Creating value through reinsurance
Strategy cycle 2018 - 2020

Ulrich Wallin, Chief Executive Officer
HR improved market position to No. 4 in P&C reinsurance

Market size and concentration

<table>
<thead>
<tr>
<th>Year</th>
<th>Top 10</th>
<th>Top 11 - 50</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>185</td>
<td>19%</td>
<td>35%</td>
</tr>
<tr>
<td>2013</td>
<td>186</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>2014</td>
<td>188</td>
<td>25%</td>
<td>35%</td>
</tr>
<tr>
<td>2015</td>
<td>190</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>2016</td>
<td>194</td>
<td>25%</td>
<td>32%</td>
</tr>
</tbody>
</table>

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

Markert & positioning

Market size and concentration

<table>
<thead>
<tr>
<th>Year</th>
<th>Market</th>
<th>Other</th>
<th>Top 5</th>
<th>Top 10</th>
<th>Top 6-10</th>
<th>HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>61%</td>
<td>6%</td>
<td>22%</td>
<td>10%</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>60%</td>
<td>6%</td>
<td>22%</td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>60%</td>
<td>6%</td>
<td>22%</td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>70%</td>
<td>6%</td>
<td>22%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>74%</td>
<td>6%</td>
<td>22%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4-year CAGR

<table>
<thead>
<tr>
<th>Category</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>+6.5%</td>
</tr>
<tr>
<td>Other</td>
<td>+7.9%</td>
</tr>
<tr>
<td>Top 6-10</td>
<td>+10.7%</td>
</tr>
<tr>
<td>Top 5</td>
<td>+5.0%</td>
</tr>
<tr>
<td>HR</td>
<td>+4.2%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Peers</th>
<th>Hannover Re</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9,004</td>
<td>12%</td>
</tr>
<tr>
<td>2013</td>
<td>8,308</td>
<td>13%</td>
</tr>
<tr>
<td>2014</td>
<td>8,738</td>
<td>14%</td>
</tr>
<tr>
<td>2015</td>
<td>9,848</td>
<td>14%</td>
</tr>
<tr>
<td>2016</td>
<td>7,733</td>
<td>17%</td>
</tr>
</tbody>
</table>

CAGR of EBIT (absolute)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Peers</th>
<th>Hannover Re</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3.7%</td>
<td>-5.2%</td>
<td>+5.3%</td>
</tr>
</tbody>
</table>

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

Market share of TOP 5 L&H EBIT

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT in m. EUR</td>
<td>2,752</td>
<td>2,168</td>
<td>2,561</td>
<td>2,881</td>
<td>3,200</td>
</tr>
<tr>
<td>Market Share</td>
<td>11%</td>
<td>7%</td>
<td>10%</td>
<td>14%</td>
<td>11%</td>
</tr>
</tbody>
</table>

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
There will be further growth in the P&C R/I market ...  
... but less pronounced than in the primary insurance market.

### Primary insurance

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2016</th>
<th>2020</th>
<th>Value (bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,631</td>
</tr>
</tbody>
</table>

### Reinsurance

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2016</th>
<th>2020</th>
<th>Value (bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>187</td>
<td>212</td>
<td>237</td>
<td>251</td>
</tr>
</tbody>
</table>

**CAGR:**

- **Primary insurance:**
  - Nominal: 6.8%
  - FX adjusted: 4.5%*

- **Reinsurance:**
  - Nominal: 3.2%
  - FX adjusted: 2.7%*

* Own estimates; as at October 2017

Based on IMF macroeconomic forecast
Based on IMF macroeconomic forecast incl. haircut
### L&H reinsurance market to grow faster than primary market
Driven by service and capital management transactions

<table>
<thead>
<tr>
<th>Primary insurance in EUR bn.</th>
<th>Reinsurance in EUR bn.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2012</strong></td>
<td><strong>2012</strong></td>
</tr>
<tr>
<td><strong>2,153</strong></td>
<td><strong>58</strong></td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td><strong>2016</strong></td>
</tr>
<tr>
<td><strong>2,589</strong></td>
<td><strong>75</strong></td>
</tr>
<tr>
<td><strong>2020</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td></td>
<td><strong>89</strong></td>
</tr>
</tbody>
</table>

- **CAGR:**
  - **Primary insurance:**
    - nominal: 4.7%
    - f/x adjusted: 3.9%*
  - **Reinsurance:**
    - nominal: 6.3%
    - f/x adjusted: 4.9%*

* Own estimates; as at October 2017
General considerations going into the strategy review

- Increase competitive advantage!
- Focus on primary insurance?
- Niche player?
- Cost efficiency!
- Digitalisation and automation!
- Concentration in the reinsurance industry?
- Less diversification?
- "Ryanair" in reinsurance?
- 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"

Creating and maintaining competitive advantages

Defining the business model

Considering the market environment
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
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
### 1. We pursue ambitious economic growth targets

**Amended Target Matrix**

<table>
<thead>
<tr>
<th>Business group</th>
<th>Key figures</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td>return on investment&lt;sup&gt;1&lt;/sup&gt;</td>
<td>&gt;2.7%</td>
<td>≥ 2.7%</td>
</tr>
<tr>
<td></td>
<td>return on equity&lt;sup&gt;2&lt;/sup&gt;</td>
<td>≥9.7%</td>
<td>≥ 9.5%</td>
</tr>
<tr>
<td></td>
<td>earnings per share growth (y-o-y)</td>
<td>≥6.5%</td>
<td>≥ 5%</td>
</tr>
<tr>
<td></td>
<td>economic value creation&lt;sup&gt;3&lt;/sup&gt;</td>
<td>≥7.5%</td>
<td>≥ 6.5%</td>
</tr>
<tr>
<td></td>
<td>solvency ratio&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>≥ 200%</td>
</tr>
<tr>
<td><strong>Property &amp; Casualty R/I</strong></td>
<td>gross premium growth&lt;sup&gt;5&lt;/sup&gt;</td>
<td>3% - 5%</td>
<td>3% - 5%</td>
</tr>
<tr>
<td></td>
<td>combined ratio&lt;sup&gt;6&lt;/sup&gt;</td>
<td>≤96%</td>
<td>≤ 96%</td>
</tr>
<tr>
<td></td>
<td>EBIT margin&lt;sup&gt;7&lt;/sup&gt;</td>
<td>≥10%</td>
<td>≥ 10%</td>
</tr>
<tr>
<td></td>
<td>xRoCA&lt;sup&gt;8&lt;/sup&gt;</td>
<td>≥2%</td>
<td>≥ 2%</td>
</tr>
<tr>
<td><strong>Life &amp; Health R/I</strong></td>
<td>gross premium growth&lt;sup&gt;9&lt;/sup&gt;</td>
<td>5% - 7%</td>
<td>3% - 5%</td>
</tr>
<tr>
<td></td>
<td>value of New Business (VNB)&lt;sup&gt;10&lt;/sup&gt;</td>
<td>≥ EUR 220 m.</td>
<td>≥ EUR 220 m.</td>
</tr>
<tr>
<td></td>
<td>EBIT growth&lt;sup&gt;11&lt;/sup&gt;</td>
<td>≥3%</td>
<td>≥ 5%</td>
</tr>
<tr>
<td></td>
<td>xRoCA&lt;sup&gt;8&lt;/sup&gt;</td>
<td>≥3%</td>
<td>≥ 2%</td>
</tr>
</tbody>
</table>

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
3. We aim for successful employees

- Be a successful corporation
- Keeping greatest possible delegation
- Educating talents in Hannover

High staff retention (3.1%* fluctuation in 2016)

Consistent client relationship

Ensure that skill sets of workforce match requirements...

- Medical doctors
- Geologists
- Mathematicians
- Economists
- Engineers
- IT specialists
- ... 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

- 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

Focus on

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?

- 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
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
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
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
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
10. We strive for Performance Excellence and ...

... continuous improvement

Develop Group Strategy and Strategy Guide

1. Plan

Develop Strategy contributions (compilation and documentation)

2. Do

Corrective measures: Reflect and learn

3. Act

Our vision: creating value through reinsurance

4. Check

Follow up on contributions, e.g. comment on achievements

Improve execution by more precisely defining the contribution and PDCA cycle
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