5,584.1	5,881.8	6,908.0	6,736.1				
Five years later	7,056.1	6,574.5	6,581.8	6,095.8	6,655.3	7,636.4					
Six years later	7,400.7	6,942.7	6,915.5	6,604.3	7,208.4						
Seven years later	7,677.4	7,222.7	7,264.6	6,957.0							
Eight years later	7,906.7	7,515.6	7,530.0								
Nine years later	8,143.5	7,729.0									
Ten years later	8,308.8										
Loss and loss adjustment expense reserve (net) for the year in question and previous years plus payments made to date on the original reserve											
End of year	**13,646.5**	**13,017.0**	**13,882.1**	**14,179.4**	**15,465.5**	**16,823.2**	**17,439.3**	**18,029.3**	**19,859.1**	**21,851.1**	**22,759.8**
One year later	12,911.4	13,307.8	14,977.3	13,643.3	14,773.9	16,519.8	16,984.2	17,769.4	19,341.7	21,046.1	
Two years later	12,494.1	13,239.1	13,690.3	12,832.4	14,136.6	16,143.6	16,570.7	17,127.7	18,296.8		
Three years later	12,419.9	12,747.0	12,763.5	12,234.1	13,717.1	15,650.3	16,057.3	16,125.7			
Four years later	11,988.9	11,828.6	12,255.1	11,813.6	13,234.1	15,029.7	15,331.6				
Five years later	11,145.6	11,472.8	11,917.2	11,336.3	12,667.6	14,321.8					
Six years later	10,870.7	11,167.3	11,407.9	10,805.5	12,094.4						
Seven years later	10,592.8	10,755.0	10,918.3	10,385.4							
Eight years later	10,272.6	10,335.9	10,540.5								
Nine years later	9,857.3	10,058.7									
Ten years later	9,656.1										
Change relative to previous year											
Net run-off result	201.2	76.1	100.6	42.3	153.0	134.8	17.7	276.3	43.0	(240.9)	
As percentage of original loss reserve	1.5	0.6	0.7	0.3	1.0	0.8	0.1	1.5	0.2	-1.1	

* Source: Hannover Re Annual Report 2016 (page 200)

Run-off disregards development of claims reserves in the reporting period

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Run-off result 2016 per accident year

Accident (underwriting-) year 2015 even negative

Net loss reserves and its run-off in P&C*

Net loss reserve and its run-off in the property and casualty reinsurance segment N53

in EUR million	31.12. 2006	31.12. 2007	31.12. 2008	31.12. 2009	31.12. 2010	31.12. 2011	31.12. 2012	31.12. 2013	31.12. 2014	31.12. 2015	31.12. 2016
Loss and loss adjustment expense reserve (from balance sheet)											
	13,646.5	13,017.0	13,882.1	14,179.4	15,465.5	16,823.2	17,439.3	18,029.3	19,859.1	21,851.1	22,759.8
Cumulative payments for the year in question and previous years											
One year later	2,643.2	2,569.4	3,041.8	2,832.7	2,521.3	3,220.0	2,999.0	3,265.1	3,587.9	3,353.0	
Two years later	4,446.5	4,427.5	4,721.7	4,086.3	4,202.5	5,002.4	4,654.5	5,096.2	5,364.9		
Three years later	5,826.6	5,576.2	5,494.2	4,923.5	5,220.5	5,954.9	5,872.9	6,233.0			
Four years later	6,654.7	6,133.3	6,092.3	5,584.1	5,881.8	6,908.0	6,736.1				
Five years later	7,056.1	6,574.5	6,581.8	6,095.8	6,655.3	7,636.4					
Six years later	7,400.7	6,942.7	6,915.5	6,604.3	7,208.4						
Seven years later	7,677.4	7,222.7	7,264.6	6,957.0							
Eight years later	7,906.7	7,515.6	7,530.0								
Nine years later	8,143.5	7,729.0									
Ten years later	8,308.8										
Loss and loss adjustment expense reserve (net) for the year in question and previous years plus payments made to date on the original reserve											
End of year	**13,646.5**	**13,017.0**	**13,882.1**	**14,179.4**	**15,465.5**	**16,823.2**	**17,439.3**	**18,029.3**	**19,859.1**	**21,851.1**	**22,759.8**
One year later	12,911.4	13,307.8	14,977.3	13,643.3	14,773.9	16,519.8	16,984.2	17,769.4	19,341.7	21,046.1	
Two years later	12,494.1	13,239.1	13,690.3	12,832.4	14,136.6	16,143.6	16,570.7	17,127.7	18,296.8		
Three years later	12,419.9	12,747.0	12,763.5	12,234.1	13,717.1	15,650.3	16,057.3	16,125.7			
Four years later	11,988.9	11,828.6	12,255.1	11,813.6	13,234.1	15,029.7	15,331.6				
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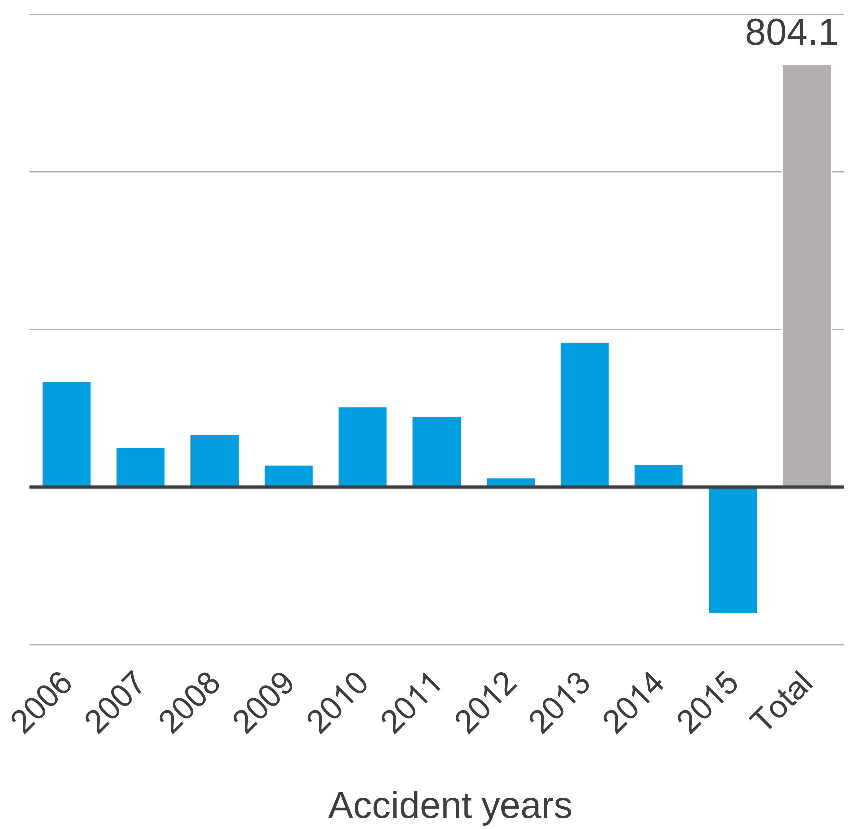
As percentage of original loss reserve	1.5	0.6	0.7	0.3	1.0	0.8	0.1	1.5	0.2	-1.1	

Run-off profit FY 2016

in m. EUR



* Source: Hannover Re Annual Report 2016 (page 200)

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Which factors have an influence on the run-off result?

- Cautious estimation for proportional business (recurring effects)
- Regular actuarial review of claims experiences
- Run-off result reporting based on accident year; allocation of IBNR to accident years
- Influence of Advanced Solutions business

Several factors influence the run-off result, leading to volatility per year

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Redundancies materialise over time

~3/4 of Hannover Re Group reserves

U/Y	Ultimate loss ratio 2010	Ultimate loss ratio 2011	Ultimate loss ratio 2012	Ultimate loss ratio 2013	Ultimate loss ratio 2014	Ultimate loss ratio 2015	Ultimate loss ratio 2016	Paid losses 2016	Case reserves 2016	IBNR balance 2016
2005	96.2%	95.8%	94.1%	92.7%	93.3%	92.8%	92.3%	84.3%	3.8%	4.2%
2006	63.3%	62.1%	60.9%	59.5%	57.5%	56.5%	54.6%	43.7%	[illegible]	[illegible]
2007	78.3%	77.1%	77.5%	77.2%	75.6%	75.0%	74.2%	57.7%	7.5%	[illegible]
2008	83.2%	84.1%	81.8%	80.9%	80.3%	78.0%	75.9%	56.5%	8.2%	11.3%
2009	78.3%	75.8%	73.1%	72.7%	70.1%	69.9%	68.5%	46.0%	8.3%	14.2%
2010	81.2%	84.1%	81.4%	78.9%	80.0%	79.0%	78.0%	50.2%	[illegible]	[illegible]
2011		85.6%	82.4%	81.9%	80.9%	81.8%	80.1%	50.1%	10.0%	[illegible]
2012			89.1%	83.1%	79.1%	79.8%	79.6%	48.7%	12.0%	18.9%
2013				82.8%	80.1%	78.9%	75.3%	42.6%	11.4%	21.3%
2014					79.0%	75.7%	75.3%	35.4%	15.8%	24.2%
2015						82.6%	80.3%	30.2%	18.6%	31.4%
2016							83.6%	15.5%	18.7%	49.4%

Lowered ULR

Lowered ULR

Based on reported loss triangles for Hannover Re/E+S Rück
As at 31 December 2016 (in m. EUR), consolidated, IFRS

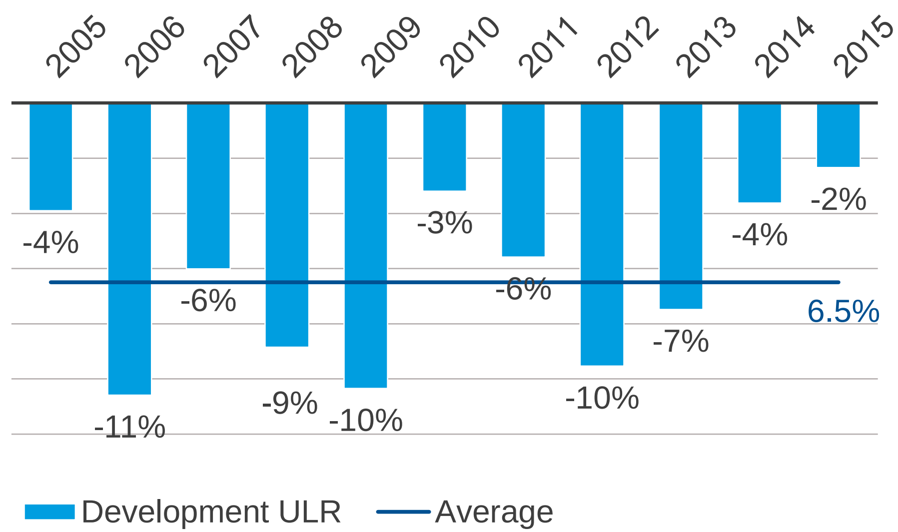
Consistent and sustainable positive reserve development ...

... while stable reserve redundancies are rolled forward

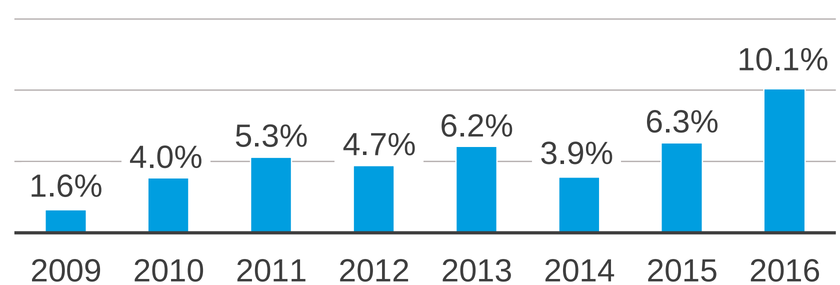
Distribution of reserve redundancies* as at 31 Dec

UY	Dec 2009	Dec 2010	Dec 2011	Dec 2012	Dec 2013	Dec 2014	Dec 2015	Dec 2016
2000	1%	1%	1%	1%	0%	0%	0%	0%
2001	1%	1%	1%	1%	0%	0%	0%	0%
2002	8%	4%	3%	2%	1%	0%	0%	0%
2003	10%	7%	2%	2%	3%	2%	0%	0%
2004	12%	8%	4%	4%	4%	2%	1%	1%
2005	12%	15%	12%	8%	6%	6%	2%	2%
2006	17%	17%	17%	17%	11%	7%	6%	4%
2007	18%	17%	19%	18%	12%	8%	7%	7%
2008	15%	11%	13%	11%	10%	14%	10%	8%
2009	6%	16%	15%	14%	15%	14%	13%	12%
2010		3%	12%	14%	13%	15%	12%	12%
2011			2%	6%	12%	13%	14%	13%
2012				2%	7%	8%	13%	15%
2013					3%	7%	12%	13%
2014						3%	7%	9%
2015							3%	5%
2016								0%

Development of booked ULR by U/Y since 2009



Run-off profit (financial year) in % of NPE



* According to Hannover Re own review; for Hannover Re/E+S Rück Standard P&C business

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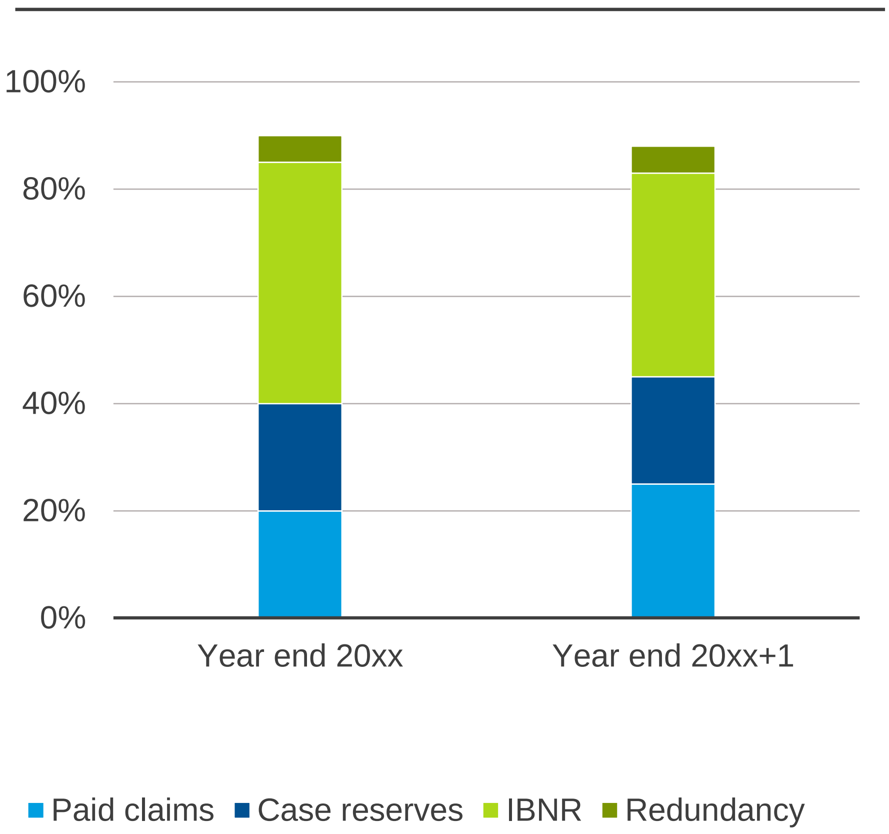
Simplified example

Impact on run-off result and confidence level



- Booked ULR (incl. Management Adjustment) lowered from 90% to 88%
- Actuarial ULR lowered from 85% to 83%
- Stable redundancy of 5%

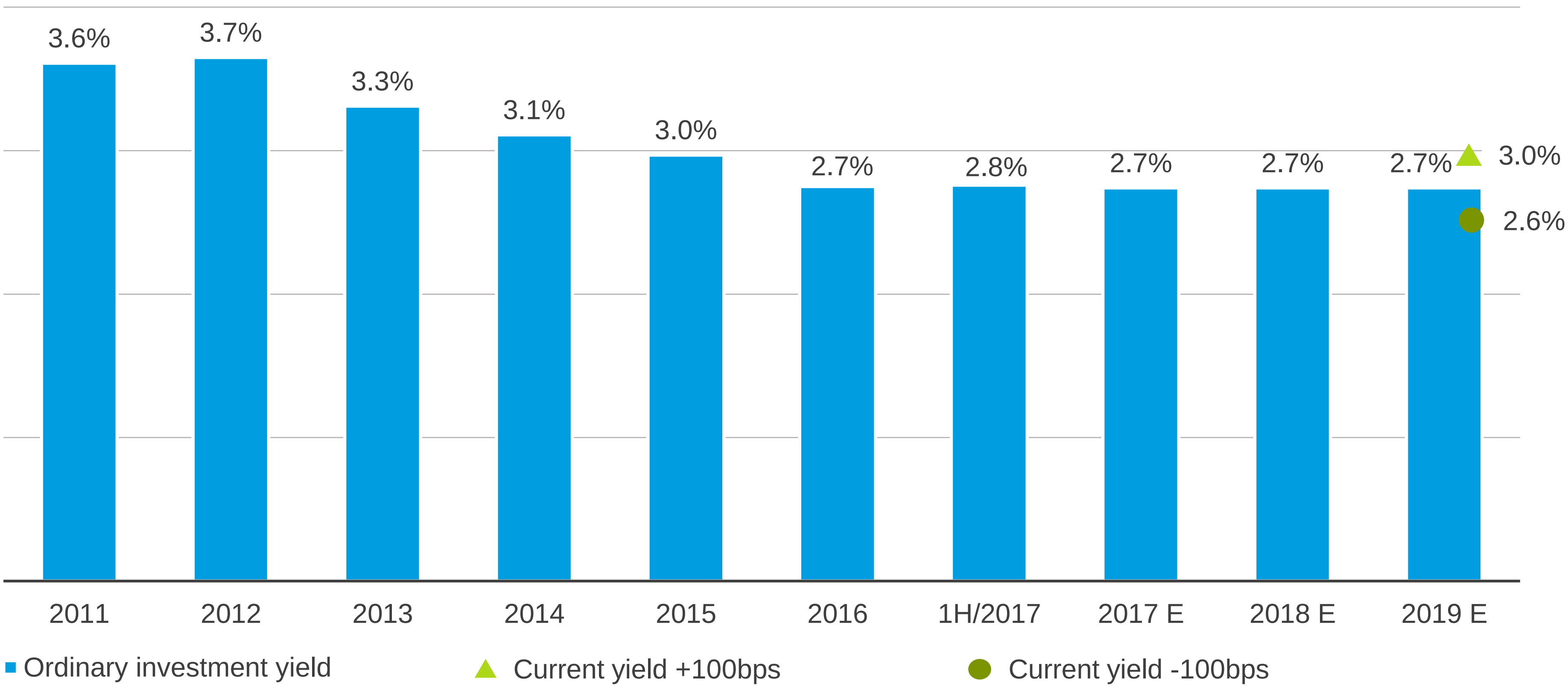
Conclusion:

The run-off result is driven by the improved actuarial ULR. The redundancy is kept stable at 5%

Ordinary return on investments stabilises in 2018 and 2019

100 bps sensitivity more or less unchanged

Ordinary yield from assets under own management

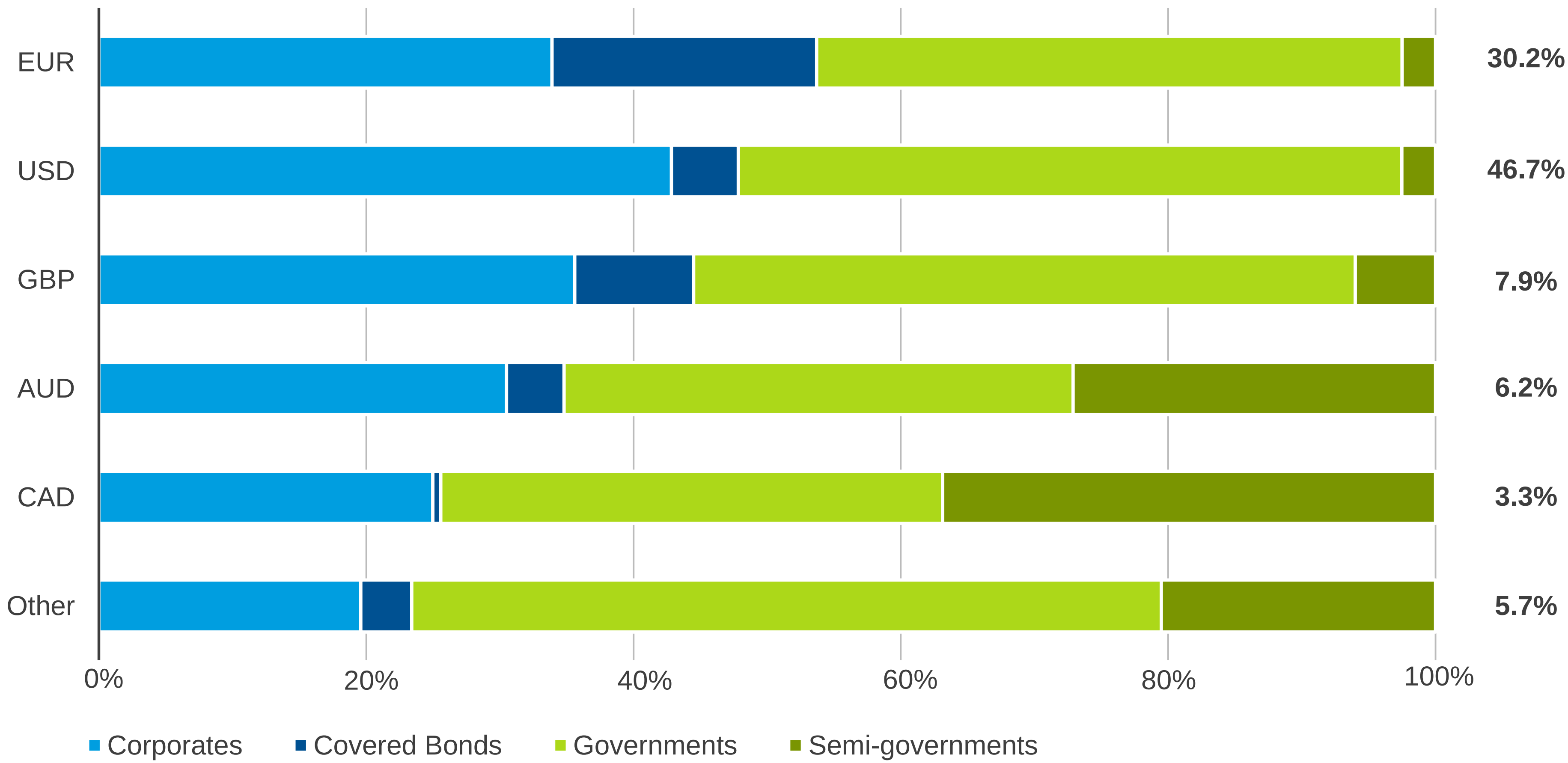


As at 30 June 2017

Fixed-income allocation varies significantly per currency

Fixed-income portfolio

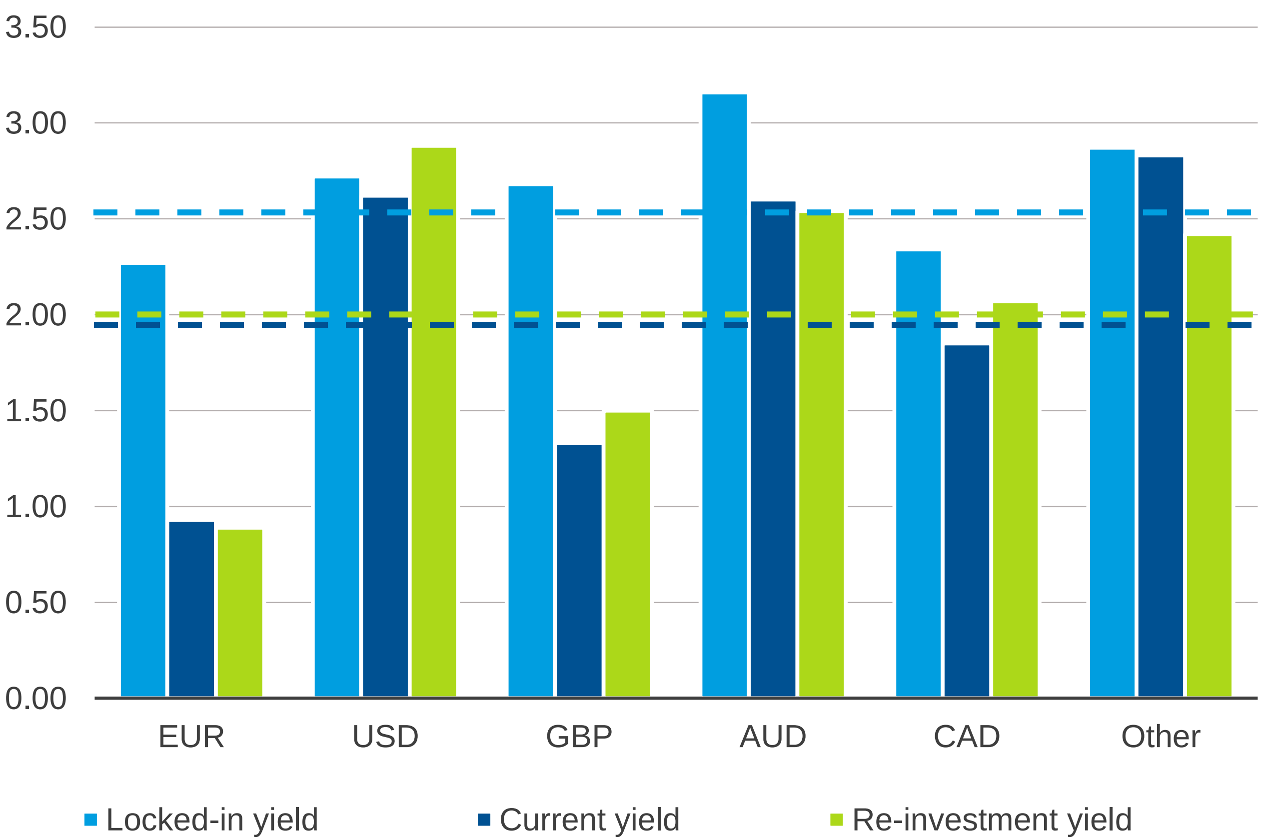
EUR 35 bn.



* Analysis as at 30 Jun 2017, excluding short-term investments and cash

Three key figures to evaluate the fixed-income return
EUR and GBP as drivers of the reinvestment gap

Yield analysis per currency of fixed-income portfolio*



Average

2.53%	"Locked-in" portfolio
~2.00%	Actual re-investments
1.95%	Current portfolio market

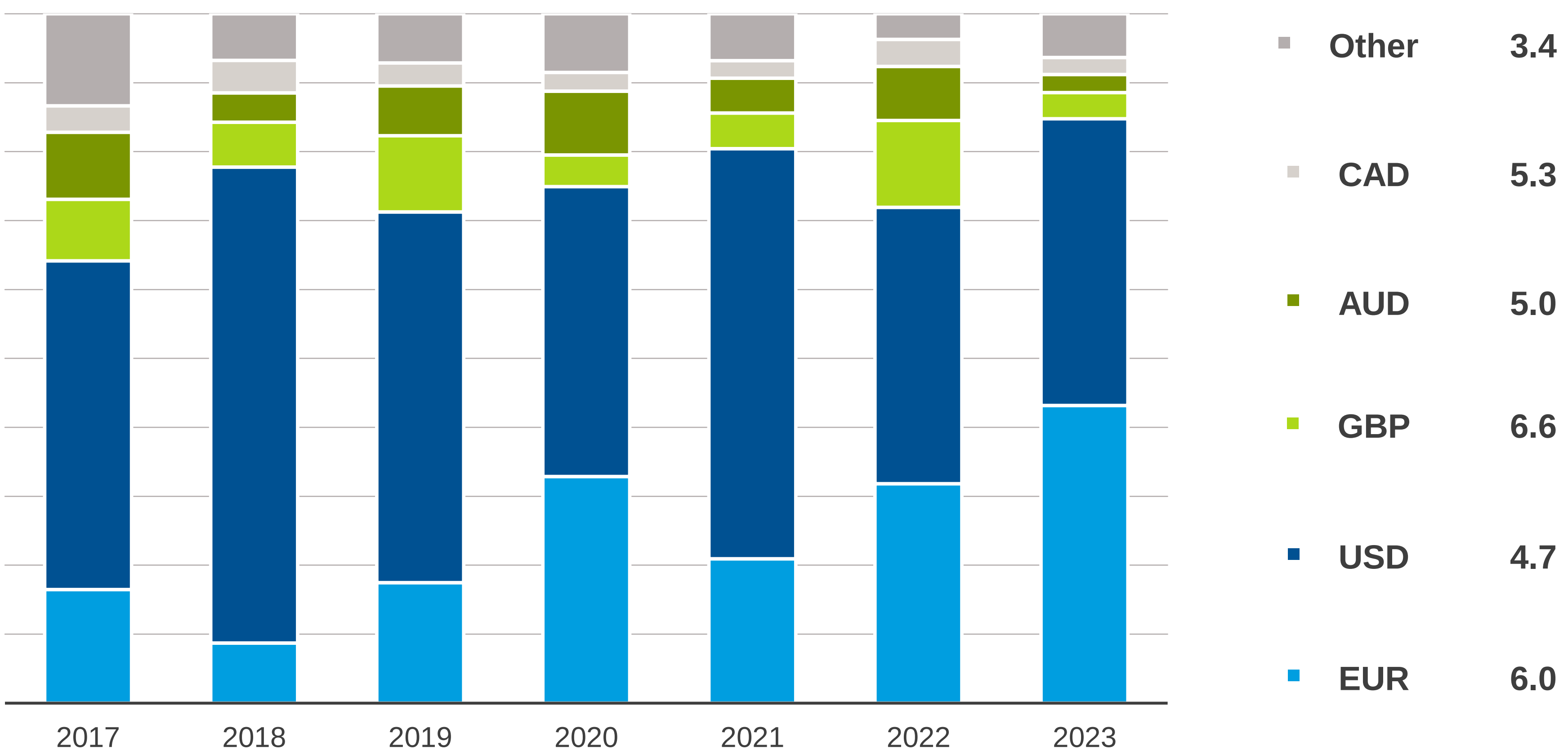
* As at 30 June 2017, excluding short-term investments and cash

Duration targets determine maturity profile per currency

Low EUR maturities in 2018 and 2019

Maturities of fixed-income portfolio* per currency

Modified duration

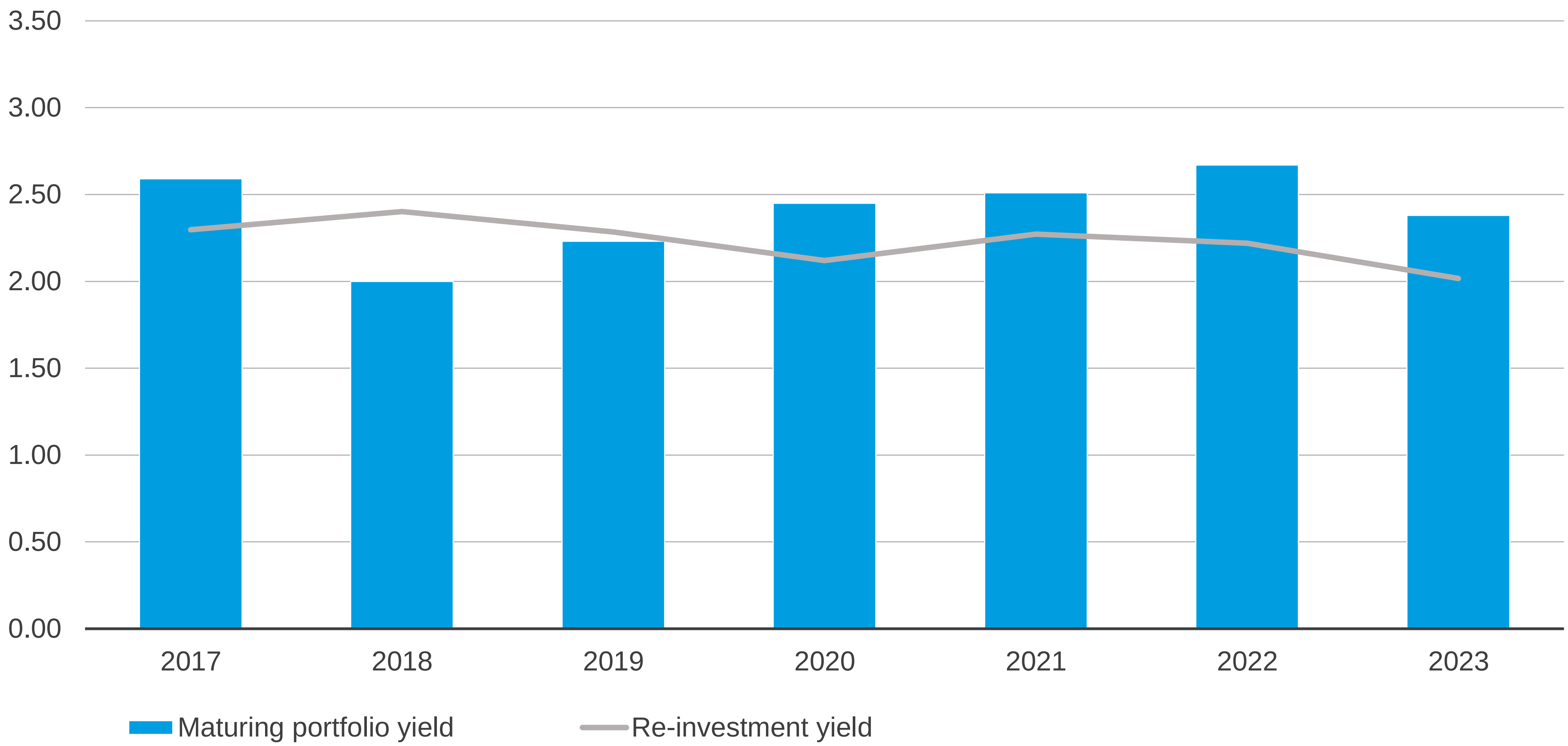


* As at 30 Jun 2017, excluding short-term investments and cash

Altogether, ordinary from fixed income stabilises in 2018/2019

Long-term scenario dependent on interest rate development

Yearly analysis of fixed-income portfolio maturing vs. re-investment yield*

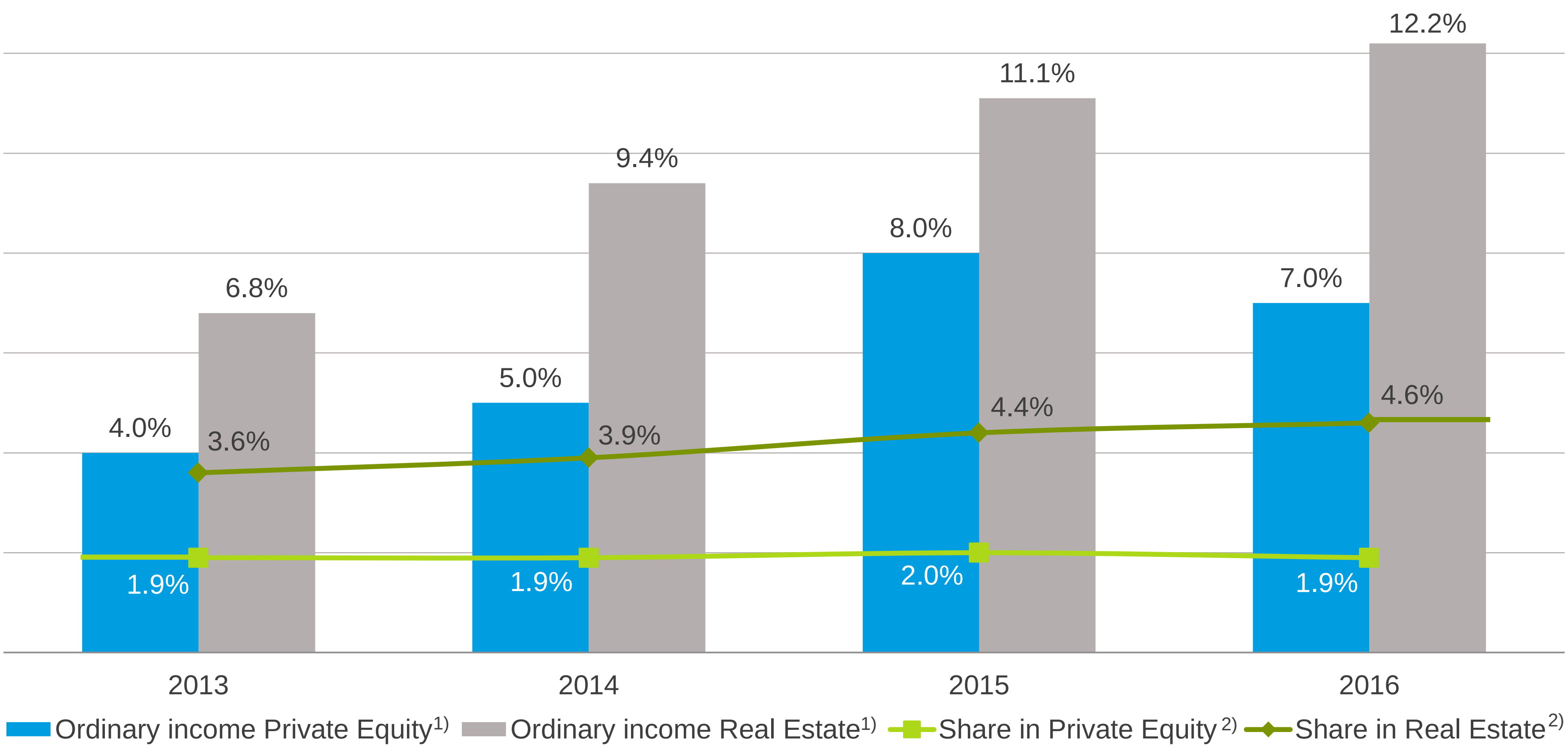


* As at 30 June 2017, excluding short-term investments and cash

Growing contribution from alternative assets to inv. income ...

... as Private Equity remains stable and Real Estate constantly increases

Private Equity and Real Estate income stakes and quota



1) In % of total ordinary income
2) In % of total AuM

Disclaimer

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Capital position and risk profile

Incl. an update on the P&C reserving level

Dr. Andreas Märkert, Managing Director Group Risk Management

20th International Investors' Day
Frankfurt, 19 October 2017

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Agenda

- Solvency position Q2/2017 and movement analysis
- Risk position and stress test results
- Recent NatCat events and adherence to risk appetite
- Composition and development of P&C claim reserves

Hannover Re maintains comfortable capital position

Capital adequacy above targets with substantial excess capital

in m. EUR, as of 30/06/2017	Internal Metrics [1]			Notional Solvency II [2]		Solvency II [3]
Available Economic Capital / Eligible Own Funds	13,425		Haircut for minority interests [4]	12,735		12,735
Confidence Level	**99.97%**	**99.5%**		**99.5%**		**99.5%**
Required Capital / Solvency Capital Requirements	10,207	5,060		5,060	Standard formula operational risk	5,513
Excess Capital	3,218	8,365		7,675		7,222
Capital Adequacy Ratio (CAR)	**132%**	**265%**		**252%**		**231%**
Minimum Target Ratio (Limit)	100%	180%		180%		180%
Minimum Target Ratio (Threshold)	110%	200%		200%		200%

1) Internal Metric: internal target confidence level at 99.97%, full internal model, full transferability of capital
2) Notional Solvency II: full internal model incl. operational risk (starting Q3/2017), confidence level at 99.5%
3) Regulatory view (Solvency II): partial internal model with standard formula for operational risk, confidence level at 99.5%
4) Non-available minority interests mostly consist of non-controlling interests in E+S Rückversicherung AG

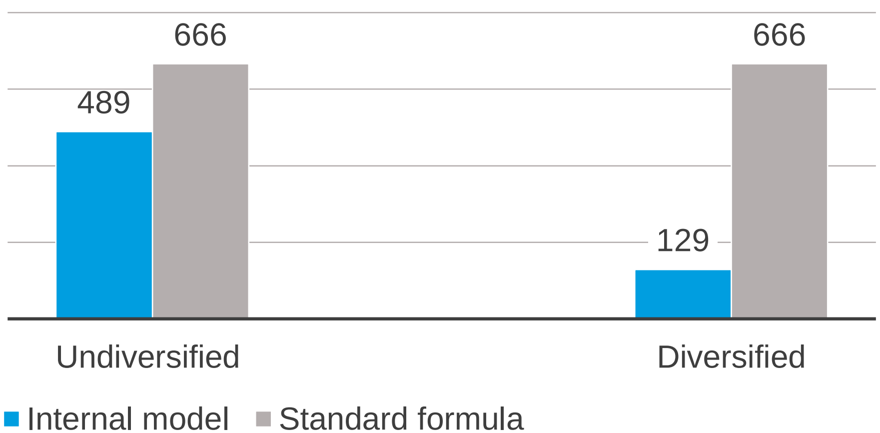
Operational risk model recently approved

Comparison to standard formula and TOP 3 scenarios

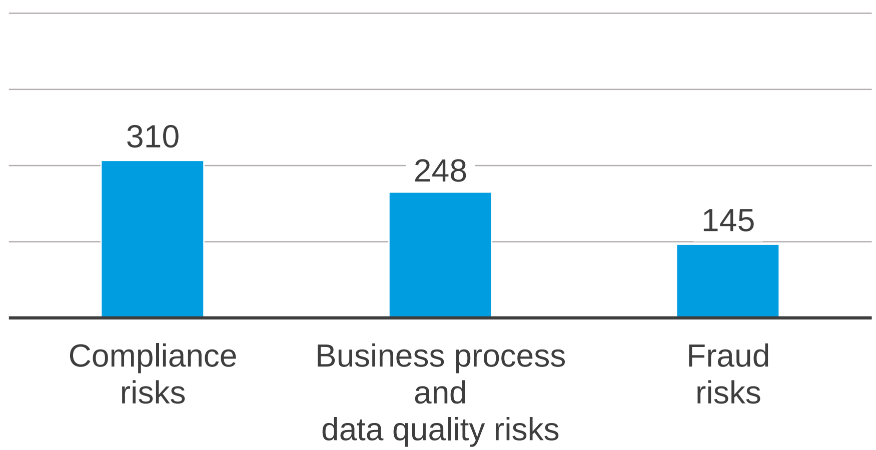
- Fully stochastic approach with high modelling granularity
  - based on internal self-assessment of operational risks
  - benchmarked against internal and external loss data

- TOP 3 scenarios:
  - Compliance passive - risk of legal changes and increasing fines
  - Data quality and insufficient processes, e.g. error in data processing
  - Fraud, via external social engineering attempts

SCR* for operational risk in m. EUR



SCR* for TOP 3 scenarios in m. EUR



As at Q2/2017; for comparison with the standard formula, the operational risk acc. to the internal model is shown with its marginal contribution (i.e. as the difference between the total required capital with and without operational risk)

* SCR = Solvency Capital Requirements

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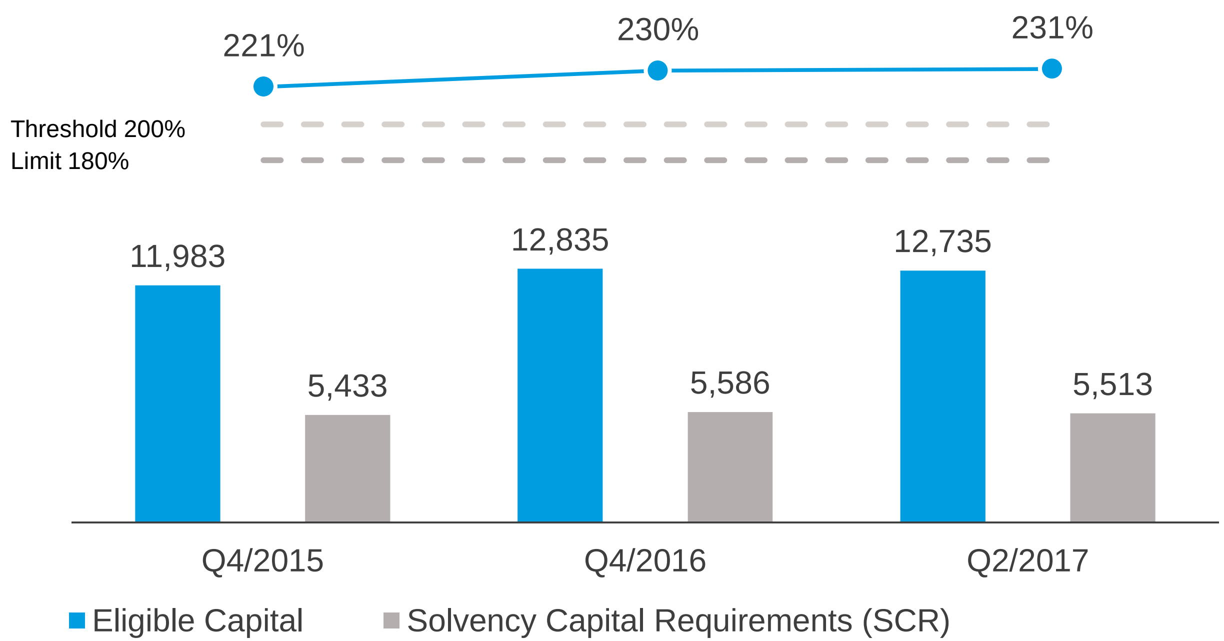
Stable buffer above Solvency II capital targets

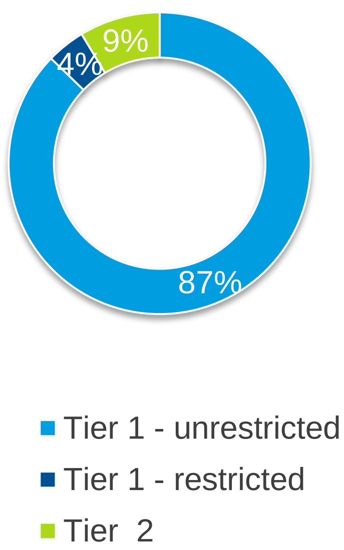
Despite significant changes in economic environment

Development of the capital adequacy ratio (regulatory view)

- 2016: Overall increase in available capital due to positive results and favourable new business developments in line with increase in required capital
- 2017: Stable ratio, f/x-induced reduction in funds and capital requirements



Q2/2017 capital composition



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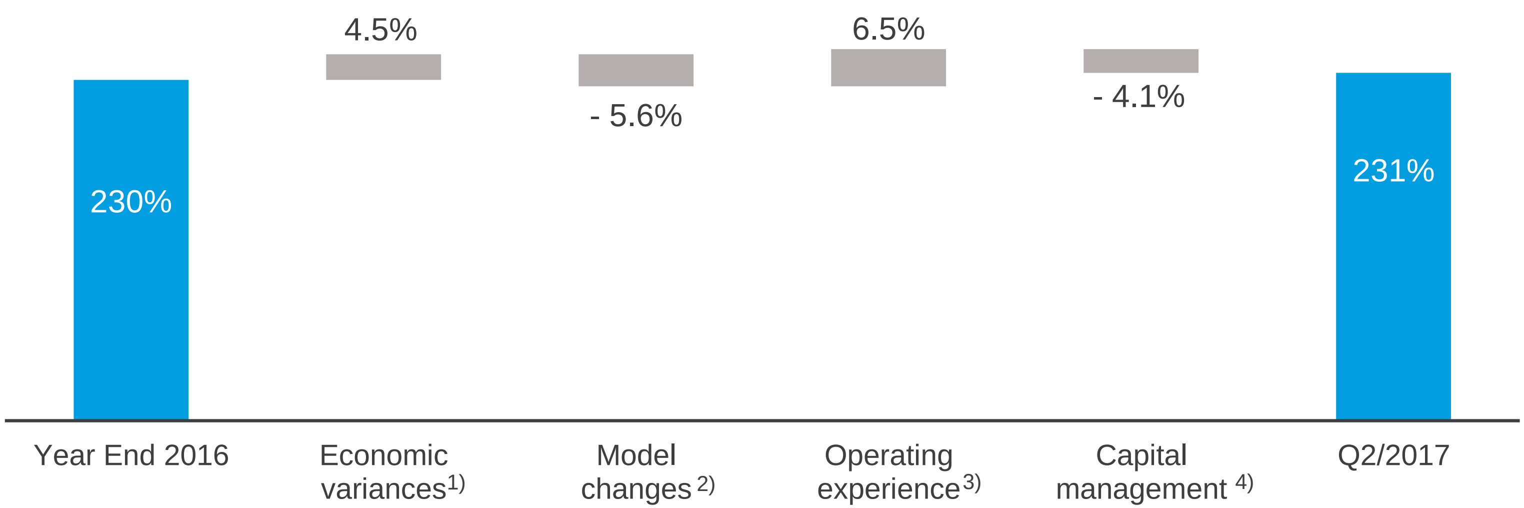
Solvency capital generation in first half 2017

Own fund and SCR movement in 2017



Eligible Own Funds	12,835	-376	-63	567	-228	12,734
SCR	5,586	-267	103	91	0	5,513

1) Changes due to changes of foreign exchange rates, interest rates, credit spreads and other financial market factors
2) Model strengthening, main effect from strengthening of risk margin
3) Operating earnings and variances in assumptions
4) Mainly build-up of foreseeable dividends

Significant diversification between largest risks

Hannover Re's risk profile

Property & Casualty	Life & Health	Market & Counterparty	Operational & Other
NatCat	Life & Health Cat	Credit & Spread	Compliance & Fraud
Man-Made Cat	Mortality Trend	Interest Rate	Processes
Pricing	Longevity Trend	F/x Rate	IT, IT Security & Data
Reserving	Disability/Morbidity	Equity[2)]	Human Resources
	Lapse	Real Estate	Strategic & Reputational[1)]
	Other	Counterparty	Emerging[1)]

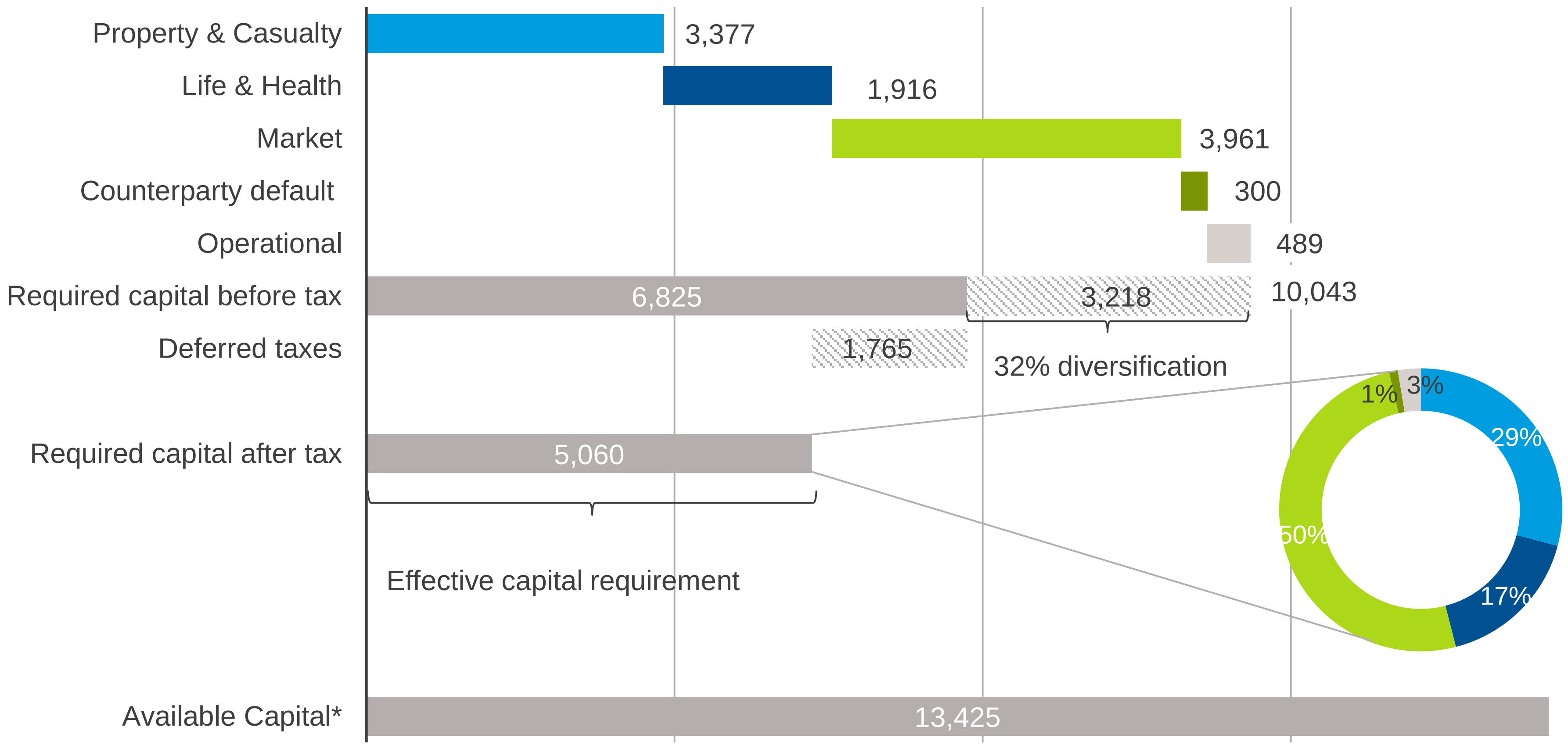
- High: VaR 99.5% > 10% of available capital[3)]
- Medium: VaR 99.5% > 5% of available capital
- Low: VaR 99.5% <= 5% of available capital

1) Not covered by VaR/Internal model
2) Including Private/Non-Listed Equity
3) VaR – Value-at-Risk, pre-tax

Capital efficiency supported by high diversification

Breakdown of Solvency II capital requirements

Risk capital for the 99.5% VaR (according to internal economic capital model) in m. EUR



As at 30 June 2017

* According to the internal model (before haircut for minority interest)

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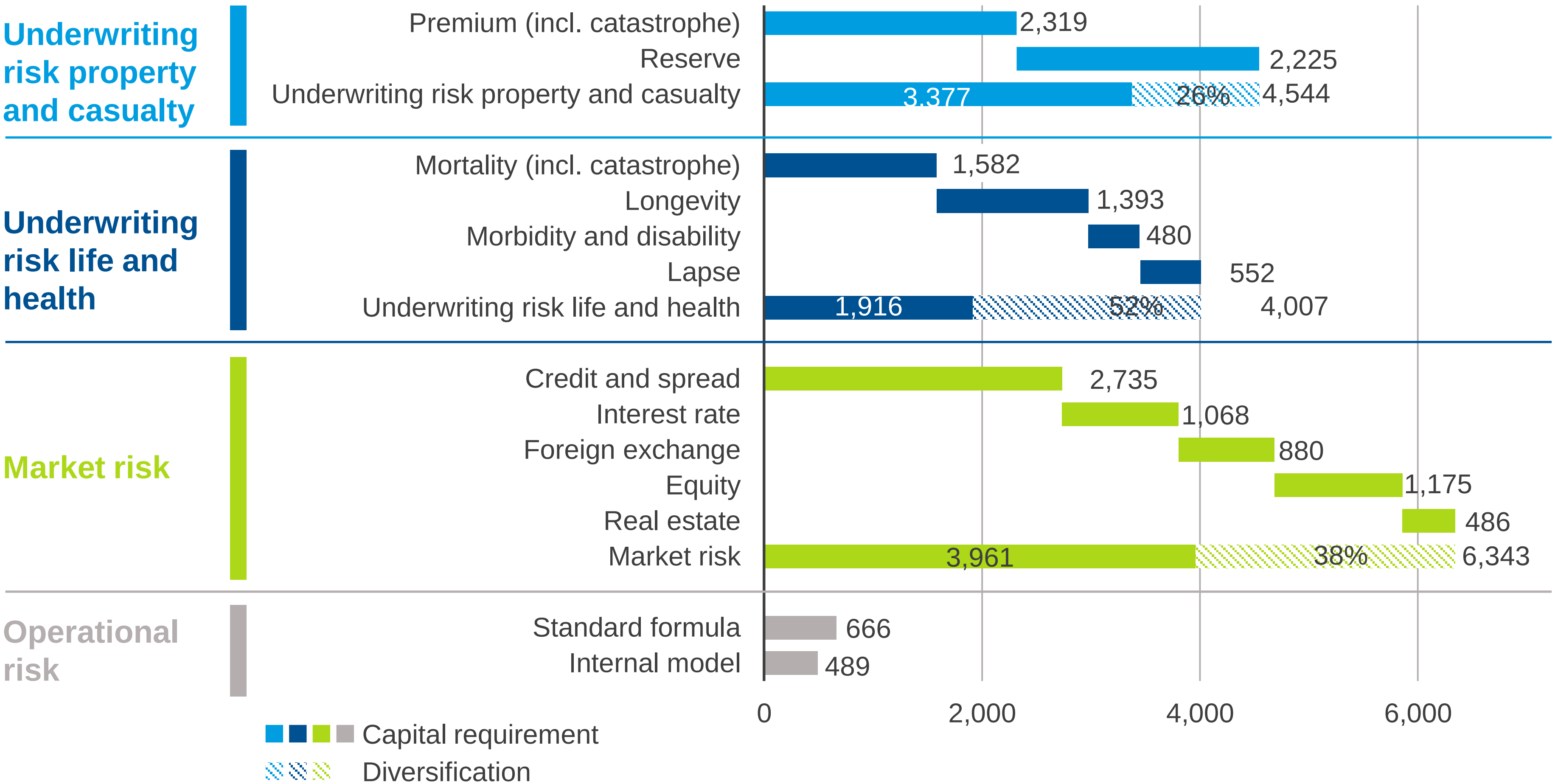
Hannover Re is well diversified within each risk category
and has a well balanced asset and liability portfolio

Risk capital for the 99.5% VaR (according to internal economic capital model) in m. EUR



As at 30 June 2017

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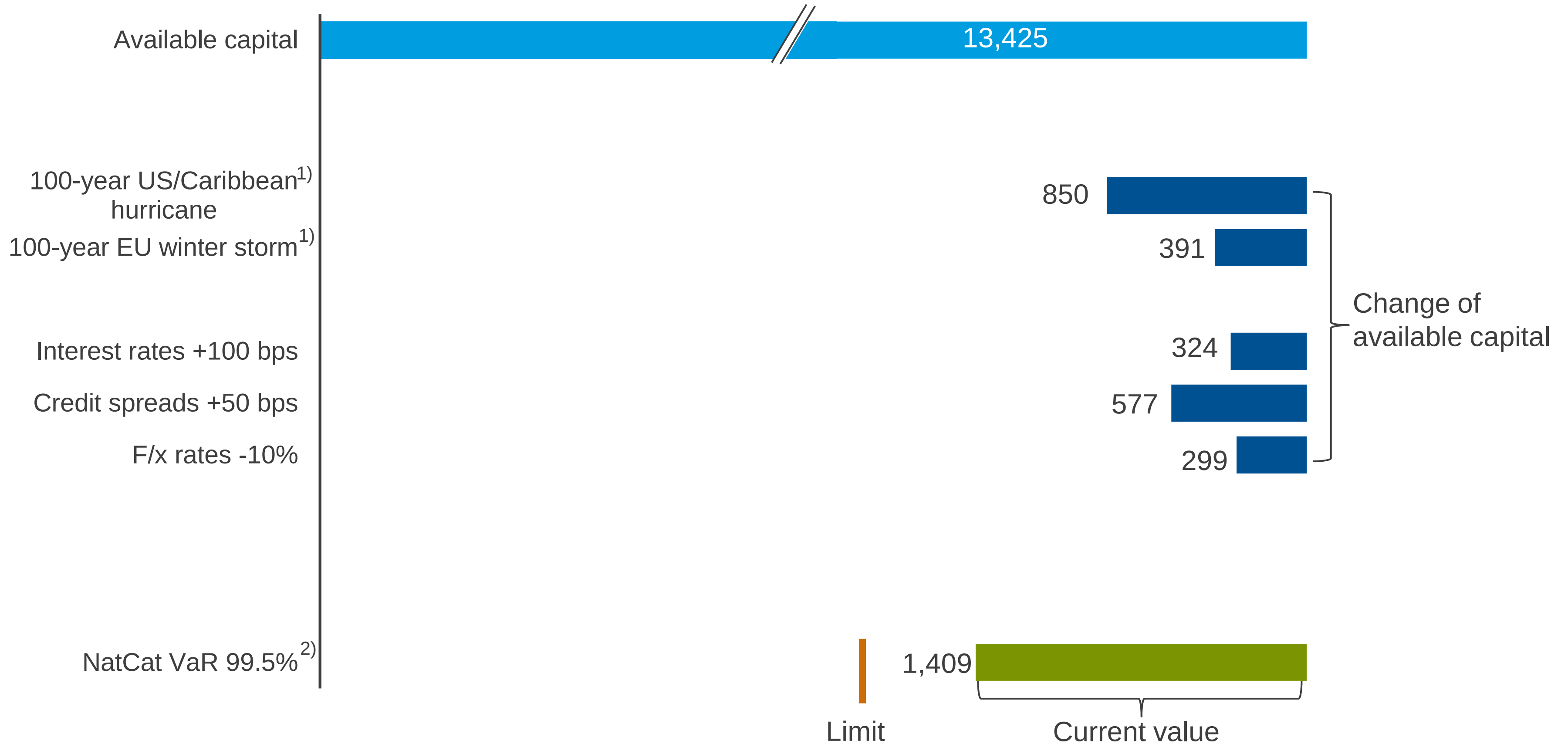
Individual risks with limited impact on own funds

Sensitivity of own funds for selected risks

Sensitivity of available capital

in m. EUR



As at 30 June 2017

1) A return period of 100 years is equivalent to an occurrence probability of 1%; based on the aggregate annual loss

2) Net underwriting result (pre-tax), annual aggregate loss, VaR – Value at Risk

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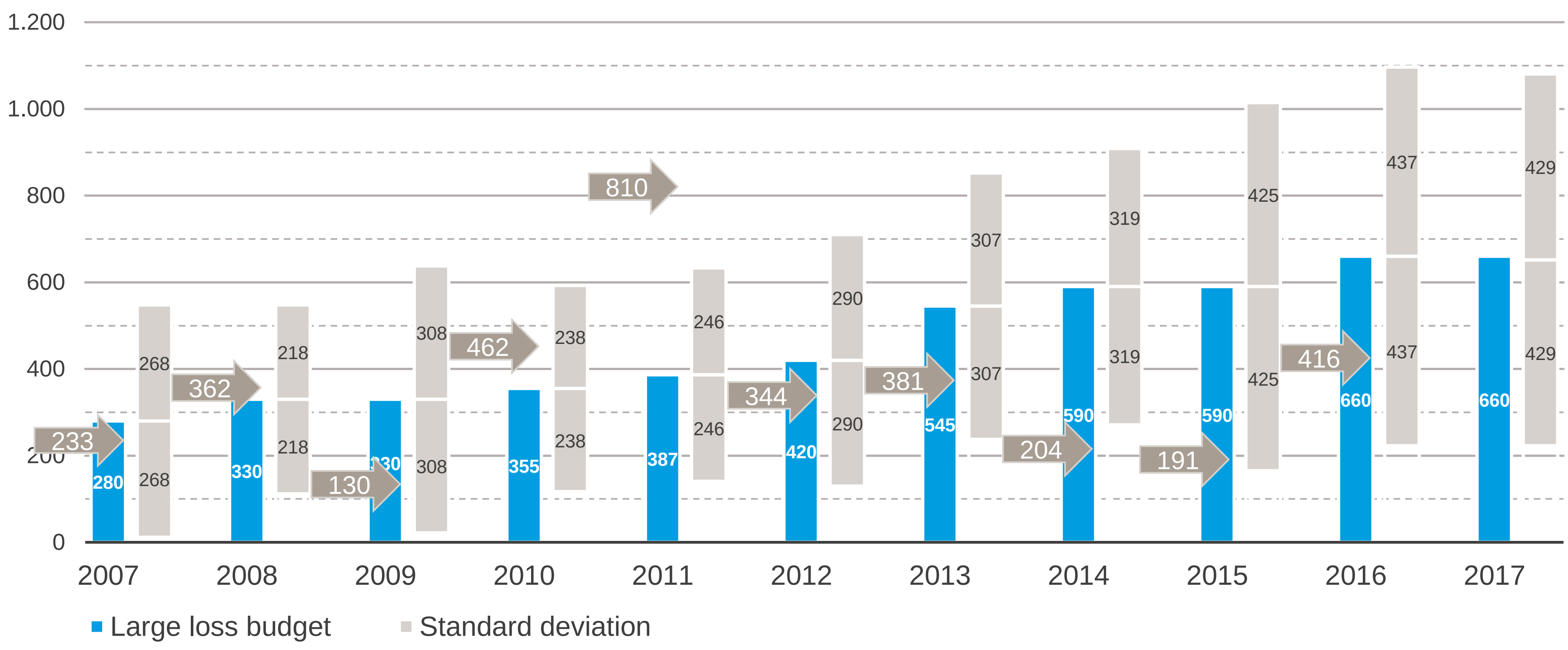
Effective exposure risk management: 11 years track record

... utilisation of large loss budget for NatCat oscillates around the expectation

Net Losses NatCat (➡)

in m. EUR



Realisation of net losses NatCat on average 85% of expectation

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Recent natural catastrophes in North / Middle America

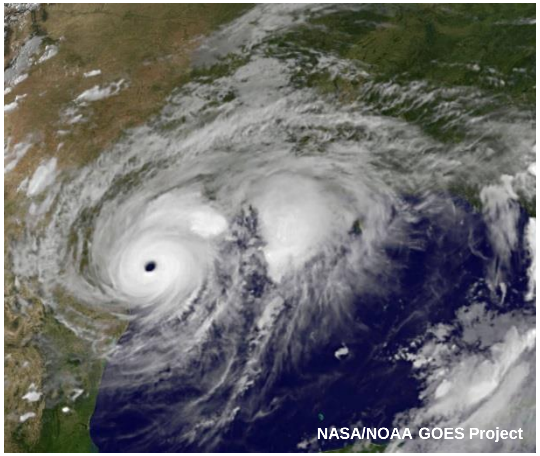
Uncertainty of estimates still significant

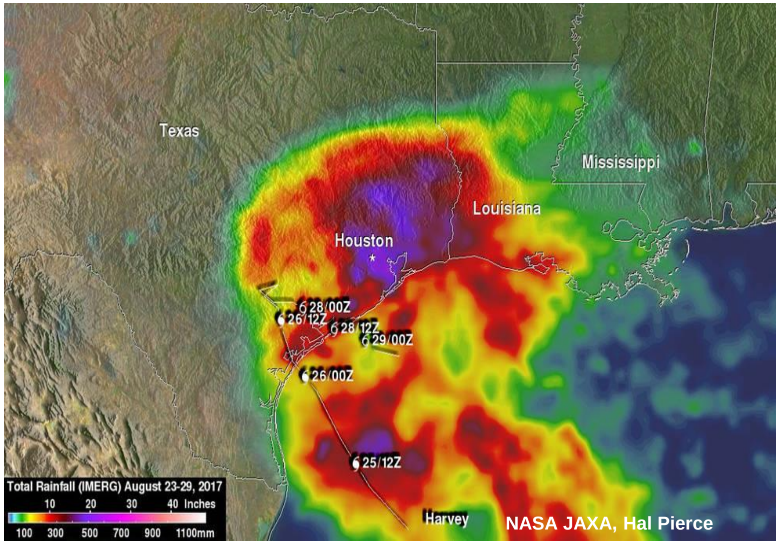
Event	Date	Region	Insured market loss estimates (MLE) in bn. USD	Modelled return period for MLE (years)
Hurricane "Harvey"	25. - 28. Aug	USA	>10	>3
Hurricane "Irma"	6. - 12. Sep	USA	25 - 35	5 - 10
		Caribbean	7 - 15	10 - 20
Hurricane "Maria"	19. - 22. Sep	Puerto Rico, Caribbean	40 - 85	75 - 350
Earthquake Mexico 8.1	07. Sep	Mexico, Chiapas	0.8 - 1.1	< 10
Earthquake Mexico 7.1	19. Sep	Mexico, Puebla	0.7 - 2	8 - 20

Sources: Insured market loss: AIR / Modelled return period: own research.

Hurricane "Harvey"
Event characteristics

- Landfall as Cat 4 hurricane near Rockport TX
- First Cat 4 landfall in the US since 2004
- Harvey caused record rainfall of up to 52 inches while circling in the area
- Houston metropolitan area severely affected by flash floods
- Basically all rivers in the area had record water levels
- Severe underinsurance of flood losses





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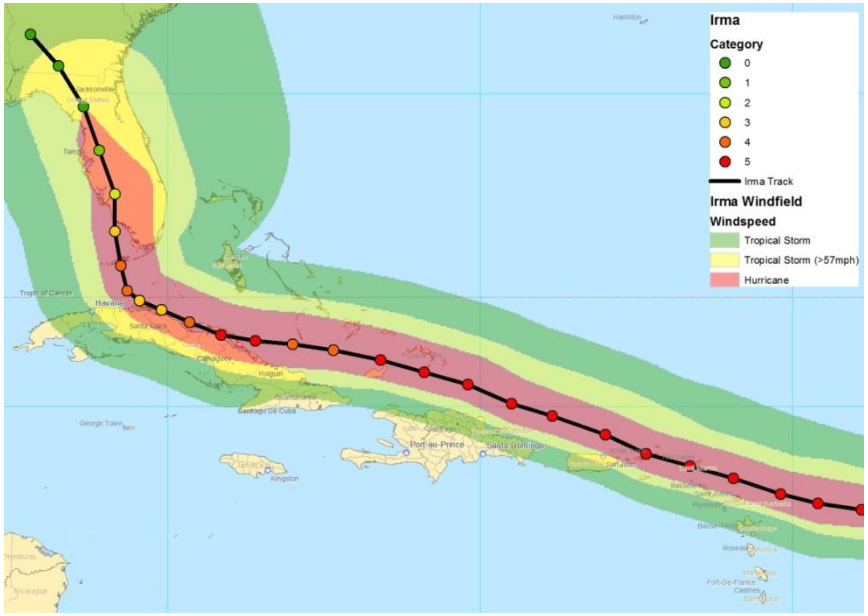
Hurricane "Irma"
Event characteristics

- Cat 5 hurricane with the highest ever recorded wind speeds in the open Atlantic
- Cat 5 landfall in the Caribbean severely affecting Barbuda, Anguilla, St. Martin/St. Maarten and Virgin Islands
- Tropical storm-force winds on Puerto Rico and Dominican Republic. Landfall as Cat 4 hurricane in Cuba
- US landfall as Cat 3 hurricane near Naples FL
- Significant storm surge and precipitation induced flooding in Florida, including Miami
- Tropical storm-force winds all over Florida plus heavy rain and wind in Georgia and South Carolina



Source: Figure based on data from National Hurricane Center (www.nhc.noaa.gov)

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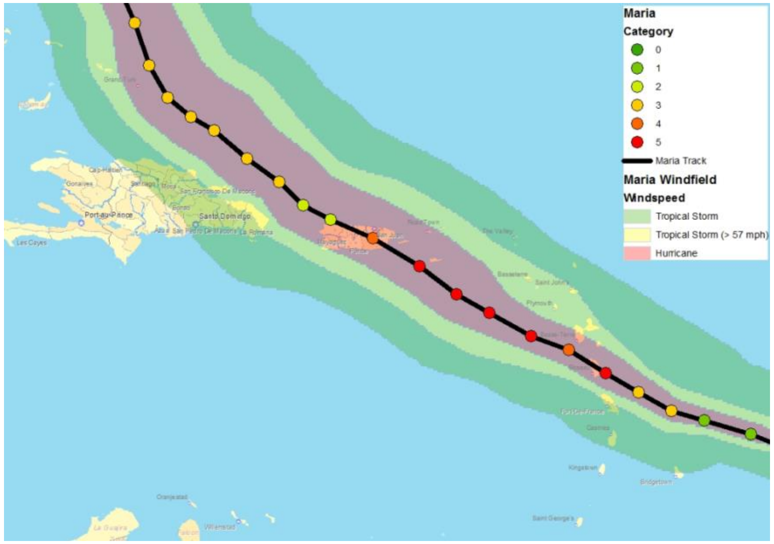
Hurricane "Maria"
Event characteristics

- Cat 5 hurricane in the Caribbean affecting Dominica, Guadeloupe, US Virgin Islands, Puerto Rico, Dominican Republic
- Cat 5 landfall in Dominica, Cat 4 landfall in Puerto Rico
- Strongest storm to hit Puerto Rico in 85 years
- Heavy rainfall, landslides and universal power outages as well as significant damage to structures reported in both Dominica and Puerto Rico
- Full recovery of power grid may last for months
- Puerto Rico accounts for largest share of insured loss



Source: Figure based on data from National Hurricane Center (www.nhc.noaa.gov)

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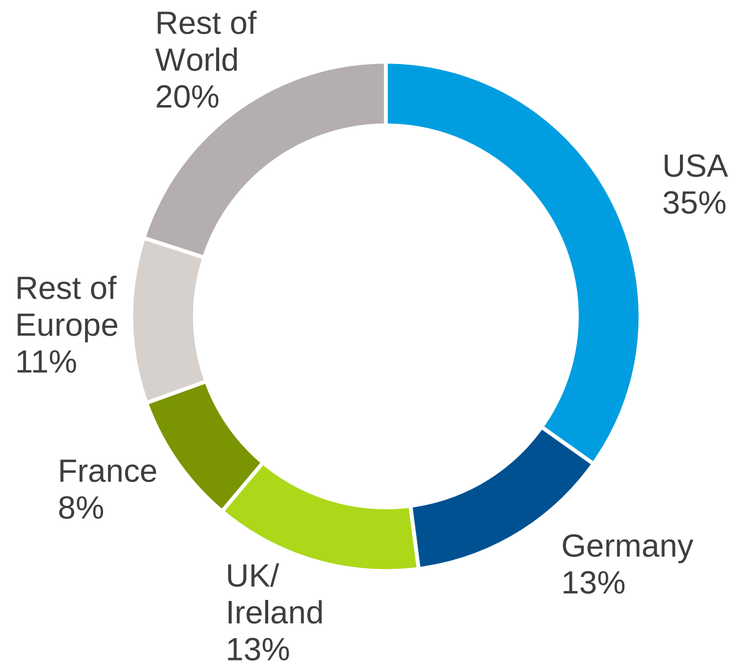
Diversified Property & Casualty book

Gross loss reserve per region

HR Group: Gross Property & Casualty loss reserves*

USA	8,362
Germany	3,150
UK/Ireland	3,165
France	2,006
Rest of Europe	2,523
Rest of World	4,804
Total	24,010

Total gross P&C loss reserves*



* As of 31 December 2016, consolidated, IFRS, in m. EUR

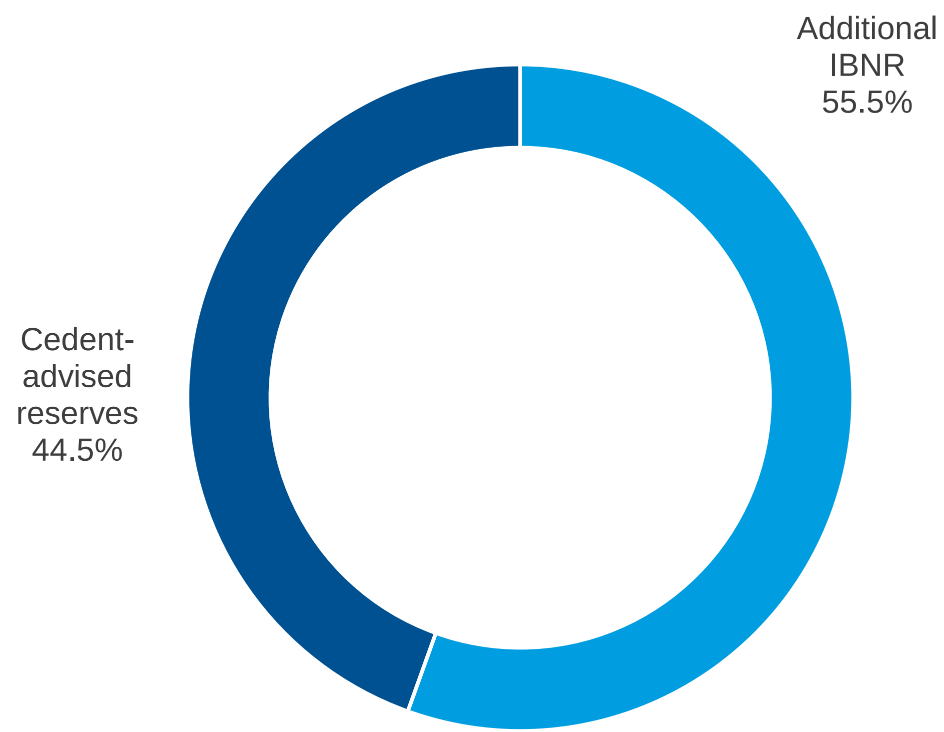
More than 50% of HR Group P&C reserves are additional IBNR

Cedent advised reserves vs. additional IBNR

HR Group: Gross Property & Casualty loss reserves*

Additional IBNR	13,323
Cedent-advised reserves	10,688
Total	24,010

Gross P&C reinsurance loss reserves*



* HR Group as at 31 December 2016, IFRS, gross, consolidated, figures in m. EUR

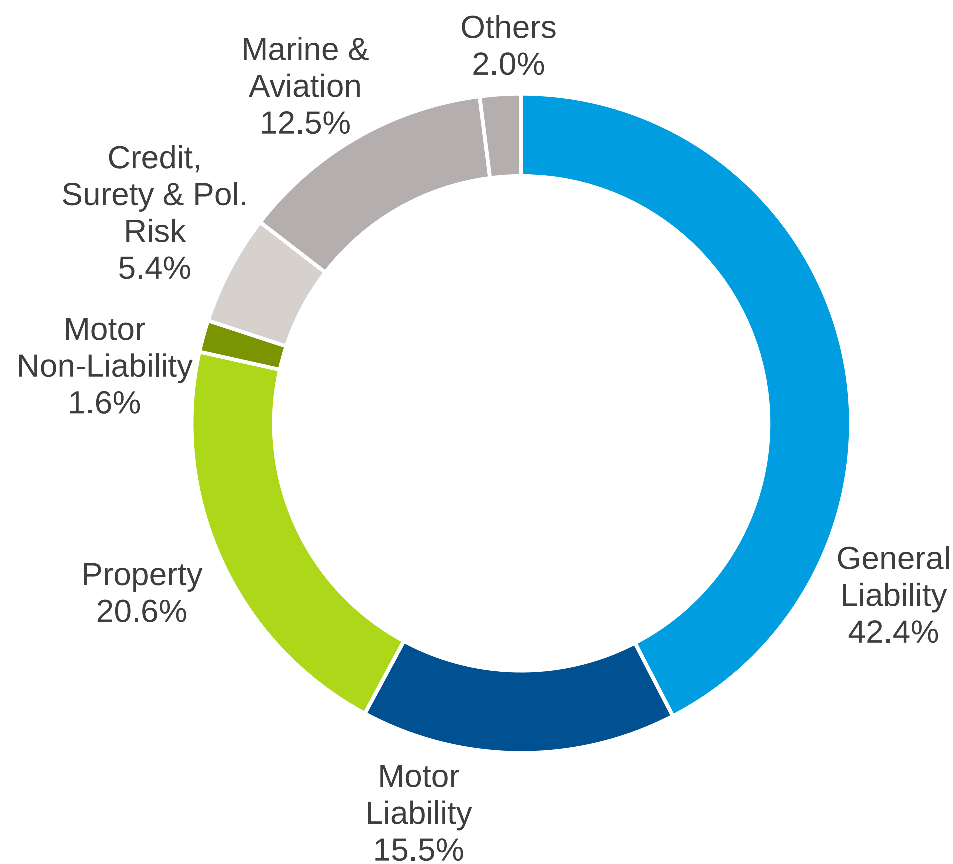
About 42% related to general liability

Driven by premium volume in recent U/Y

HR Group: Gross Property & Casualty loss reserves*

General Liability	10,179
Motor Liability	3,716
Property	4,950
Motor Non-Liability	376
Credit, Surety & Political Risk	1,297
Marine & Aviation	3,010
Others	483
Total	24,010

Gross P&C reinsurance loss reserves*



* HR Group as at 31 December 2016, IFRS, gross, consolidated, figures in m. EUR

Stable redundancy despite challenging environment

Reserve study review by WillisTowers Watson confirms redundancies*

- Over the last 8 years, on average 2.4% of the net earned loss ratio for P&C business is due to net reserve redundancy increases

in m. EUR

Year	Redundancy	Increase redundancy	Effect 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
2009 - 2016 total		**1,275**		**53,401**
2009 - 2016 average		**159**	**2.4%**	**6,675**

* Redundancy of loss and loss adjustment expense reserve for its non-life insurance business against held IFRS reserves, before tax and minority participations. WillisTowers Watson reviewed these estimates - more details shown in appendix.

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Reported loss triangles for HR/E+S* ...

Reconciliation to our balance sheet

in m. EUR

No.	Line of business	Total reserves U/Y 1979 - 2004	U/Y 1979 - 2004 in % of HR Group	Total reserves U/Y 2005 - 2016	U/Y 2005 - 2016 in % of HR Group
1	General liability non-prop.	829.1	3.5%	5,071.3	21.1%
2	Motor non-prop.	548.0	2.3%	1,838.5	7.7%
3	General liability prop.	159.9	0.7%	2,089.8	8.7%
4	Motor prop.	183.0	0.8%	949.8	4.0%
5	Property prop.	26.3	0.1%	1,333.3	5.6%
6	Property non-prop.	17.3	0.1%	1,127.2	4.7%
7	Marine	20.3	0.1%	1,151.4	4.8%
8	Aviation	247.3	1.0%	914.7	3.8%
9	Credit/surety	0.1	0.0%	1,151.4	4.8%
	All lines of business	2,031.2	**8.5%**	15,627.3	**65.1%**

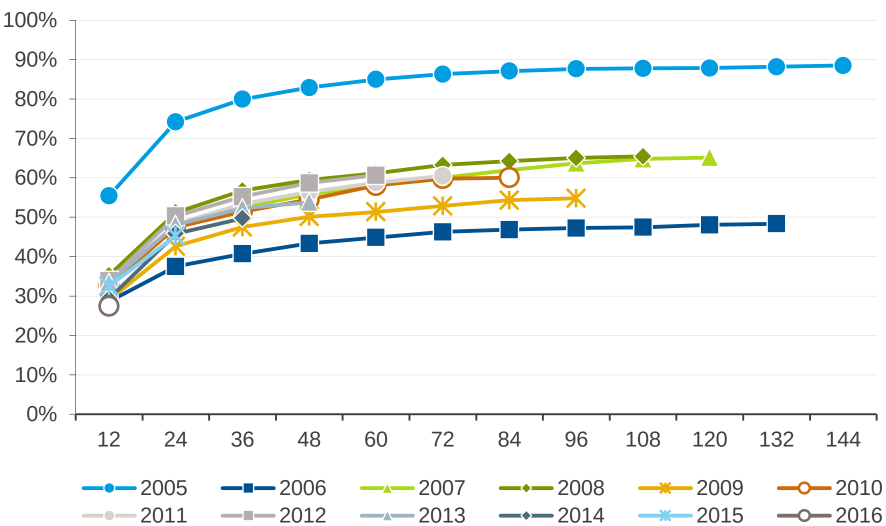
As at 31 December 2016 (in m. EUR), consolidated, IFRS figures

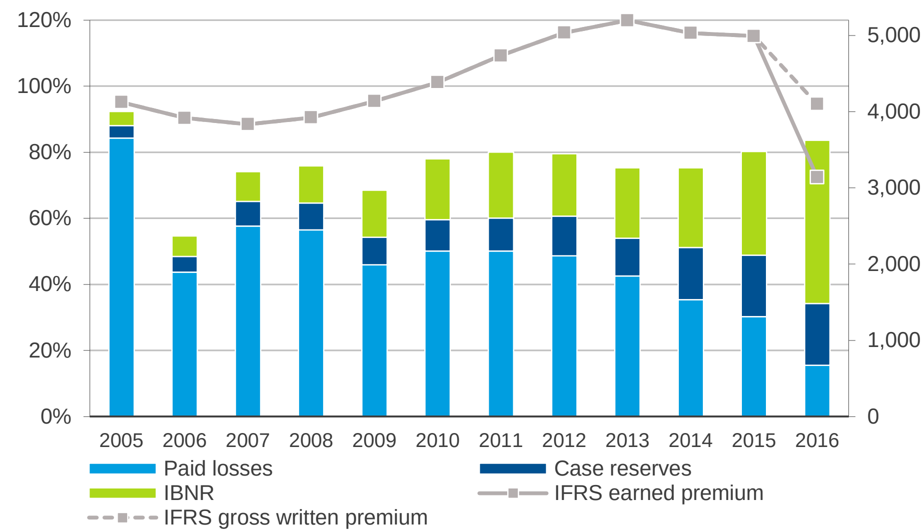
... represent about 3/4 of our gross carried reserves

Reported gross claims triangle for HR/E+S*

Total (~3/4 of HR Group reserves shown in 9 individual triangles)

		Statistical data (as provided by cedents)												Booked data			
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2005	4,124	55.4%	74.2%	79.9%	82.9%	85.0%	86.3%	87.1%	87.6%	87.8%	87.9%	88.2%	88.5%	92.3%	84.3%	3.8%	4.2%
2006	3,917	28.6%	37.5%	40.7%	43.3%	44.9%	46.3%	46.8%	47.3%	47.4%	48.0%	48.3%		54.6%	43.7%	4.8%	6.2%
2007	3,834	33.9%	47.6%	52.6%	55.8%	58.2%	60.0%	62.0%	63.7%	64.8%	65.1%			74.2%	57.7%	7.5%	9.0%
2008	3,923	35.2%	51.2%	56.8%	59.4%	61.2%	63.2%	64.2%	65.0%	65.4%				75.9%	56.5%	8.2%	11.3%
2009	4,138	29.0%	42.6%	47.5%	50.1%	51.3%	52.9%	54.3%	54.8%					68.5%	46.0%	8.3%	14.2%
2010	4,385	32.7%	47.4%	51.4%	54.5%	58.1%	59.8%	60.0%						78.0%	50.2%	9.5%	18.4%
2011	4,734	33.5%	48.2%	53.4%	56.4%	58.7%	60.5%							80.1%	50.1%	10.0%	19.9%
2012	5,035	33.9%	50.3%	55.2%	58.7%	60.6%								79.6%	48.7%	12.0%	18.9%
2013	5,195	33.4%	48.1%	52.3%	53.8%									75.3%	42.6%	11.4%	21.3%
2014	5,030	29.3%	45.8%	49.7%										75.3%	35.4%	15.8%	24.2%
2015	4,992	32.5%	45.3%											80.3%	30.2%	18.6%	31.4%
2016	3,140	27.4%												83.6%	15.5%	18.7%	49.4%





* Combined Hannover Re / E+S Rück as at 31 Dec 2016 (in m. EUR), consolidated, IFRS, excluding branches, development in months, underwriting year

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Reserving risk is reflected in the variation in ultimate loss ratios

Total (~3/4 of HR Group reserves shown in 9 individual triangles)

U/Y	Ultimate loss ratio 2010	Ultimate loss ratio 2011	Ultimate loss ratio 2012	Ultimate loss ratio 2013	Ultimate loss ratio 2014	Ultimate loss ratio 2015	Ultimate loss ratio 2016	Paid losses 2016	Case reserves 2016	IBNR balance 2016
2005	96.2%	95.8%	94.1%	92.7%	93.3%	92.8%	92.3%	84.3%	3.8%	4.2%
2006	63.3%	62.1%	60.9%	59.5%	57.5%	56.5%	54.6%	43.7%	4.8%	6.2%
2007	78.3%	77.1%	77.5%	77.2%	75.6%	75.0%	74.2%	57.7%	7.5%	9.0%
2008	83.2%	84.1%	81.8%	80.9%	80.3%	78.0%	75.9%	56.5%	8.2%	11.3%
2009	78.3%	75.8%	73.1%	72.7%	70.1%	69.9%	68.5%	46.0%	8.3%	14.2%
2010	81.2%	84.1%	81.4%	78.9%	80.0%	79.0%	78.0%	50.2%	9.5%	18.4%
2011		85.6%	82.4%	81.9%	80.9%	81.8%	80.1%	50.1%	10.0%	19.9%
2012			89.1%	83.1%	79.1%	79.8%	79.6%	48.7%	12.0%	18.9%
2013				82.8%	80.1%	78.9%	75.3%	42.6%	11.4%	21.3%
2014					79.0%	75.7%	75.3%	35.4%	15.8%	24.2%
2015						82.6%	80.3%	30.2%	18.6%	31.4%
2016							83.6%	15.5%	18.7%	49.4%

As at 31 December 2016 (in m. EUR), consolidated, IFRS, development in years

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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 2016, 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 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 2016 covered 98.1% / 98.2% of the gross and net held non-life reserves of €24.0 billion and € 22.8 billion respectively. Together with life reserves of gross €4.1 billion and net €3.9 billion, the total balance sheet reserves amount to €28.1 billion gross and €26.6 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 2016. 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 is typical for reinsurance companies, claims reporting can be delayed due to late notifications by some cedants. 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.
- Except for any agreed responsibilities Willis Towers Watson may have to Hannover Rück SE, Willis Towers Watson 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 Willis Towers Watson in this document.

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Growth and profit opportunities in P&C R/I

Jürgen Gräber, Member of the Executive Board

20th International Investors' Day
Frankfurt, 19 October 2017

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Did you know that ...

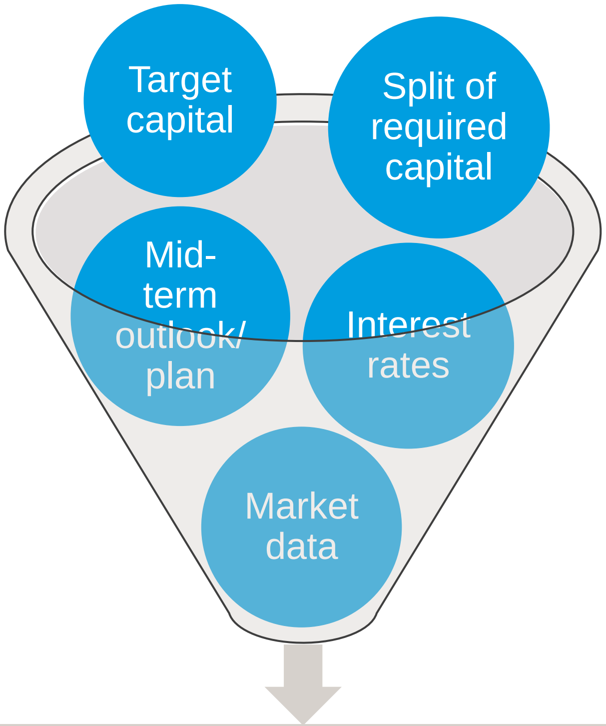
Volume & profitability expectation out of our regular reporting

	Lines of business	Volume[1]	Profitability[2]
Target markets	North America[3]	↗	+/-
	Continental Europe[3]	↘	+
Specialty lines worldwide	Marine	↘	+
	Aviation	↘	-
	Credit, surety and political risks	↗	+/-
	UK, Ireland, London market and direct	↗	-
	Facultative reinsurance	↘	+
Global reinsurance	Worldwide treaty[3] reinsurance	→	+/-
	Cat XL	→	-
	Structured reinsurance and ILS	↑	+/-

1) In EUR, development in original currencies can be different
2) ++ = well above CoC; + = above CoC; +/- = CoC earned; - = below Cost of Capital (CoC)
3) All lines of business except those stated separately

2) ++ = well above CoC; + = above CoC; +/- = CoC earned; - = below Cost of Capital (CoC)

Our approach to the calculation of expected return of capital



Output parameters

- Calculation of
  - WACC (weighted average CoC)
  - Minimum return on capital according to RoEC target
  - Minimum margins based on capital allocation and MRC
- Bottom-up cross check of minimum margins

Input parameters

- Target capital:
  IFRS equity, hybrid capital, valuation reserves
- Split of required capital:
  P&C, L&H, Asset Management
- Mid-term outlook/plan P&C
- Interest rates:
  5y average of 10y EUR gov., hybrid capital costs, target RoE
- Market data:
  Capital Asset Pricing Model

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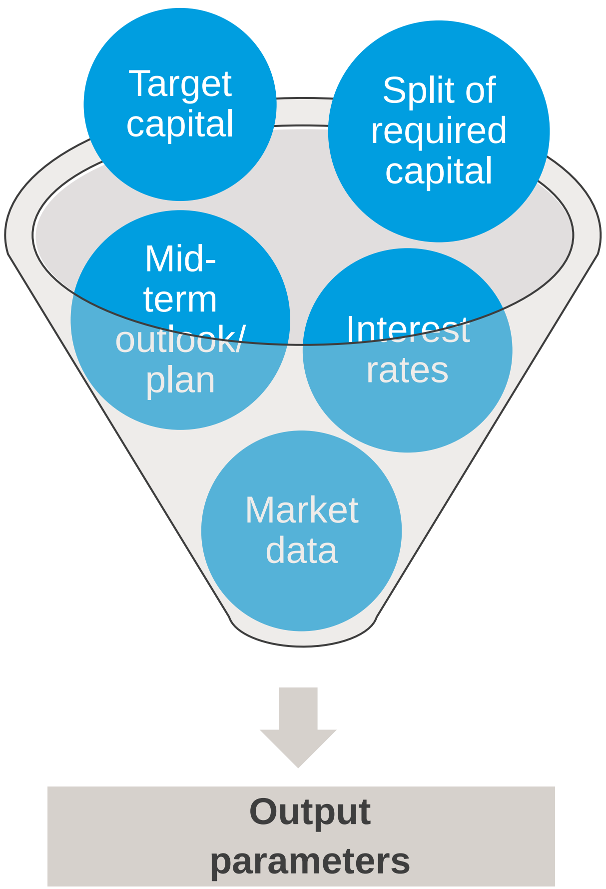
Our approach to the calculation of expected return of capital

Input parameter using examples



Input parameters

- Target capital: EUR 15 bn.
- Split of required capital:

P&C	35%
L&H	25%
Asset Management	40%

- Mid-term outlook/plan P&C:

GWP	EUR 10 bn.
NEP	EUR 9 bn.
internal costs	EUR 0,25 bn.
retro costs	EUR 0,1 bn.

- Interest rates:

5y average of 10y EUR gov.,	0.5%
hybrid capital costs,	4.5%
target RoE (target RoEC)	9% (6%)

- Market data: Capital Asset Pricing Model

Unlevered beta	0.8%
Levered beta	0.9%
Market risk premium	4%

Our approach to the calculation of expected return of capital

Output parameter using examples

Output parameters

- WACC (weighted average CoC) 4.6%
- Minimum return on capital according to RoEC target
  - MRC spread over risk free 7.5%
  - WACC spread (before tax) 4.7%
- Minimum margins based on capital allocation and MRC
  - P&C: capital + cost + retro cost margin 7.5%
- Bottom-up cross check of minimum margins

Segment	Premium in m. EUR	2017 MRC in %	2017 as if MRC in m. EUR	2018 MRC in %	2018 MRC in m. EUR	Retro	Exp	Margin	Margin in m. EUR
Non-prop. Property Category 1	175	21.3%	37.5	19.6%	34.4	12.2%	3.2%	35.0%	61.6
Motor Germany prop.	270	0.7%	1.9	0.7%	1.9	0.0%	0.8%	1.5%	4.1
Structured (Advanced Solutions)	2,190	1.5%	33.2	1.4%	30.7	0.0%	1.0%	2.4%	53.6

Reality check of our predictions

2011 - 2014

Lines of business	Volume 01.01.2011	Volume 01.01.2012	Volume 01.01.2013	Volume 01.01.2014	Profitability 01.01.2011	Profitability 01.01.2012	Profitability 01.01.2013	Profitability 01.01.2014
North America[3)]	→	→	↗	↗	+/-	+/-	+	+
Germany	→	→	↘	→	+/-	+/-	+/-	+/-
Marine (incl. energy)	↗	↗	↗	↗	+	+	+	++
Aviation	↗	↗	↗	↘	+	+	+	+/-
Credit, surety and political risks	↘	↗	→	↘	+	+	+	+
Structured R/I and ILS	→	↗	→	↗	+/-	+	+/-	+/-
UK, Ireland, London market and direct	↗	↗	↘	↘	+	+	+/-	+/-
Global treaty	→	→	→	→	+/-	+	+/-	+
Global Cat XL	↘	↗	↗	↘	+	++	+	+
Global facultative	↗	↗	↗	↗	+	+	+	+

	2011	2012	2013	2014	2011	2012	2013	2014
Guided P&C growth	↗	↑	→	→				
Reality check growth: P&C GWP	+8.4%	+12.3%	+1.2%	+2.3%				
Reality check profitability: P&C xRoCA					3.0%	6.0%	4.7%	10.7%

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Reality check of our predictions
2015 - 2017

Lines of business	Volume 01.01.2015	Volume 01.01.2016	Volume 01.01.2017	Profitability 01.01.2015	Profitability 01.01.2016	Profitability 01.01.2017
North America[3)]	↗	↗	↗	+	+	+
Continental Europe[3)]	→	↘	↘	+/-	+/-	+/-
Marine	↘	↘	↘	+	+	+/-
Aviation	↘	↘	↘	+/-	-	-
Credit, surety and political risks	→	↗	↗	+	+	+/-
UK, Ireland, London market and direct	↗	↗	↗	+/-	+/-	+/-
Facultative R/I	→	↘	↘	+	+	+
Worldwide treaty[3)] R/I	→	→	↘	+	+	+/-
Cat XL	→	↘	→	+/-	-	-
Structured R/I / Advanced Sol. and ILS	↗	↘	↗	+/-	+/-	+/-
	2015	**2016**	**2017**	**2015**	**2016**	**2017**
Guided P&C growth	↗	→	**n.a.**			
Reality check growth: P&C GWP	**+18.2%**	**-1.4%**	**n.a.**			
Reality check profitability: P&C xRoCA				**7.4%**	**7.1%**	**n.a.**

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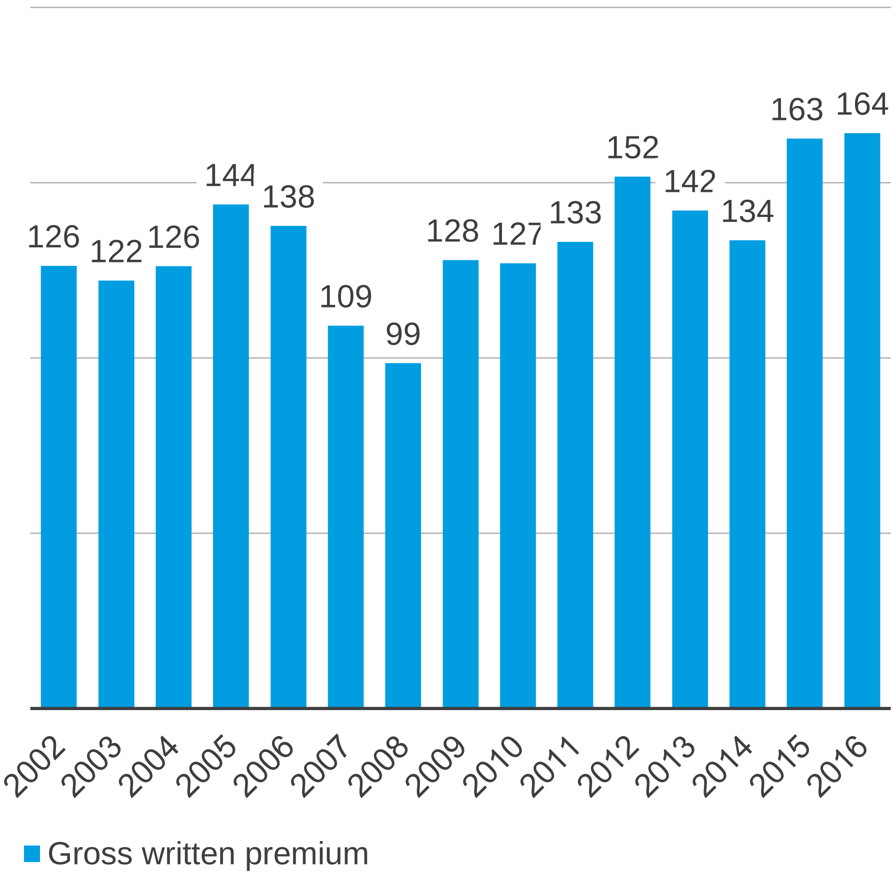
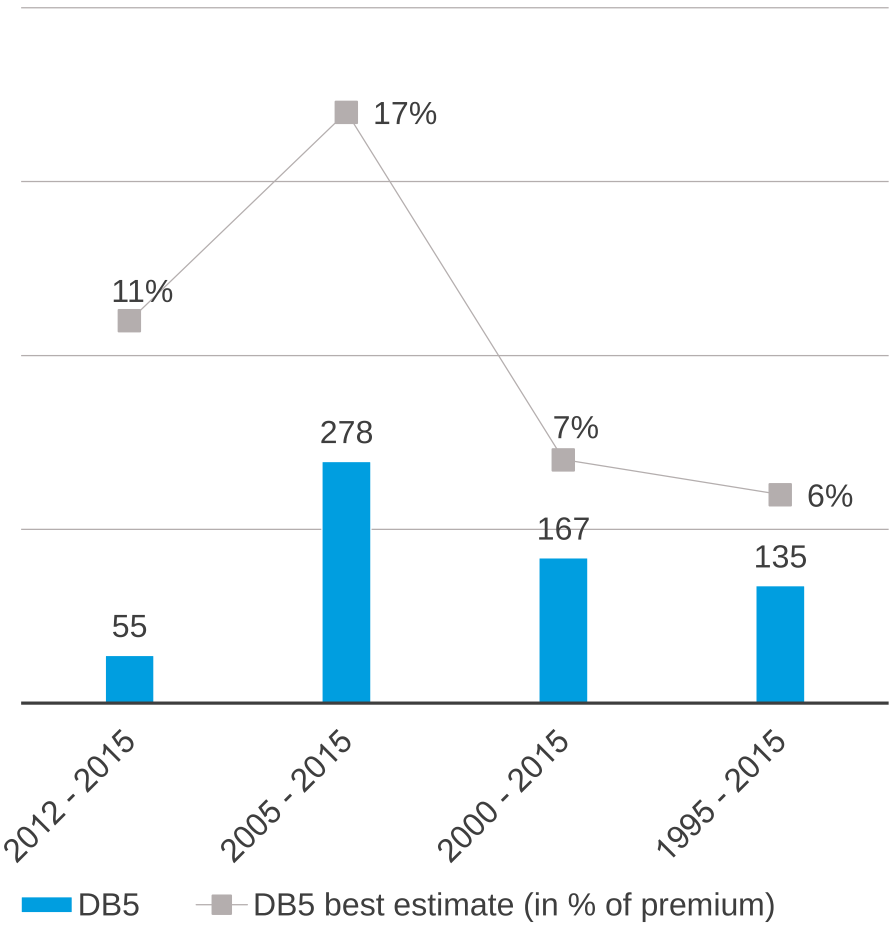
Successful management of premium volume and profitability

Sample 1: US per risk

US per risk premium volume vs. profitability

in m. EUR





DB5 = Discounted balance level 5

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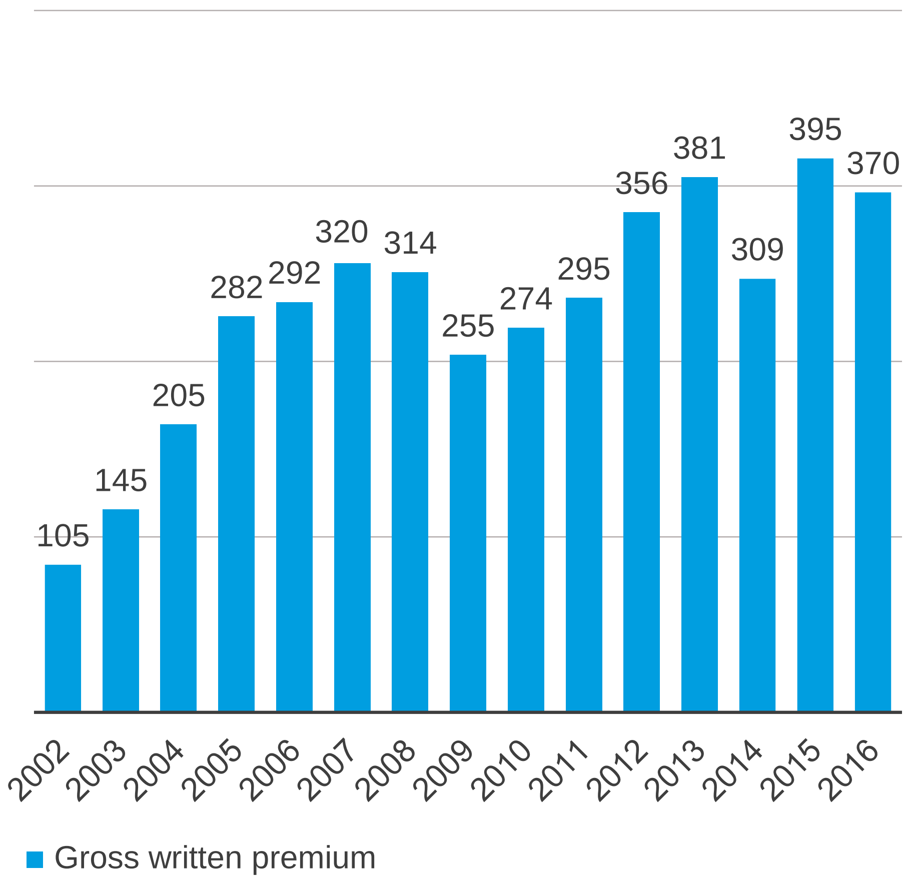
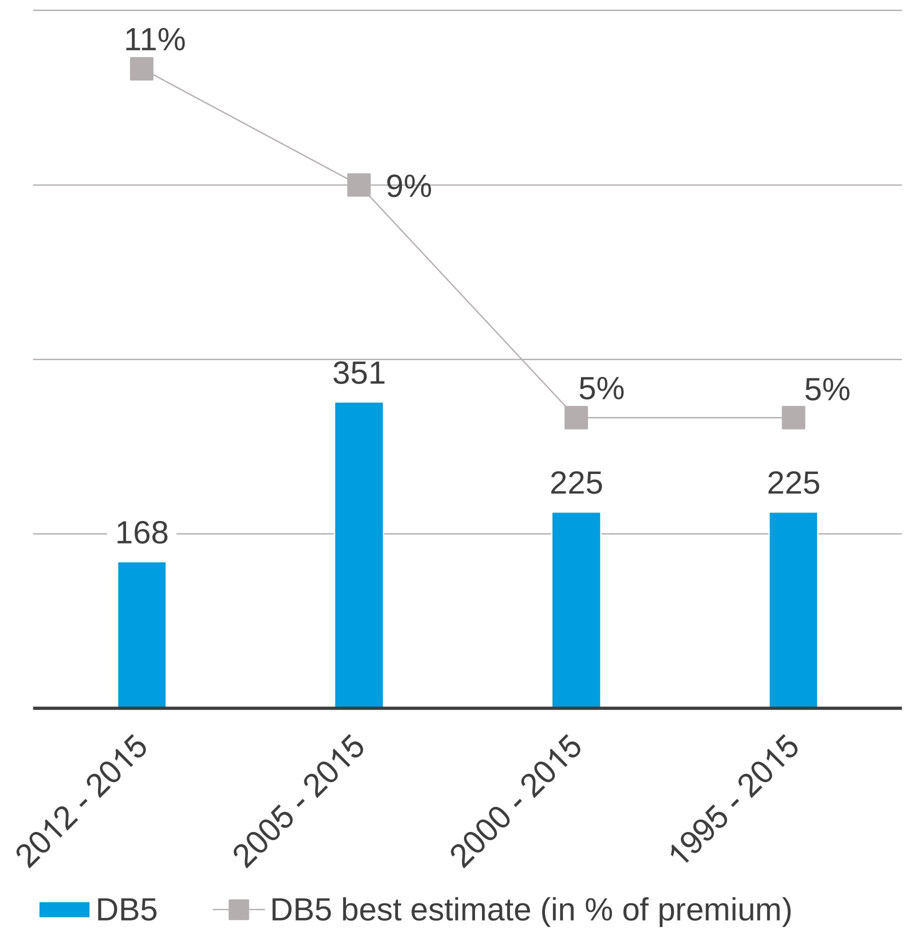
Successful management of premium volume and profitability
Sample 2: Global Cat XL

Global Cat XL premium volume vs. profitability in m. EUR





DB5 = Discounted balance level 5

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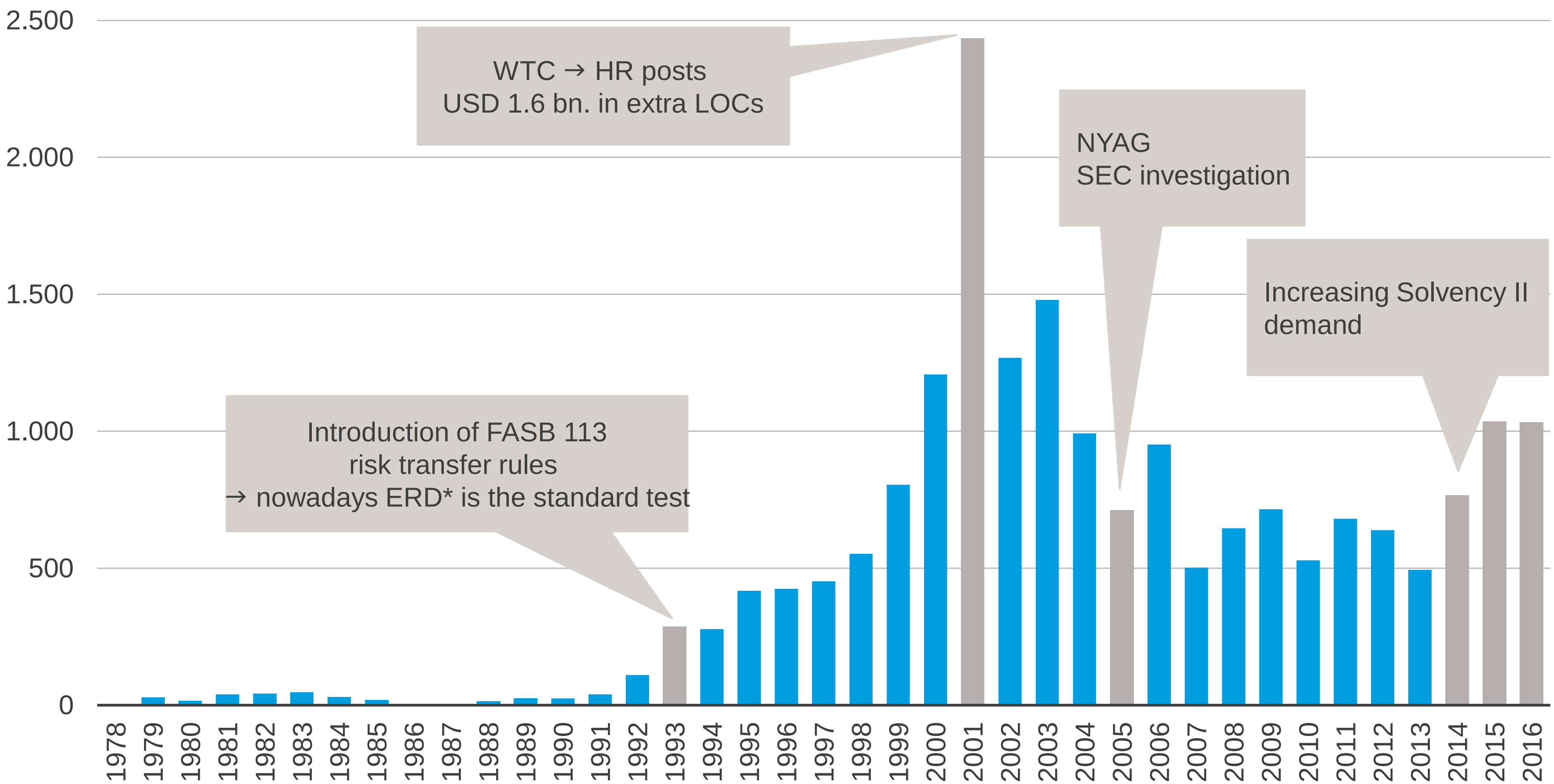
Advanced Solutions

Generation of business strongly opportunity-driven

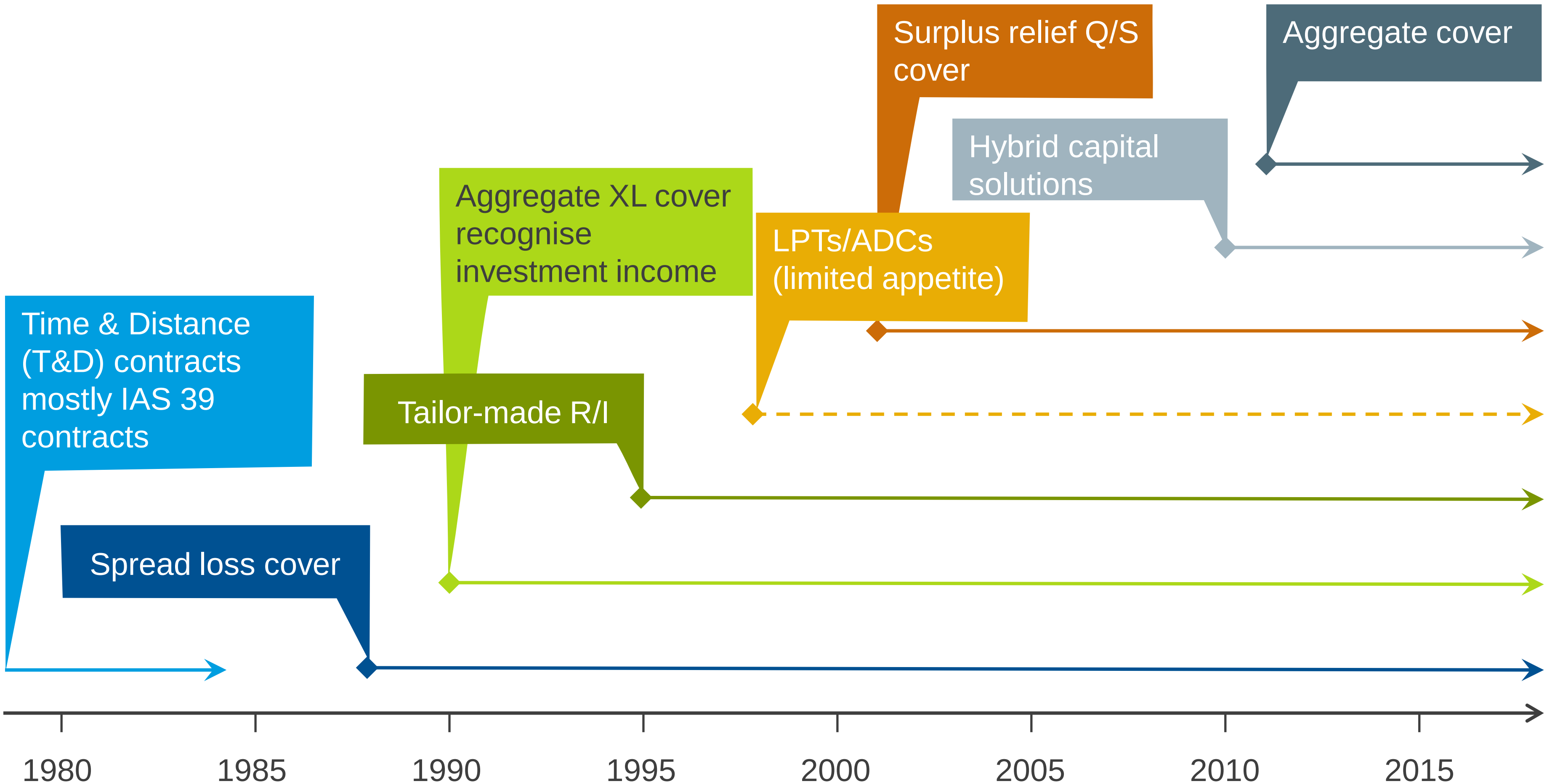
Gross written premium in m. EUR



* Expected Reinsurer Deficit

Advanced Solutions

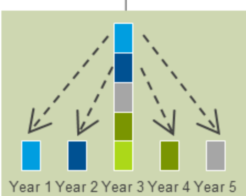
From mere T&D contracts to an all-round structured reinsurer



IAS = International Accounting Standards

Advanced Solutions today

Spread Loss

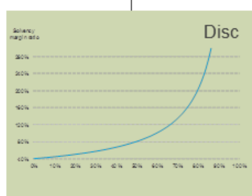


Capital protection against temporary shortfalls

Stop Loss

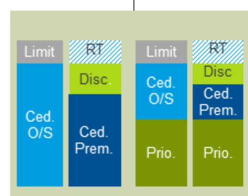
- Reduction of volatility
- Capital protection

Surplus Relief Quota Share



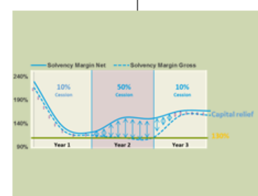
Solvency relief by ceding:
- premium
- losses
- reserves

Loss Portfolio Transfer (LPT)/ Adverse Development Cover (ADC)



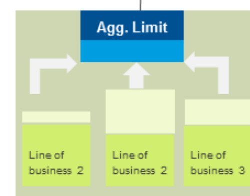
Release of capital by ceding:
- loss reserves

Hybrid capital solutions



Release of capital by ceding:
- loss reserves

Aggregate Cover



Protection at the tail end

Special tailor-made reinsurance solutions

Matches all kinds of individual challenges

The fine line between structured and traditional reinsurance

Structured Reinsurance

- Marketing approach
  - We focus on C-levels: CEO, CFO, etc.
- Solutions vs. products
  - Individual bespoke transactions
    - Mostly privately placed
- Cost of capital and margins
  - Lower, according to the risk transfer
- Deposit accounting and R/I accounting
- Risk transfer
  - ERD calculated for each transaction
  - Higher compliance standards including an internal compliance committee review process
- Conservative profit recognition policy

Traditional reinsurance

- Marketing approach
  - We focus on all levels
- Solutions vs. products
  - Mostly standardised business
    - Usually no private placements
- Cost of capital and margins
  - Higher, according to the risk
- R/I accounting
- Risk transfer
  - Standardised risk transfer checks

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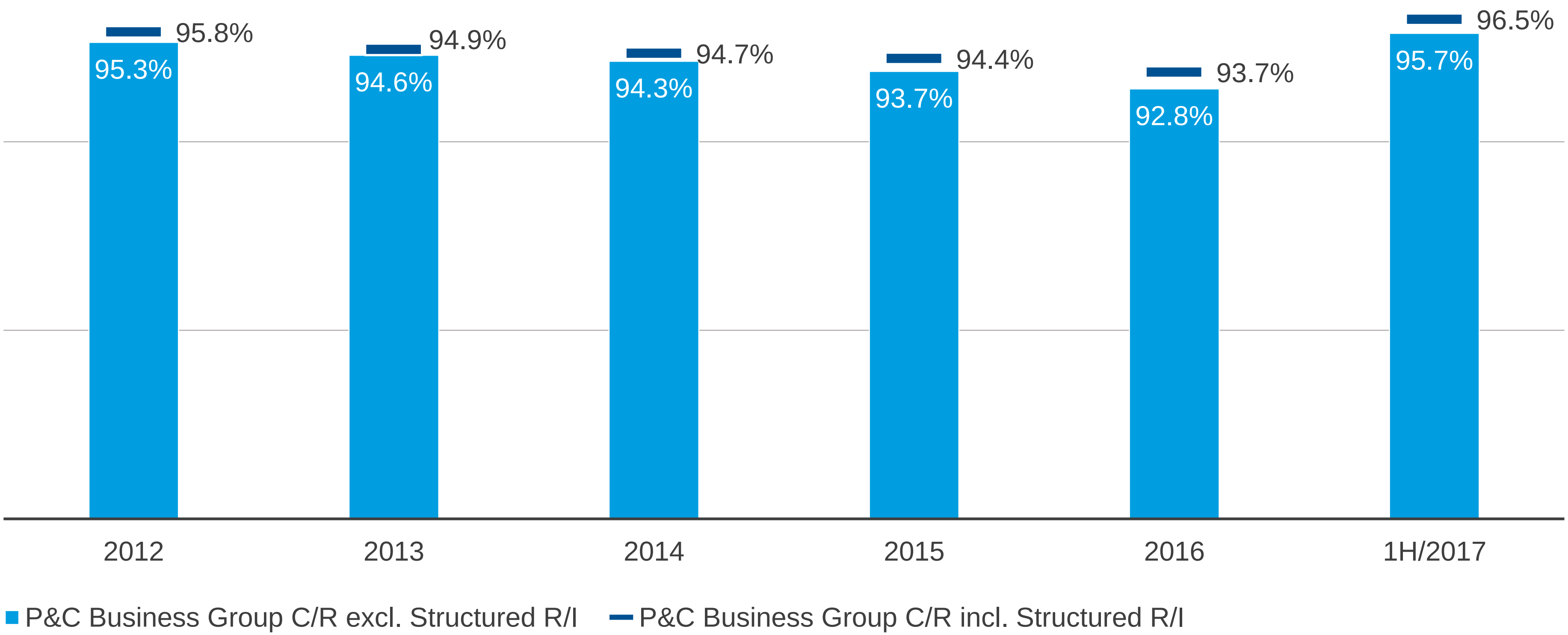
Diluting effect of 0.3% to 0.9% on C/R

Comparison of the Combined Ratio (C/R)



Combined ratio for AS is higher due to lower but less volatile margin

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Large US Auto Quota Share on net basis
Case study 1

- Motivation:
  - Supporting growth opportunities in presence of a hard US auto market
  - GAAP premium leverage: reduction of NPW to common equity ratio
- Type:
  - Auto Quota Share assumed from an US cedent
- Structure:
  - 15% cession, sliding scale commission (~3%p loss ratio scale)
  - Liability caps per risk and per event → net quota share
  - Conditional option for the cedent to increase cession up to 20%

Ceded premium >USD 100 m. at expected margin of 3%

Solvency II Quota Share
Case study 2

- Motivation:
  - Solvency relief under SII standard formula requirements during temporary capital add-on
- Type:
  - Quota Share assumed from a UK general insurer
- Structure:
  - Two-year net quota share after inuring reinsurance
  - Sliding scale commission (~9%p loss ratio scale)
  - Profit commission to share positive result with the client
  - Maintenance fee attached to the ceded premium p.a. if not commuted 5 years after inception

Ceded premium >GBP 50 m. at expected net margin of more than GBP 2.5 m.

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Multi-year Cat aggregate excess of loss

Case study 3

- Motivation:
  - Reducing the volatility of medium-sized NatCat claims in the clients' P&L accounts
- Type:
  - Multi-year natural catastrophe aggregate cover
- Structure:
  - Three-year term
  - Losses subject to a franchise deductible are aggregated and subject to a layer A xs B p.a.
  - A single large loss can only erode the retention B, but cannot lead to ceded losses
  - Profit commission to share positive result with the client

Expected margin: ~EUR 4 m. for our share (best margin possible ~EUR 8. m.)

What we expect

- Significant demand increase expected
- xRoCa accretive
- Deterioration of combined ratio and EBIT margin
- Diversifying effect
- Less exposed to NatCat business than traditional business
- New level of communication: CFO as main contact

We have 4 decades of experience and continuity

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Insights into life and health reinsurance

Metrics in business and reporting

Claude Chèvre, Member of the Executive Board

20th International Investors' Day
Frankfurt, 19 October 2017

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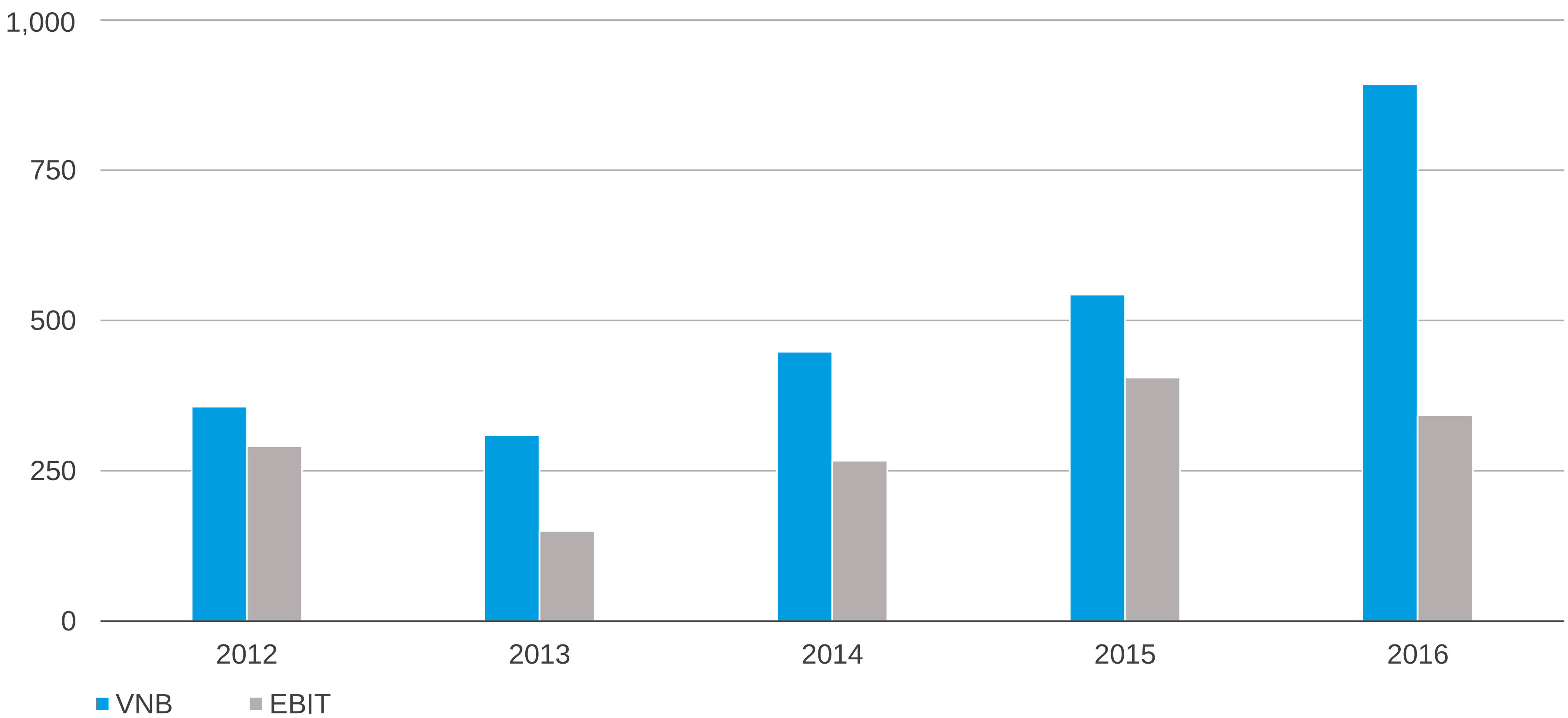
How does VNB translate into EBIT?

VNB & EBIT: 2012 - 2016

in m. EUR



EBIT on IFRS basis, VNBs not directly comparable due to several changes in methodology

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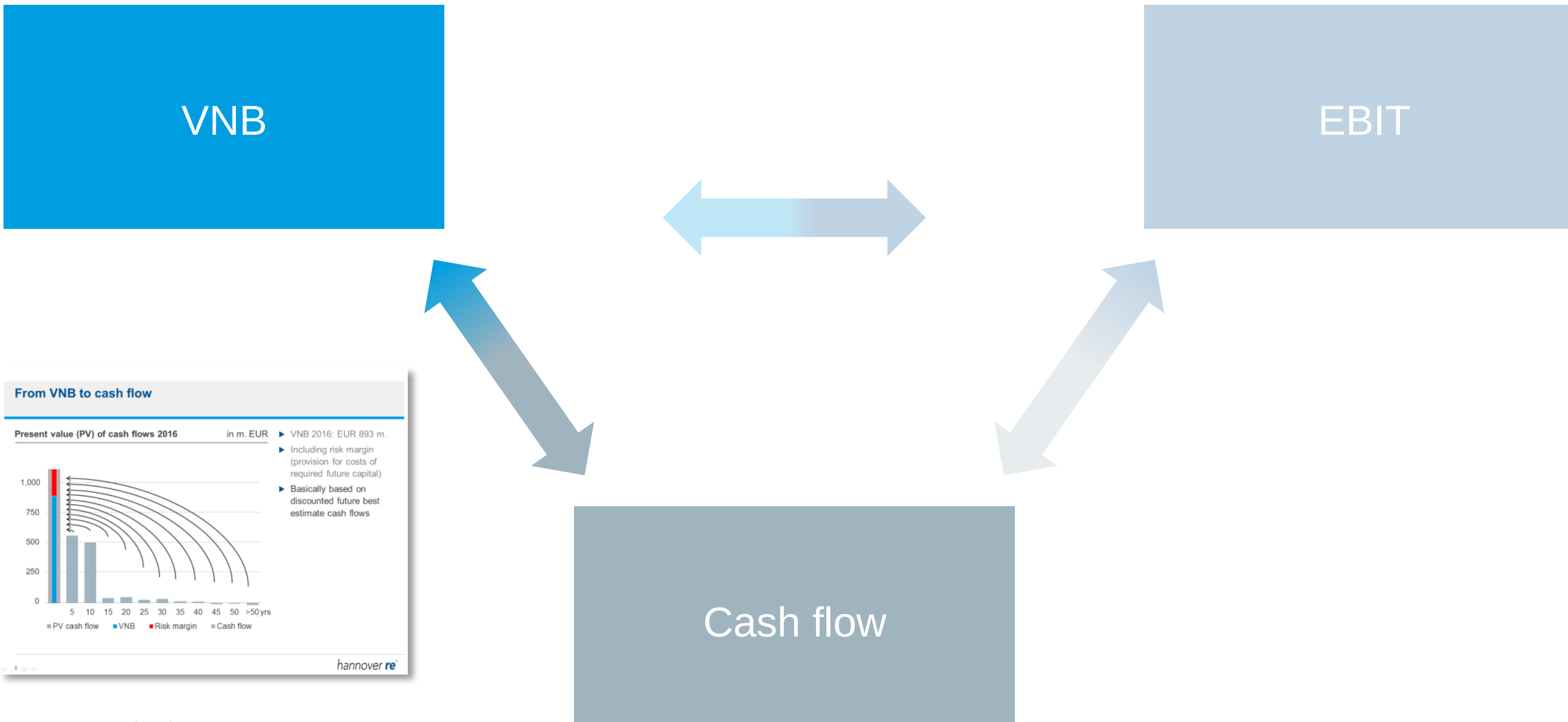
Three perspectives
How does VNB translate into EBIT?



EBIT on IFRS basis

From VNB to cash flow
Modifications in the calculation since 2014

- Value of New Business (VNB)
  - Present value (over the full duration) of the new business written within one year
  - Costs for required capital (CoC) included

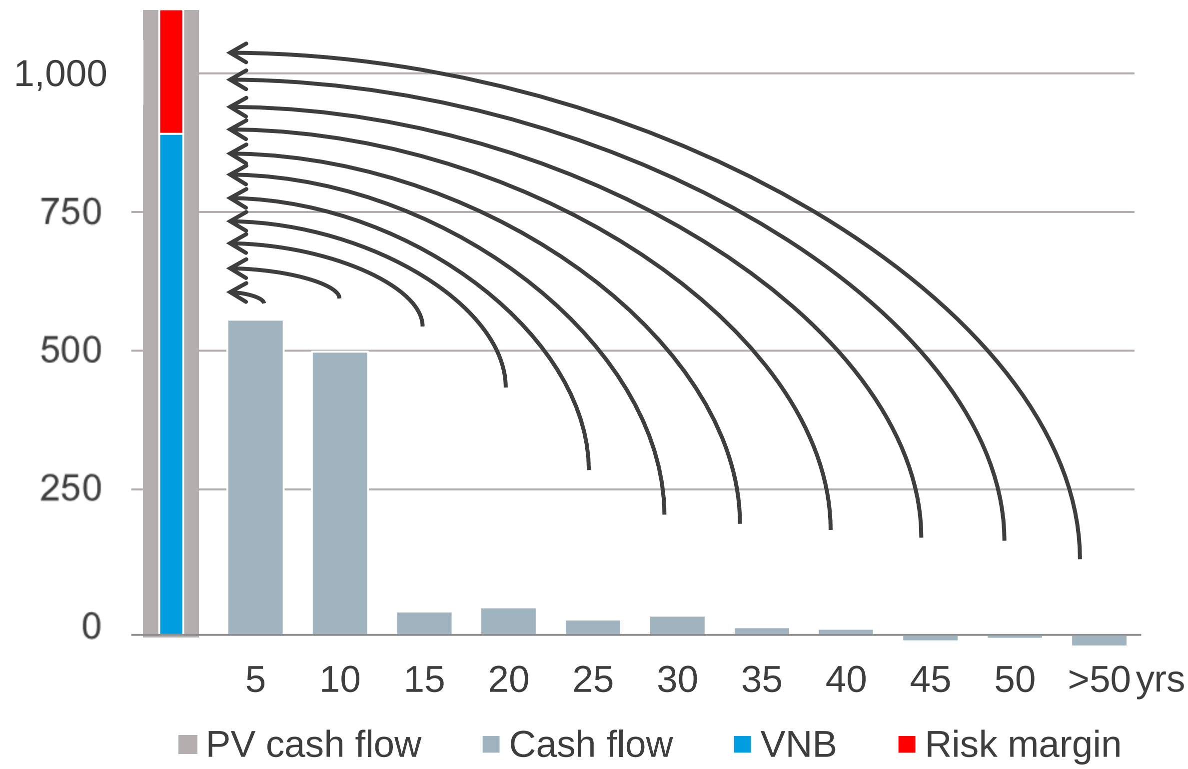
Definitions have changed over the last years

Until 2015	As of 2016	From 2021 onwards
Part of **MCEV** reporting	Based on **SII** reporting	Currently addressing implications of **IFRS 17**
Local statutory results	Cash flows	Impact on future VNB definition not yet clear
Post-tax	Pre-tax	
4.5% CoC* (CoRNHR)	6% CoC (Risk Margin)	

* In 2015 already 6%

From VNB to cash flow

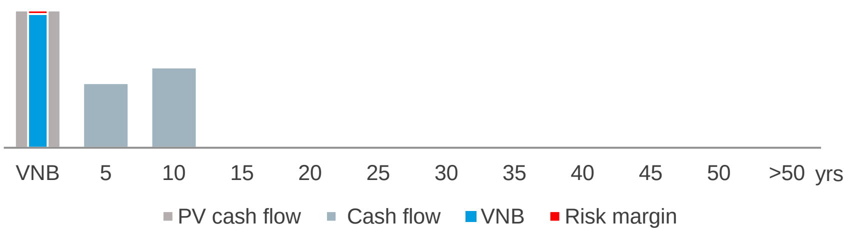
Present value (PV) of cash flows 2016 in m. EUR



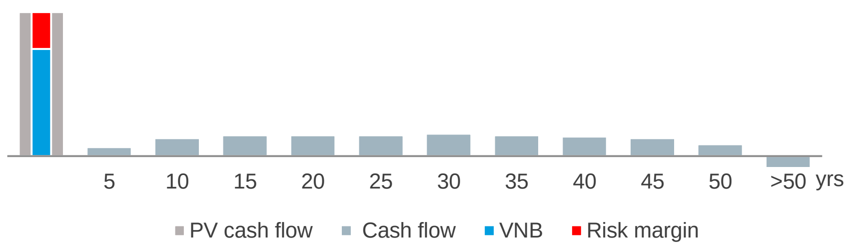
- VNB 2016: EUR 893 m.
- Including risk margin (provision for costs of required future capital)
- Based on discounted future best estimate cash flows
- > EUR 1 bn. of cash flows are expected to emerge within the first 10 years

From VNB to cash flow
Cash flow pattern 2016 by main sources

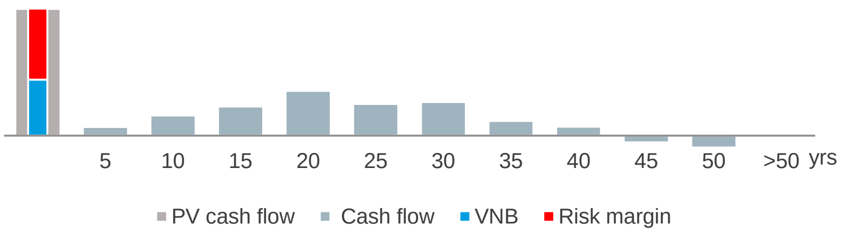
Financial solutions fee deals



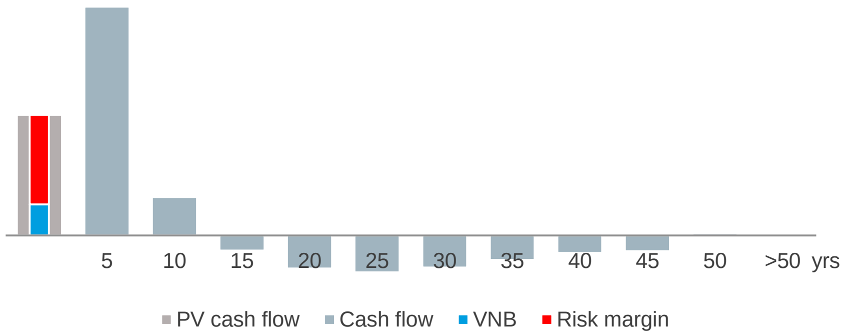
Longevity RPATs*



US mortality new business



Others



All pattern have been scaled to the same PV cash flow level for better comparability

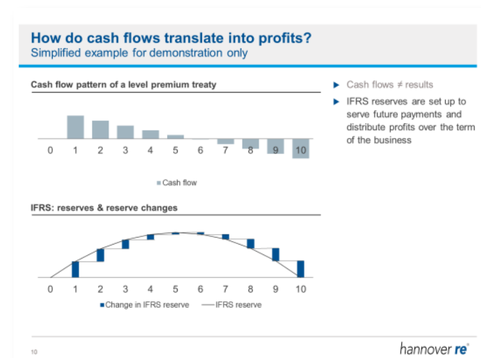
* On a gross basis

Three perspectives
How does VNB translate into EBIT?

VNB

EBIT

Cash flow



EBIT on IFRS basis

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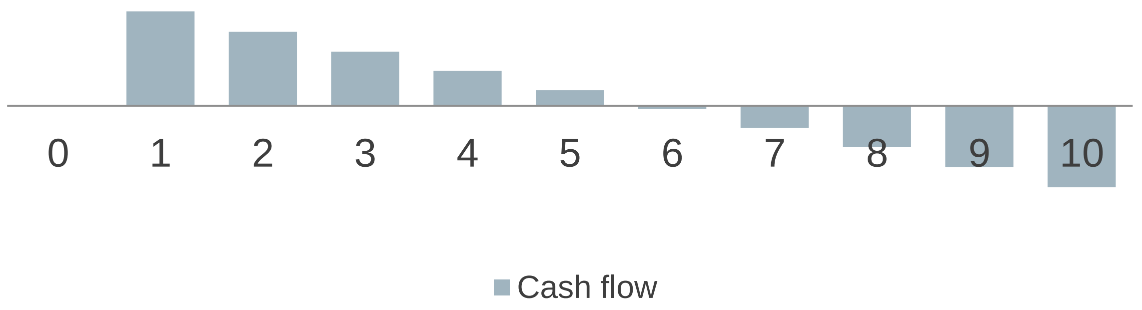
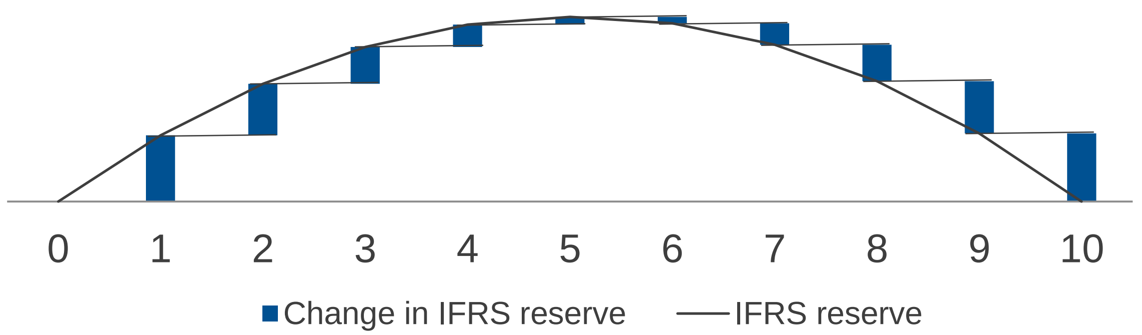
How do cash flows translate into profits?
Simplified example

Cash flow pattern of a level premium treaty



IFRS: reserves & reserve changes



- Cash flows ≠ results
- IFRS reserves are set up to serve future payments and distribute profits over the lifetime of the business

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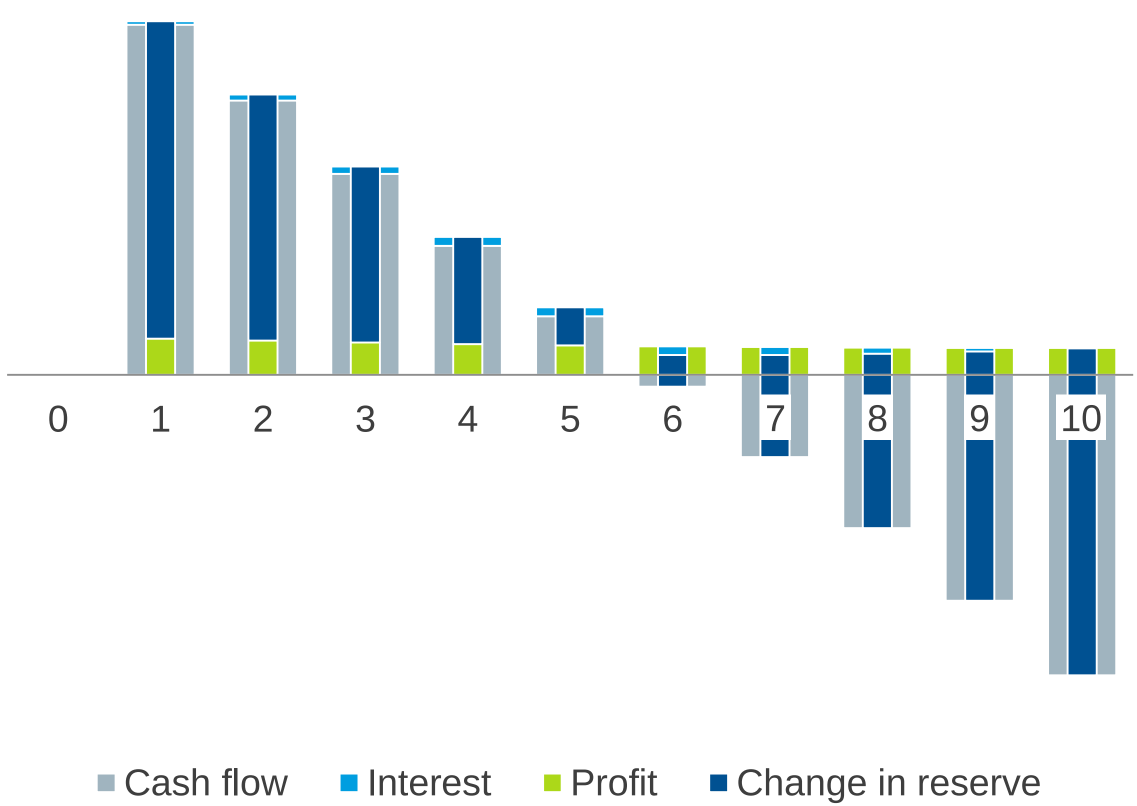
How do cash flows translate into profits?
Simplified example

Cash flows, change in reserve and interest

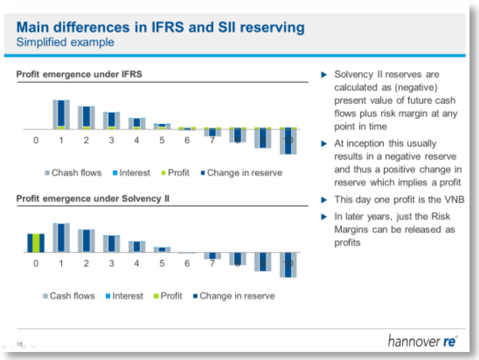


- Cash flows ≠ results
- IFRS reserves are set up to serve future payments and distribute profits over the lifetime of the business
- Reserve changes need to be deducted from the cash flows
- Additionally, interest income is earned on the reserves
- IFRS profits calculated as the sum of cash flows & interest on reserves minus change in reserve in each year

Three perspectives

How does VNB translate into IFRS EBIT?

VNB



EBIT

Cash flow

EBIT on IFRS basis

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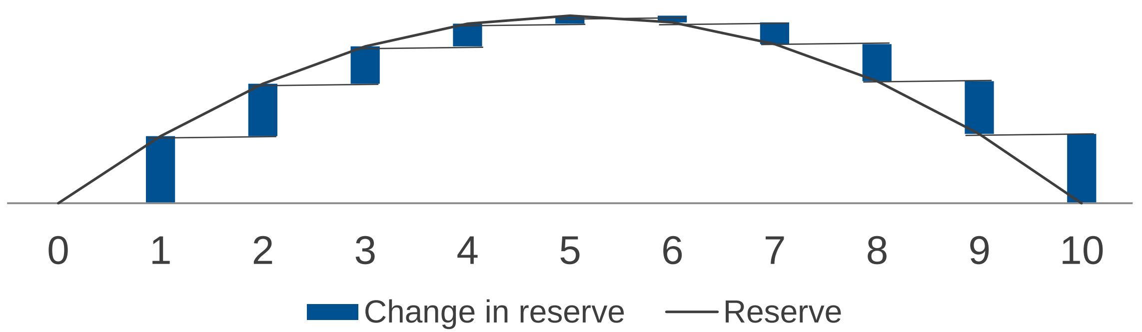
Main differences between IFRS and Solvency II reserving

IFRS		Solvency II
US GAAP standard	Basis	Solvency II standard
Over time	Profit realisation	Mainly at inception as VNB
Locked-in* (+ Loss recognition test)	Assumptions	Best estimate at any time
Provision for adverse deviations	Margins	Explicit risk margin
Yes	DAC	No
Locked-in* earned rate	Interest rates	Floating EIOPA interest rate curve

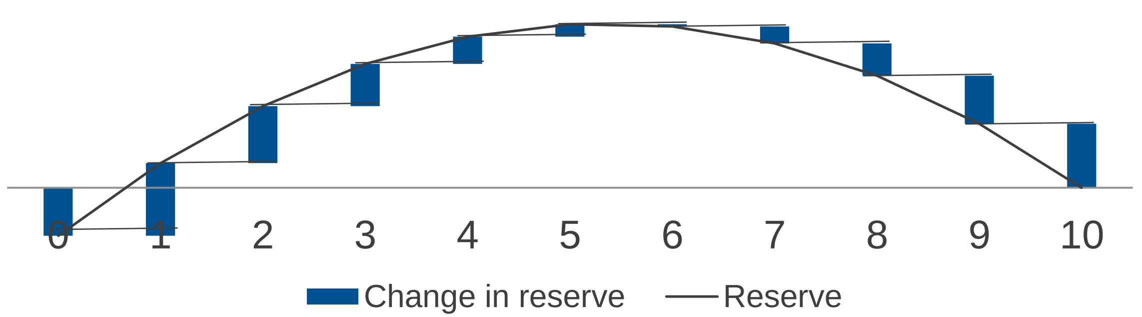
* Under FAS60

Main differences in IFRS and Solvency II reserving
Simplified example

IFRS: reserves & reserve changes



Solvency II: reserves & reserve changes

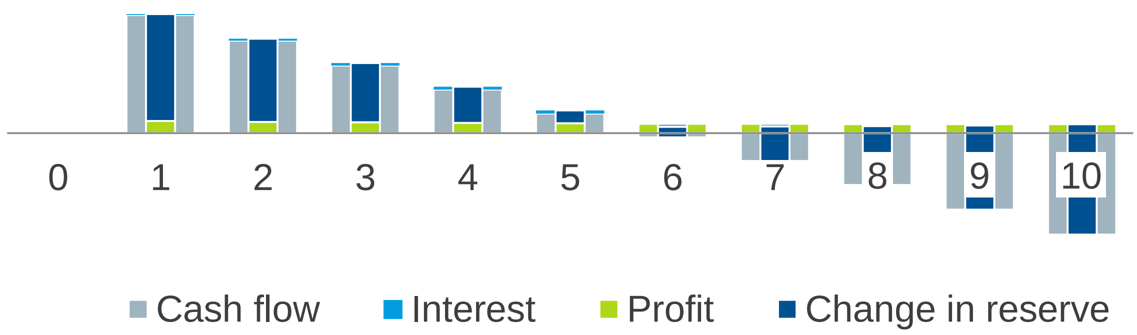


- Cash flows are generally the same
- Solvency II reserves are only set up to serve future payments, not to distribute profits
- They are calculated as the (negative) present value of future cash flows plus risk margin at any point in time
- At inception this usually results in a negative reserve

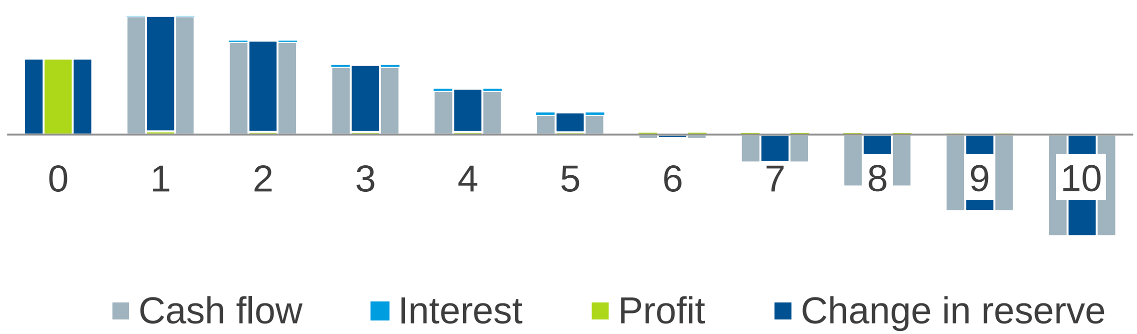
Main differences in IFRS and Solvency II reserving

Simplified example

IFRS: profit emergence



Solvency II: profit emergence



- Cash flows are generally the same
- Solvency II reserves are only set up to serve future payments, not to distribute profits
- They are calculated as the (negative) present value of future cash flows plus risk margin at any point in time
- At inception this usually results in a negative reserve
- As reserve changes are deductible, this means a day 1 profit, which is the VNB
- Thereafter, only the risk margins are released as profits

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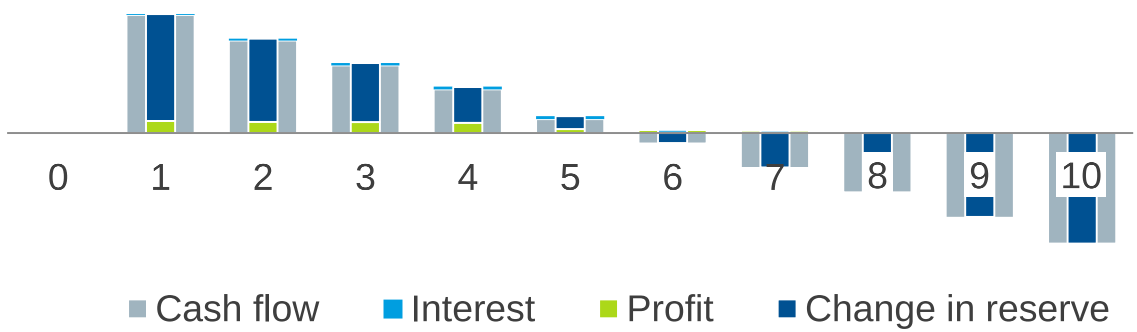
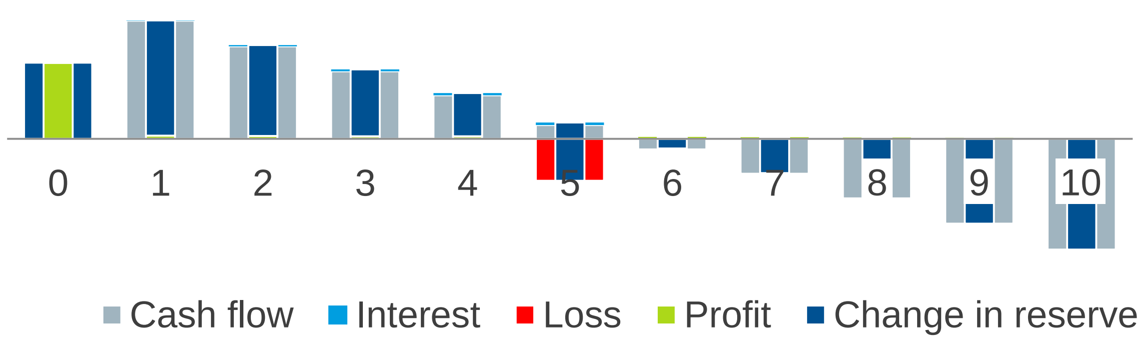
Main differences in IFRS and Solvency II reserving

Scenarios: Negative assumption change in year 5

IFRS: profit emergence



Solvency II: profit emergence

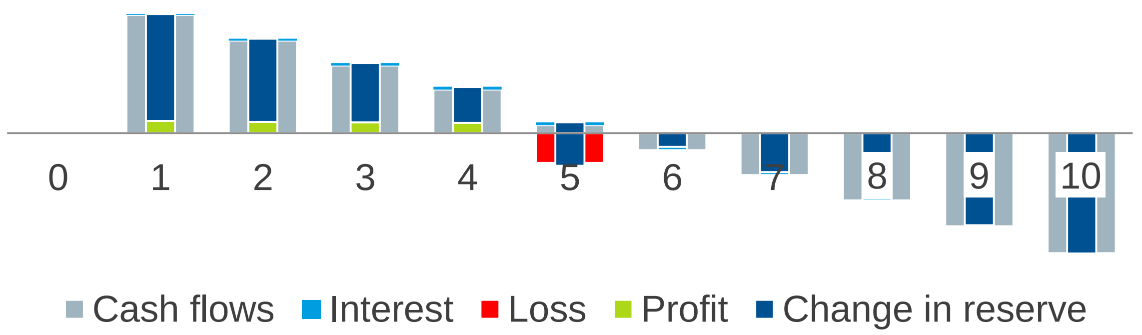


- Negative assumption changes will not impact IFRS results as long as reserves are still sufficient
- As most profits have already been realised under Solvency II, losses will incur directly

Main differences in IFRS and Solvency II reserving

Scenarios: Further negative assumption change in year 5

IFRS: profit emergence



Solvency II: profit emergence

- Negative assumption changes will not impact IFRS results as long as reserves are still sufficient
- As most profits have already been realised under Solvency II, losses will incur directly
- If reserves are not sufficient, there is also a loss recognition under IFRS. All future profits are set to 0

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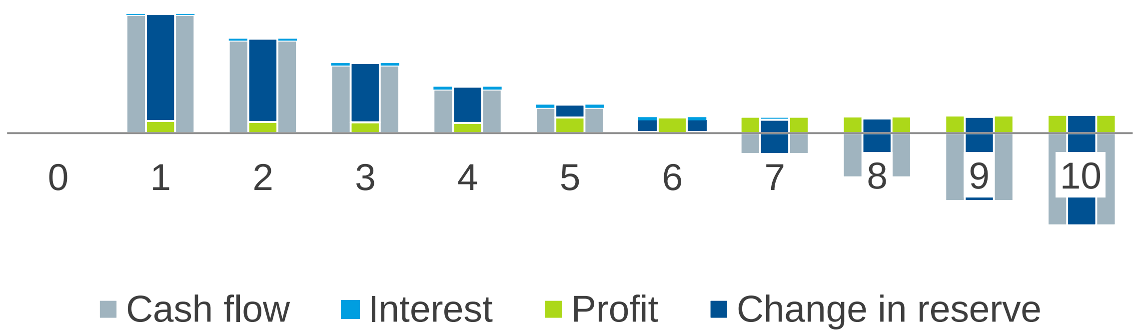
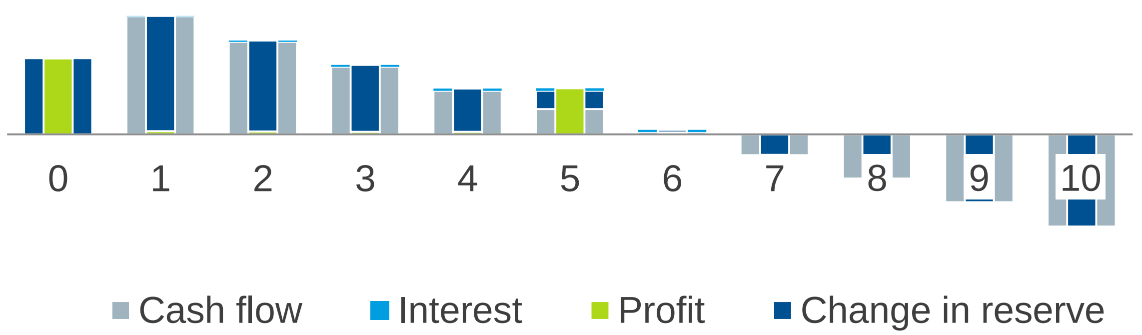
Main differences in IFRS and Solvency II reserving

Scenarios: Positive assumption change in year 5

IFRS: profit emergence



Solvency II: profit emergence



- Negative assumption changes will not impact IFRS results as long as reserves are still sufficient
- As most profits have already been realised under Solvency II, losses will incur directly
- If reserves are not sufficient, there is also a loss recognition under IFRS. All future profits are set to 0
- Positive assumption changes are shown as single-year profit under Solvency II
- Under IFRS reserves remain locked-in and profits are realised over time

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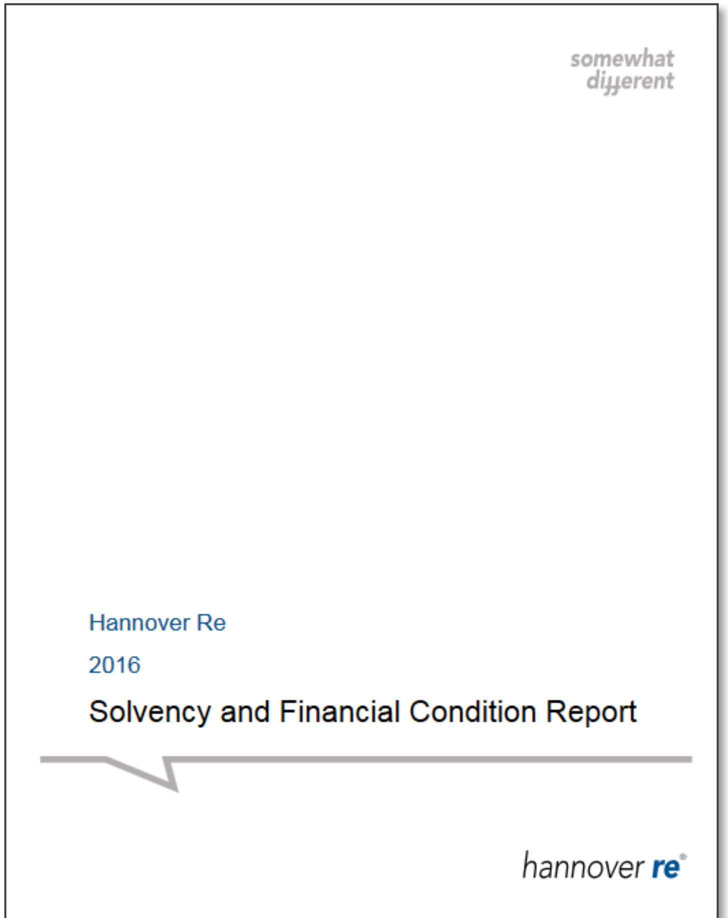
Transition from VNB into expected EBIT

For new business 2012 to 2016



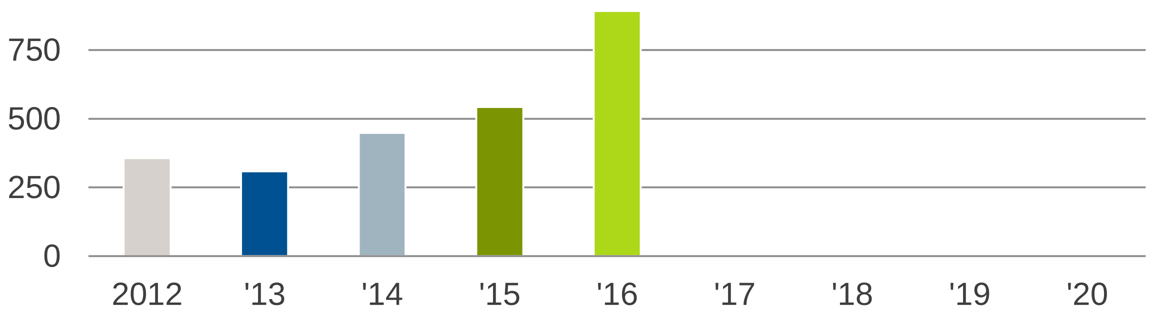
- The reality is more complex than shown on the previous slides and examples:
  - Cash flow definitions are slightly different
  - Contract boundaries are slightly different
  - Treatment of f/x-rates can be different

- A comprehensive transition of the Solvency II Technical Provision into IFRS liabilities can be found in the “Solvency and Financial Condition Report” available on our website

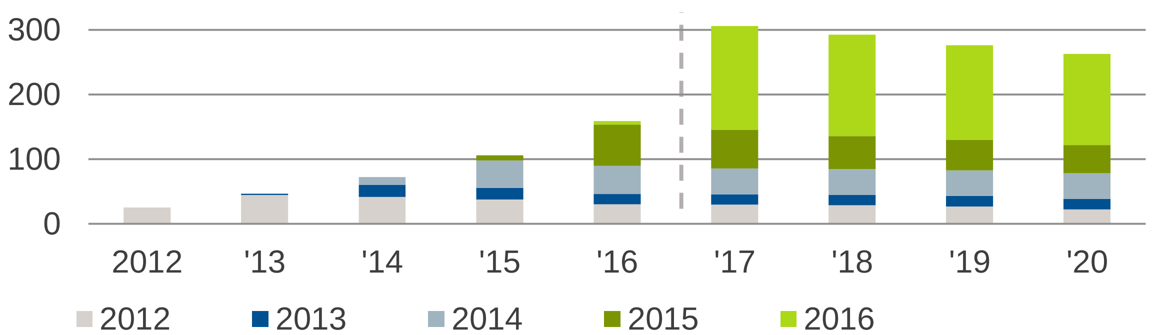
- On the following slides we have undertaken the transition from VNB into expected annual IFRS EBITs for the new business years 2012 to 2016

Transition from VNB into expected EBIT
Split by years

VNB: 2012 - 2016 in m. EUR



Expected VNB contribution to EBIT in m. EUR



- Strong 2016 VNB contribution to EBITs, mainly based on extraordinary financial solutions new business
- Each new business year adds a new layer of expected profit streams

EBIT on IFRS basis

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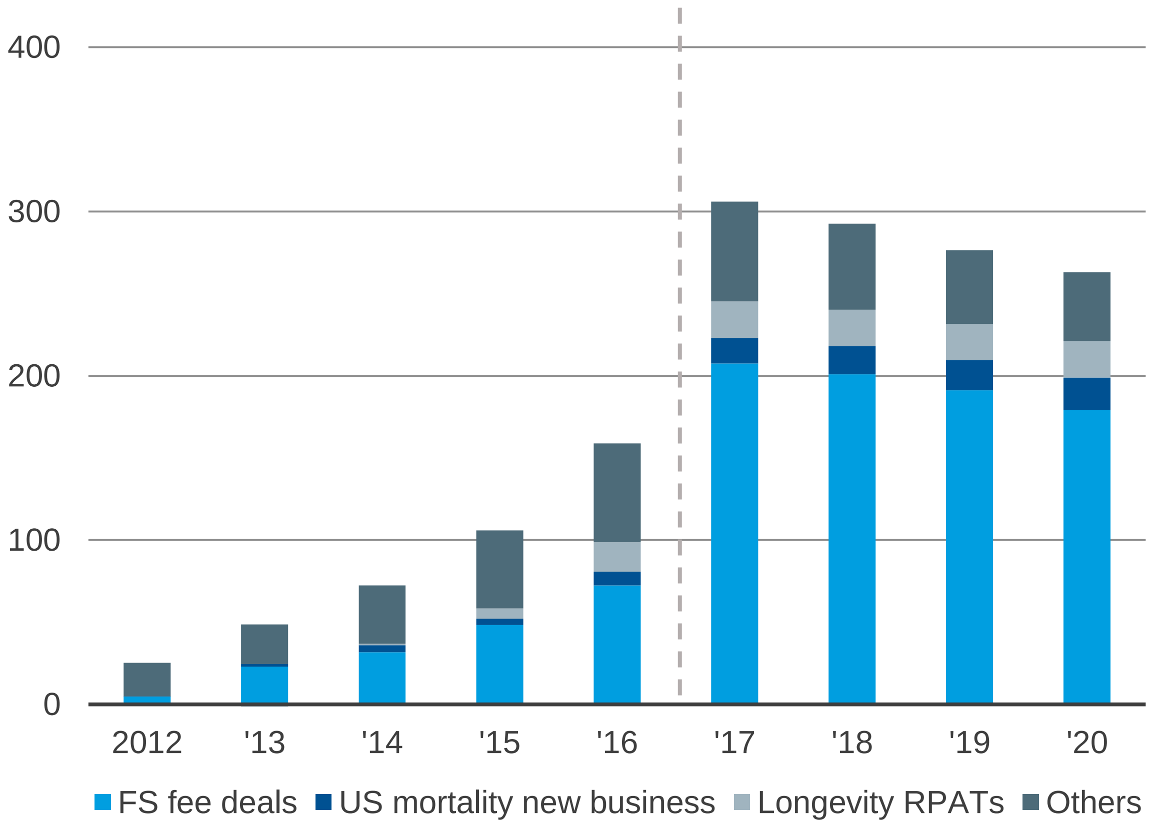
Transition from VNB into expected EBIT

Split by sources

Expected VNB contribution to IFRS EBIT in m. EUR



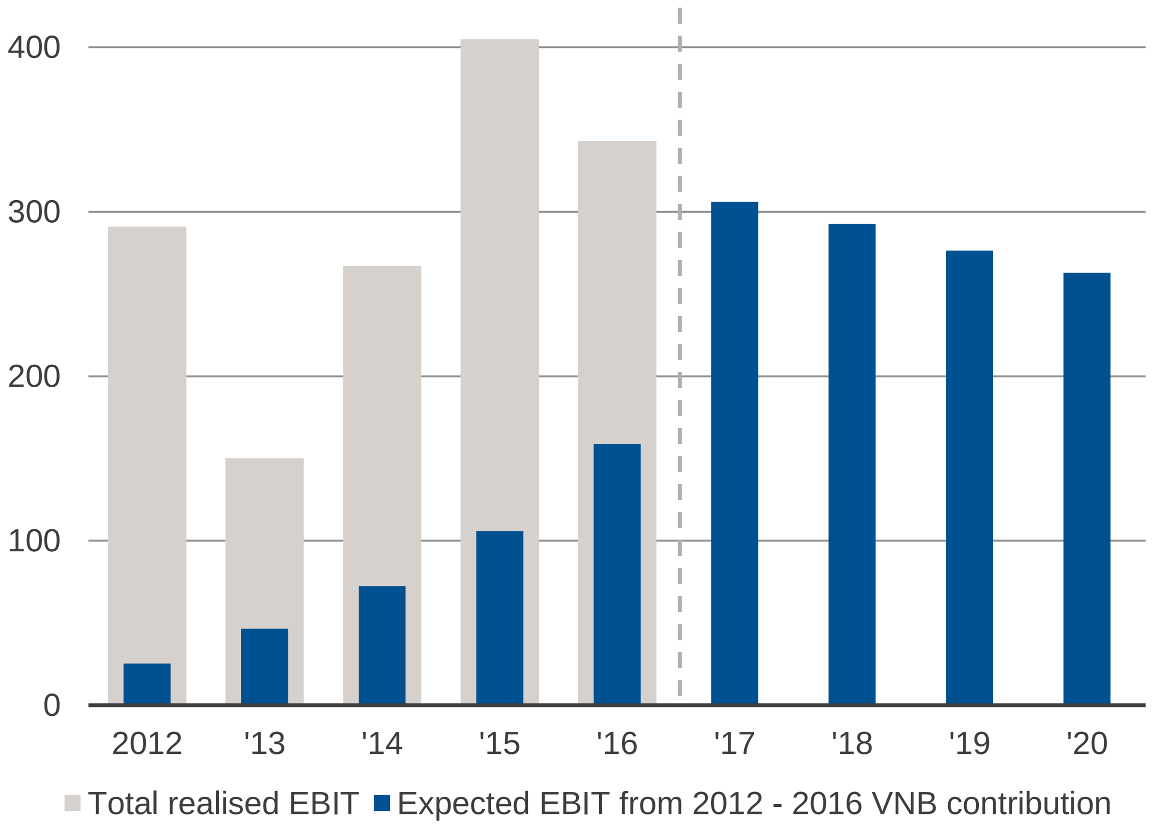
EBIT on IFRS basis

- Strong 2016 VNB contribution to EBITs, mainly based on extraordinary financial solutions new business
- Each new business year adds a new layer of expected profit streams
- Financial Solutions fee deals represent the largest part of the near-term profits
- Profits of the other main business segments emerge over longer durations

Transition from VNB into expected EBIT

Expected VNB contribution and past realised EBITs

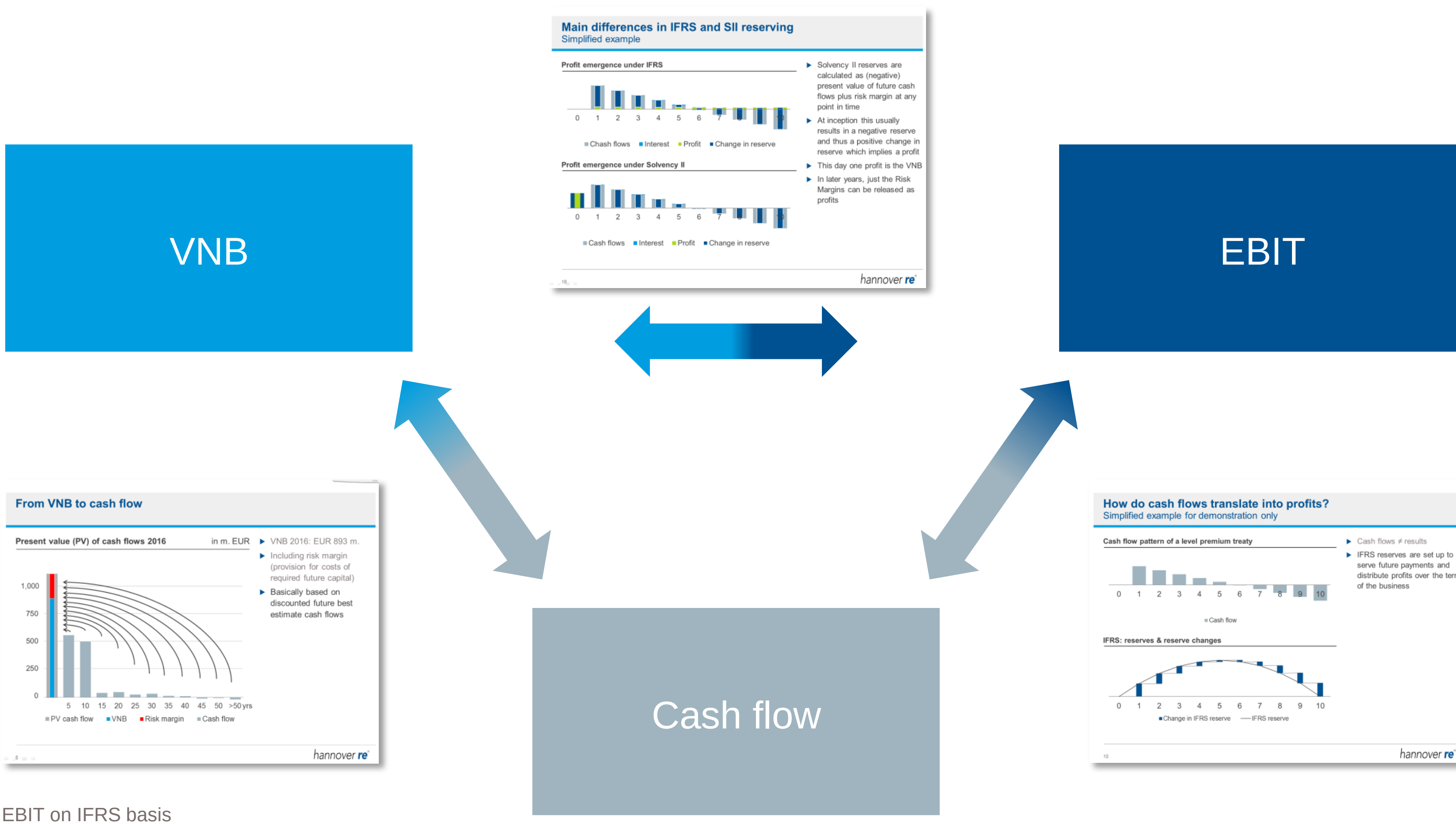
Expected contribution and realised EBIT in m. EUR



- Strong 2016 VNB contribution to EBITs, mainly based on extraordinary financial solutions new business
- Each new business year adds a new layer of expected profit streams
- Financial Solutions fee deals represent the largest part of the near-term profits
- Profits of the other main business segments emerge over longer durations
- New business of the last 5 years represents a growing share of the L&H EBIT

EBIT on IFRS basis

Three perspectives
How does VNB translate into IFRS EBIT?



EBIT on IFRS basis

Outlook

Where do we expect the future VNB?

Risk solutions

Provide terms and capacity for all types of technical risks.

Financial solutions

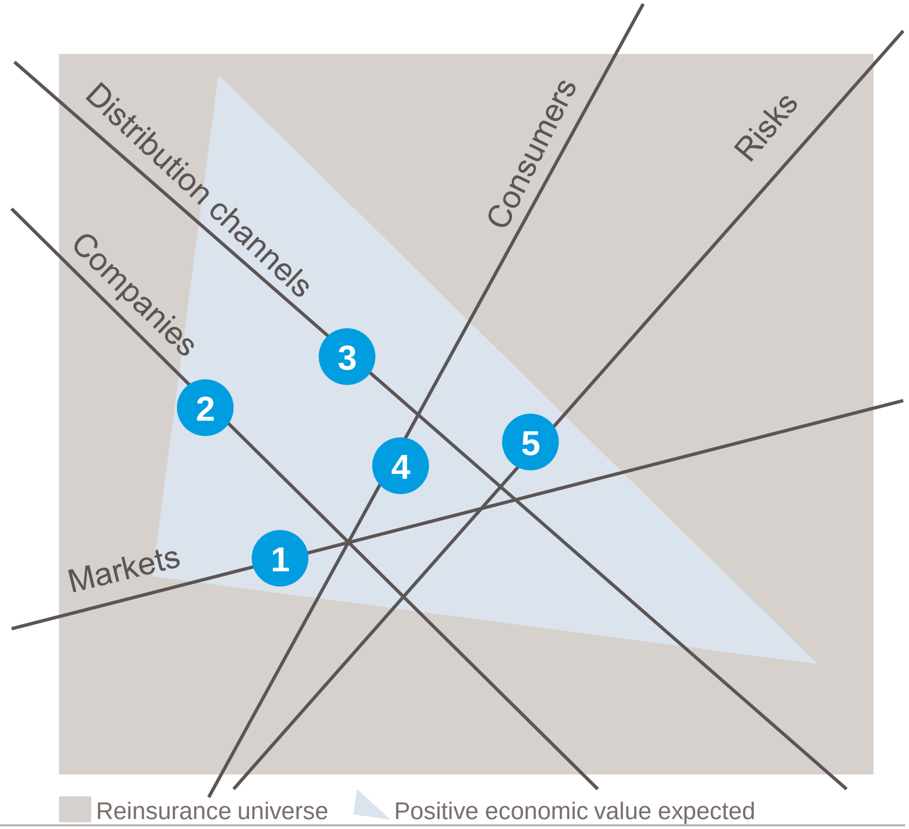
Achieve financial objectives for our clients.

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



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Concluding remarks and outlook

Ulrich Wallin, Chief Executive Officer

20th International Investors' Day
Frankfurt, 19 October 2017

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Key takeaways from our 20th Investors' Day

- Hannover Re is well capitalised and has flexibility to manage its capital position
- We use special dividends to balance the equity growth with our profit growth
- Premium and earnings growth in the medium and long term
- Low yield environment is manageable, esp. due to continued positive cash flow
- High level of reserve redundancies safeguards profitability of our P&C business
- Growth in Property & Casualty is protected by expert knowledge and strong market position
- Inforce management for US mortality business is likely to create quarterly volatility in IFRS results; improved earnings profile in 2019 and beyond
- Favourable VNB development is the basis for future growth in L&H IFRS profits

We create value for clients, shareholders and employees

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