



*somewhat  
different*

## Update on investments and capitalisation

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

*hannover* **re**<sup>®</sup>

# Agenda

---

1	Investment update	3
2	Capitalisation and reserving	8
3	Key take-aways	13
4	Appendix	15

---

*somewhat  
different*

1

Investment update

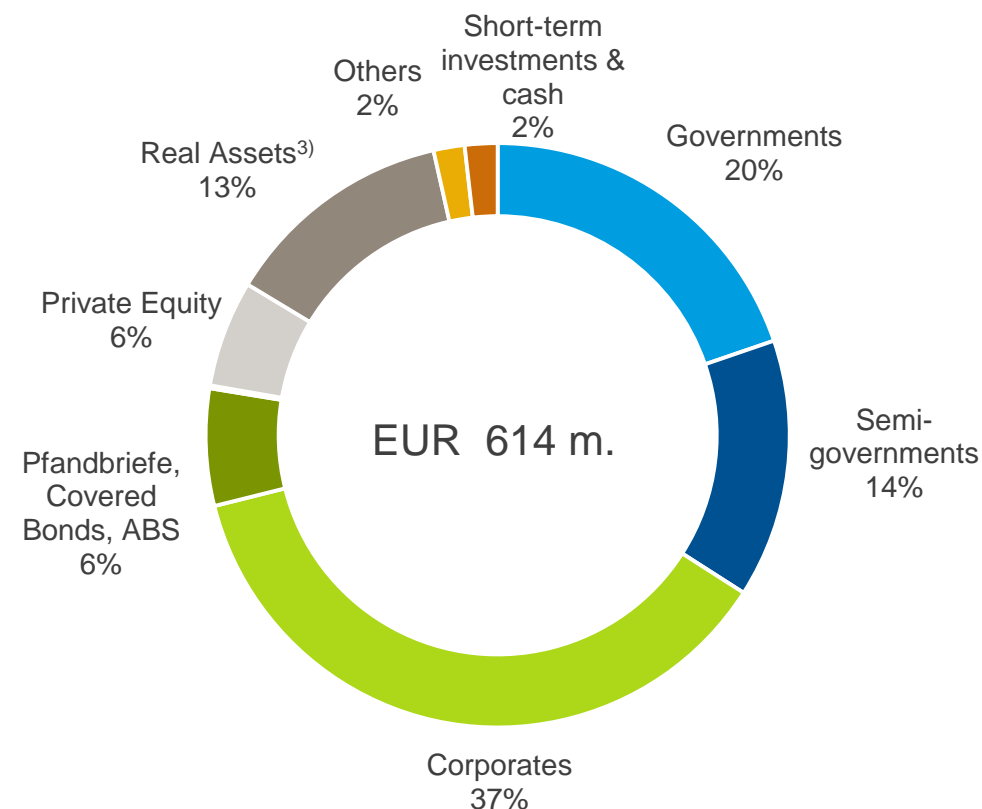
# Ordinary return in comparison to asset class weightings

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

### Asset allocation<sup>1)</sup>

Investment category	2016	2017	2018	2019	Q2/2020
<b>Fixed-income securities</b>	<b>87%</b>	<b>87%</b>	<b>87%</b>	<b>87%</b>	<b>87%</b>
- 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% <sup>2)</sup>
<b>Equities</b>	<b>4%</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>	<b>3%</b>
- Listed equity	2%	<1%	<1%	<1%	1%
- Private equity	2%	2%	2%	2%	2%
<b>Real Assets</b>	<b>5%</b>	<b>5%</b>	<b>6%</b>	<b>5%</b>	<b>5%</b>
<b>Others</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>
<b>Short-term investments &amp; cash</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>3%</b>	<b>3%</b>
<b>Total market values in bn. EUR</b>	<b>42.3</b>	<b>40.5</b>	<b>42.7</b>	<b>48.2</b>	<b>49.3</b>

### 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

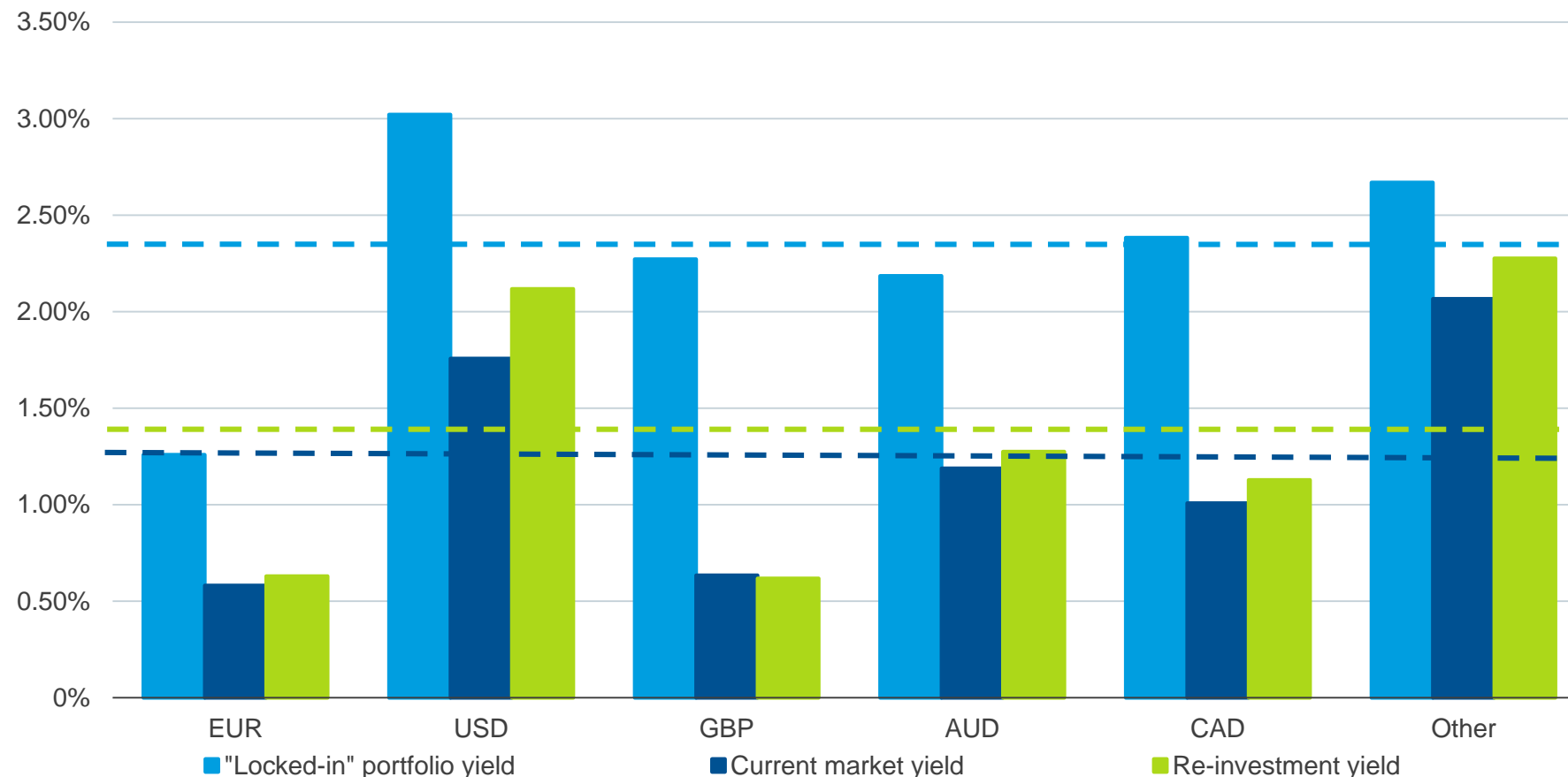
2) Of which Pfandbriefe and Covered Bonds = 67.0%

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 portfolio<sup>1)</sup>



#### Average yield levels:

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

#### Current year:

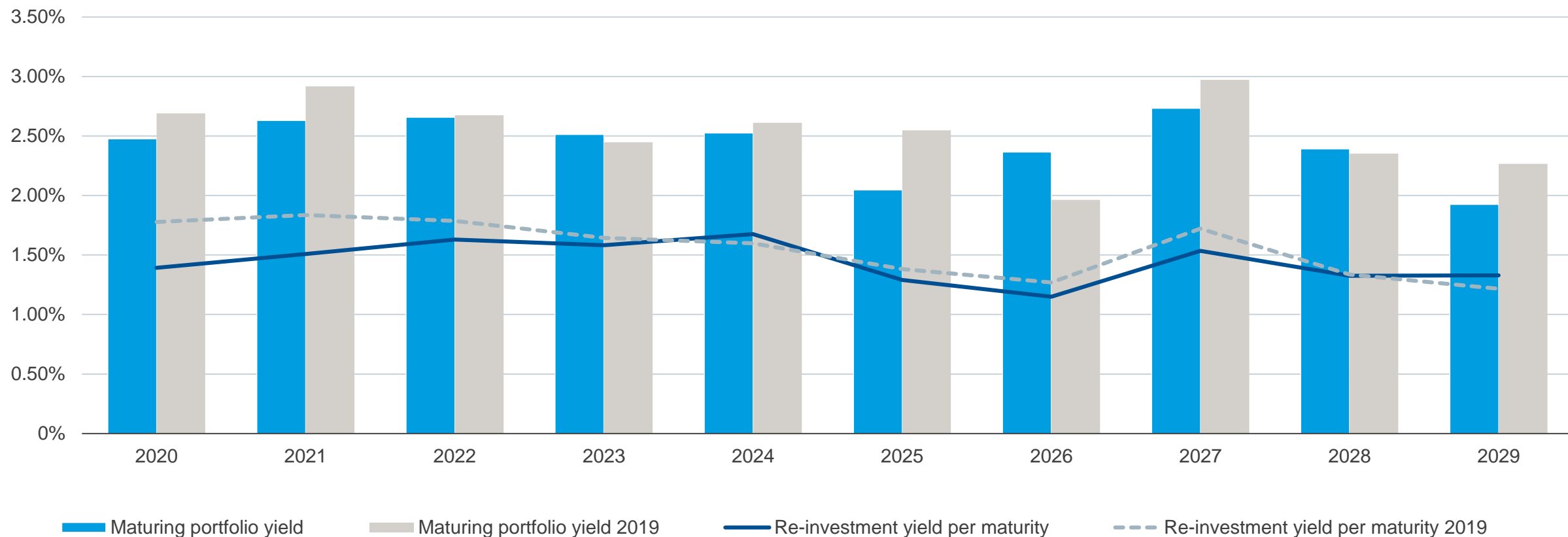
- Reinvestments in 2020 occur on even more challenging yield levels than anticipated at beginning of year
- Ordinary income from inflation linkers is driven by CPI inflation
- Worldwide shift in CPI by +/-100 bps would increase/decrease the total ordinary income by ~10 bps

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 portfolio<sup>1)</sup>

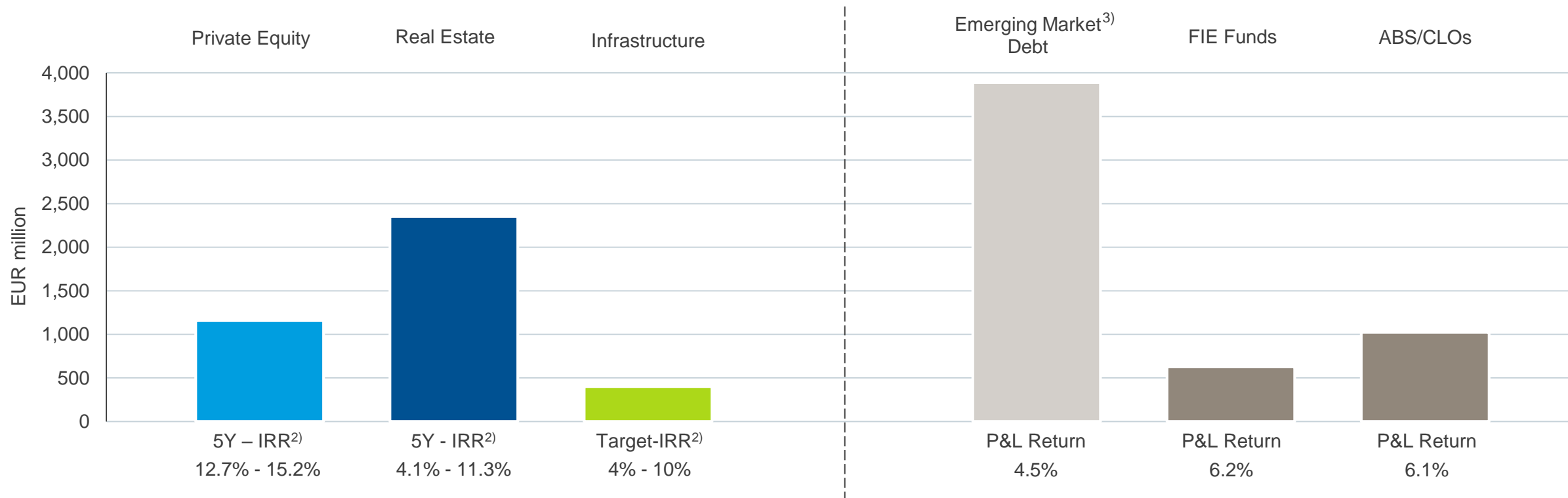


1) Analysis as at 15 July 2020, excluding short-term investments and cash

# Invested asset spectrum will be more colourful

## Current return expectation of alternative asset strategies

### Volume and returns<sup>1)</sup> 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

*somewhat  
different*

**2**

**Capitalisation and reserving**

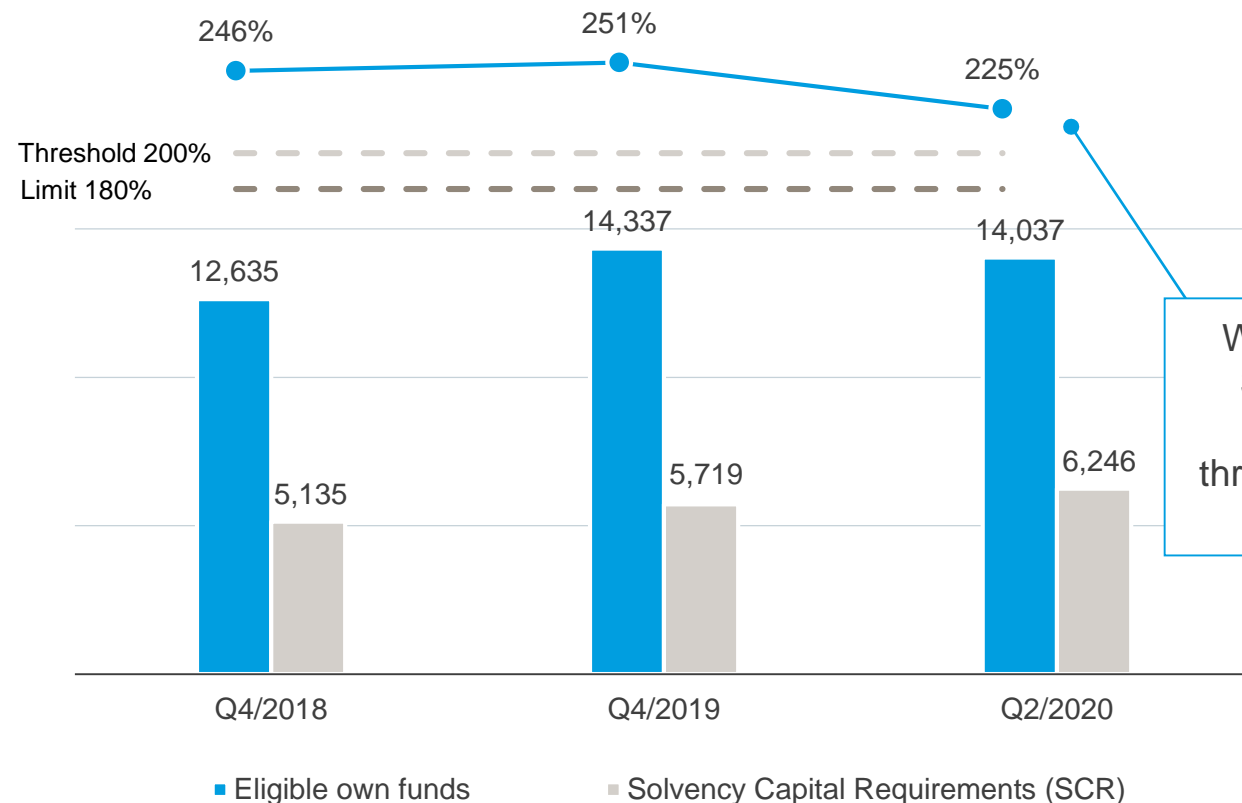
---



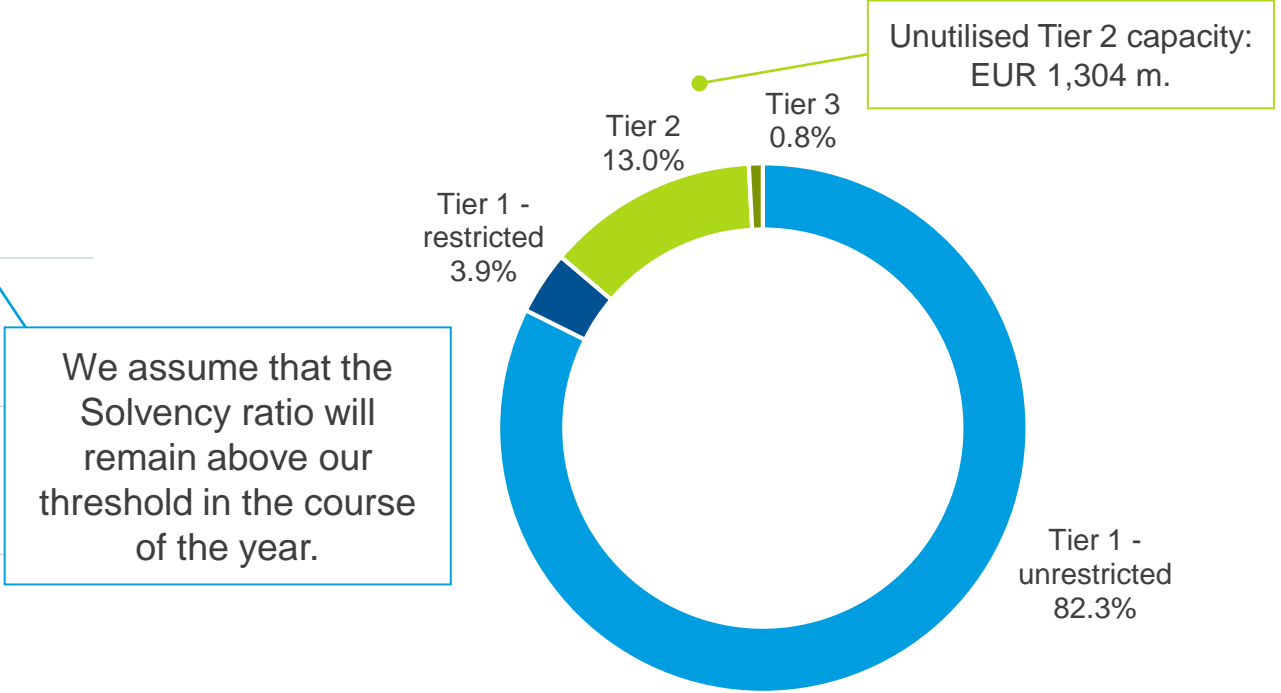
# Solvency ratio remains above capital targets

## Despite significant capital market movements

### Development of Solvency II capital adequacy ratio



### Composition of Solvency II eligible capital<sup>1)</sup>

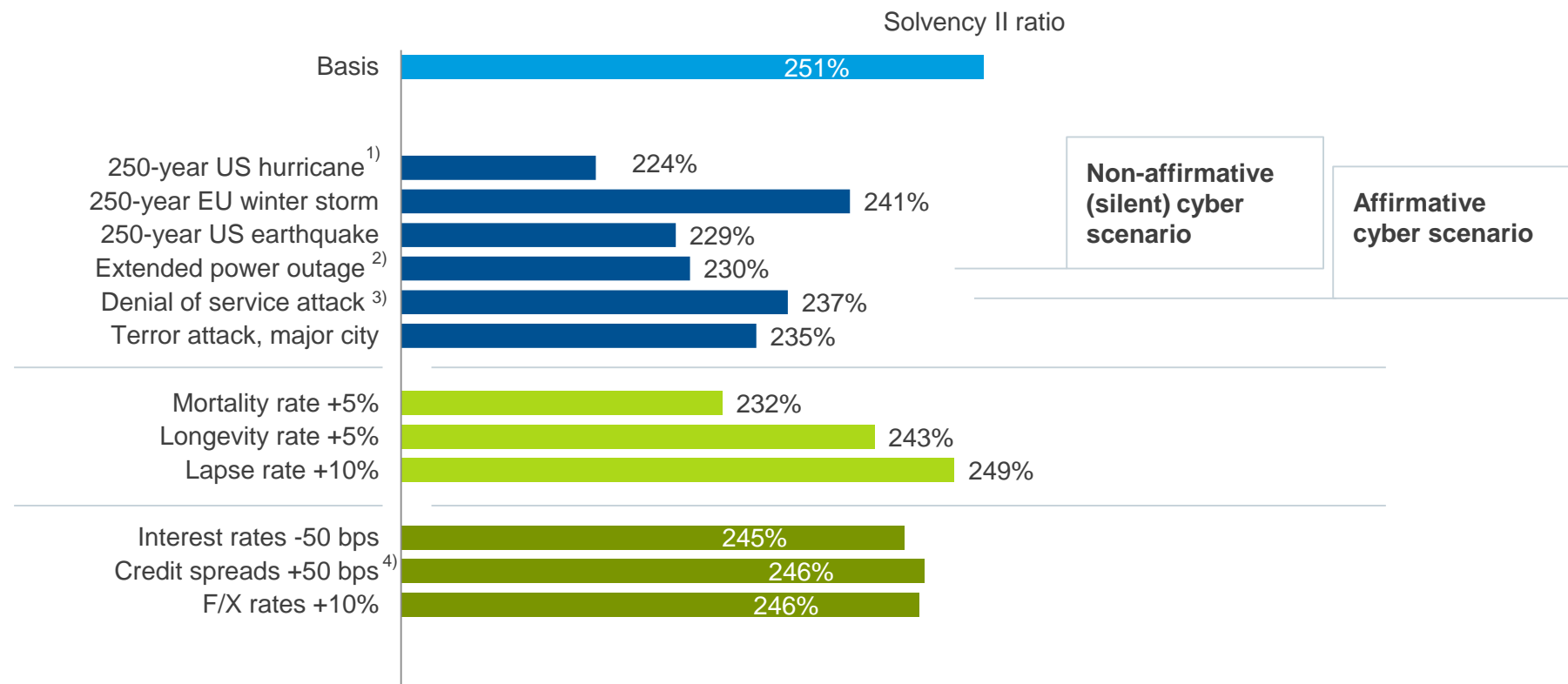


Figures in m. EUR  
1) As at Q2/2020

# 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

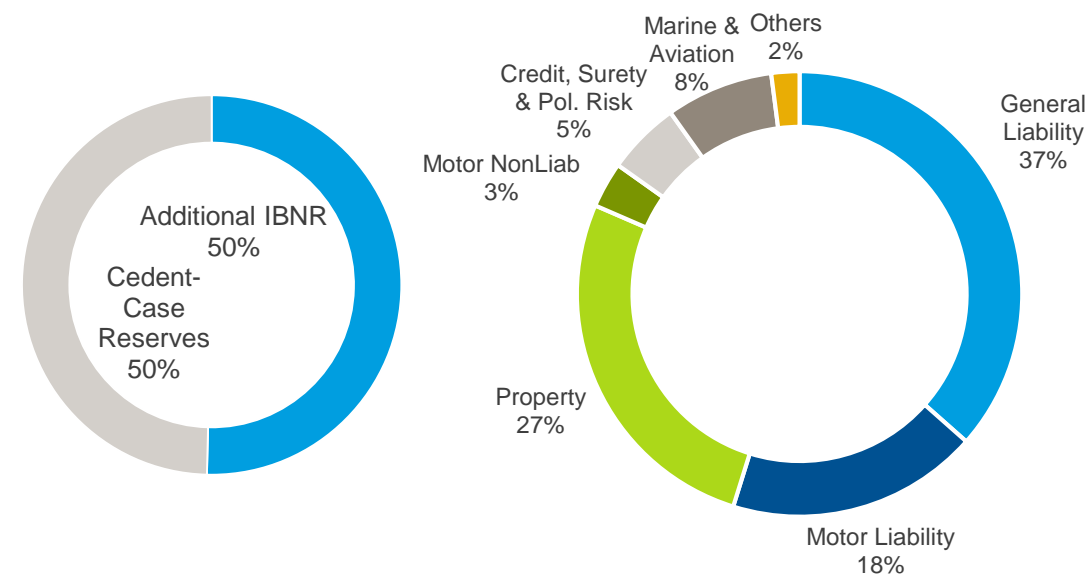
4) +50bps for Hannover Re average portfolio bucket. Point-in-time stress level differs by rating. Includes impact of changes in dynamic volatility adjustment.

# Reserve redundancy reduced but remains at high level

## Level of additional IBNR at 50%

Year end <sup>1)</sup>	Redundancy <sup>2)</sup>	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
<b>2019</b>	<b>1,457</b>	<b>-238</b>	<b>-1.9%</b>	<b>12,798</b>

### Property & Casualty gross loss reserves<sup>3)</sup> 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




*somewhat  
different*

**3**


**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

*somewhat  
different*

**4**

**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.
- 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.



# Disclaimer

---

This presentation does not address the investment objectives or financial situation of any particular person or legal entity. Investors should seek independent professional advice and perform their own analysis regarding the appropriateness of investing in any of our securities.

While Hannover Re has endeavoured to include in this presentation information it believes to be reliable, complete and up-to-date, the company does not make any representation or warranty, express or implied, as to the accuracy, completeness or updated status of such information.

Some of the statements in this presentation may be forward-looking statements or statements of future expectations based on currently available information. Such statements naturally are subject to risks and uncertainties. Factors such as the development of general economic conditions, future market conditions, unusual catastrophic loss events, changes in the capital markets and other circumstances may cause the actual events or results to be materially different from those anticipated by such statements.

This presentation serves information purposes only and does not constitute or form part of an offer or solicitation to acquire, subscribe to or dispose of, any of the securities of Hannover Re.

© Hannover Rück SE. All rights reserved.

Hannover Re is the registered service mark of Hannover Rück SE.