



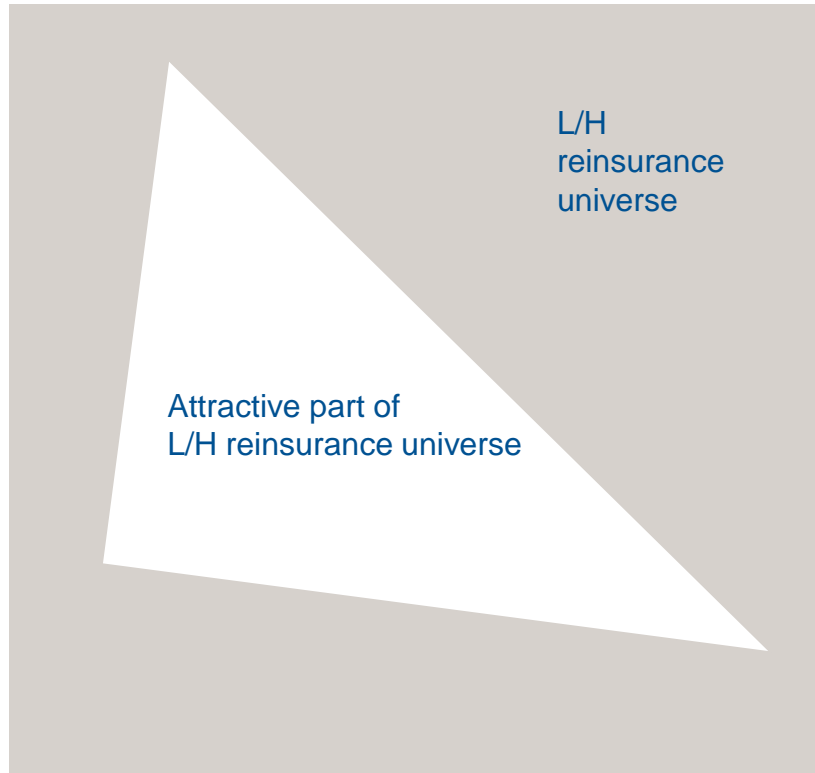
somewhat  
different

# Insights into life and health reinsurance

Sources and measures of attractive new business

**Claude Chèvre, Member of Executive Board**

# Hannover Re L&H strategy



## Definition

△ Positive VNB expected

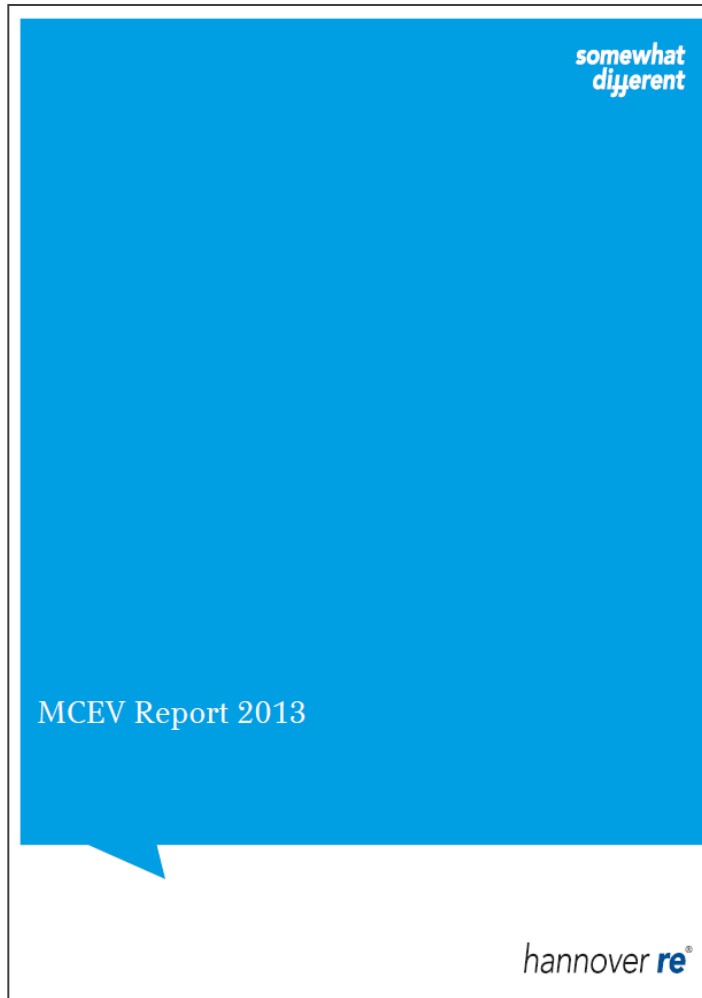
## Goal

To outperform the worldwide growth of the L/H business in △ over a 3-year rolling period

**We concentrate on the attractive part of the reinsurance universe**

# What is the VNB?

## Some theoretical background

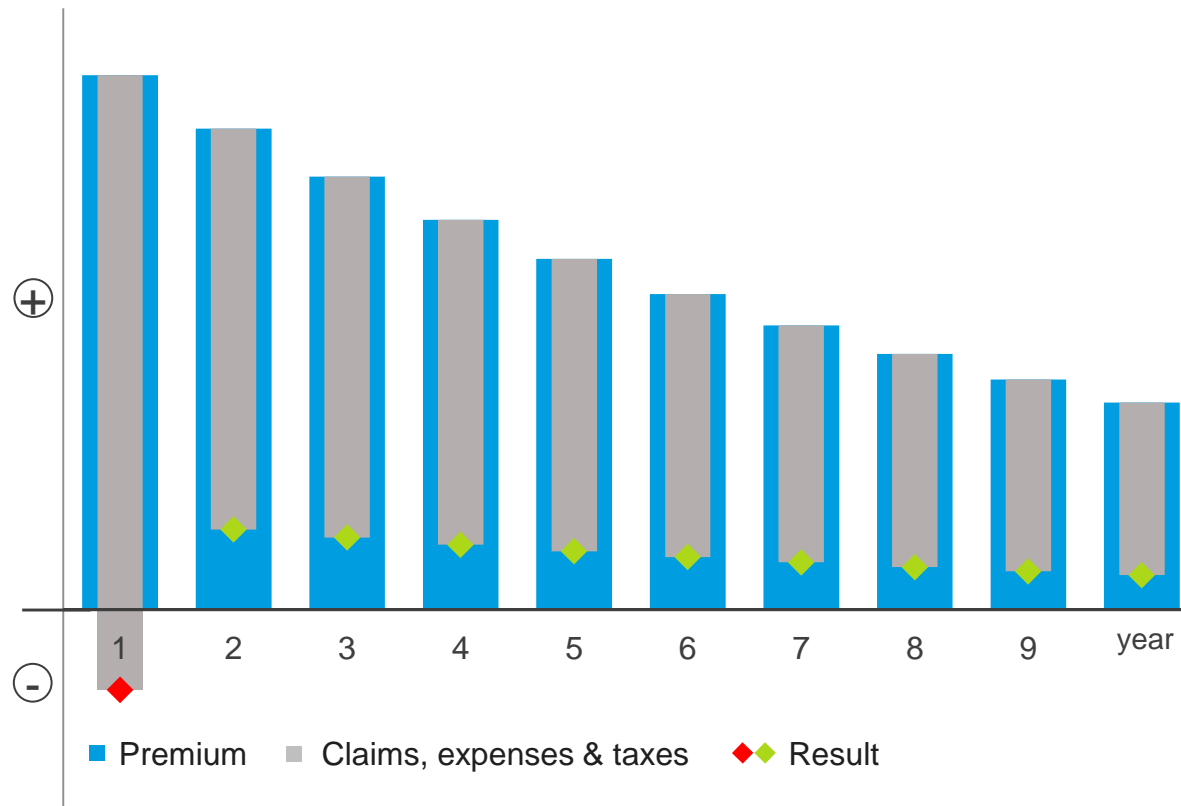


- ▶ The Value of New Business (VNB)
  - is part of the MCEV reporting
  - is based on the MCEV standard
  - discloses the present value (over the full duration) of the new business written within one year
  - includes costs for required capital
- ▶ The following slides
  - provide an overview about the basic concept of the VNB
  - are simplified for demonstration purpose

# Insights into the VNB

The VNB is based on projected future statutory annual results

## New business projection for the portfolio of one underwriting year



- ▶ The VNB is based on a best estimate projection of the future statutory results of the new business
- ▶ The costs of the required capital need to be deducted from the results

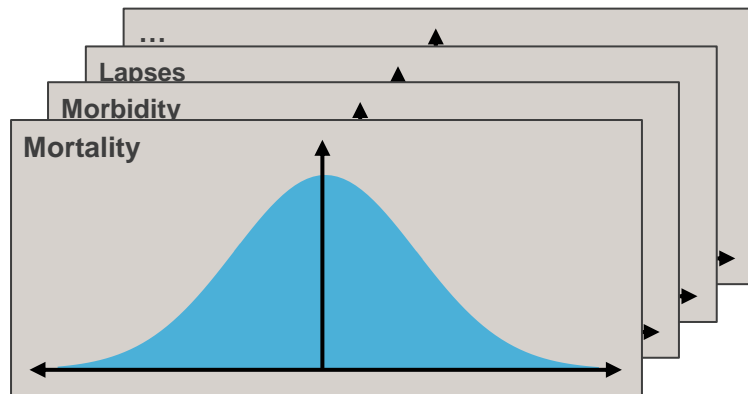
# Insights into the VNB

## How to calculate the required capital?

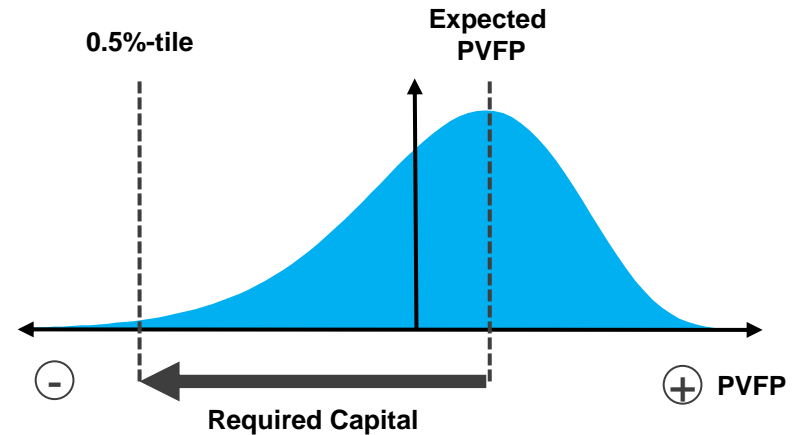
### Simulation of different projection scenarios



### Statistical distribution of single risks



### Statistical distribution of the PVFP\*

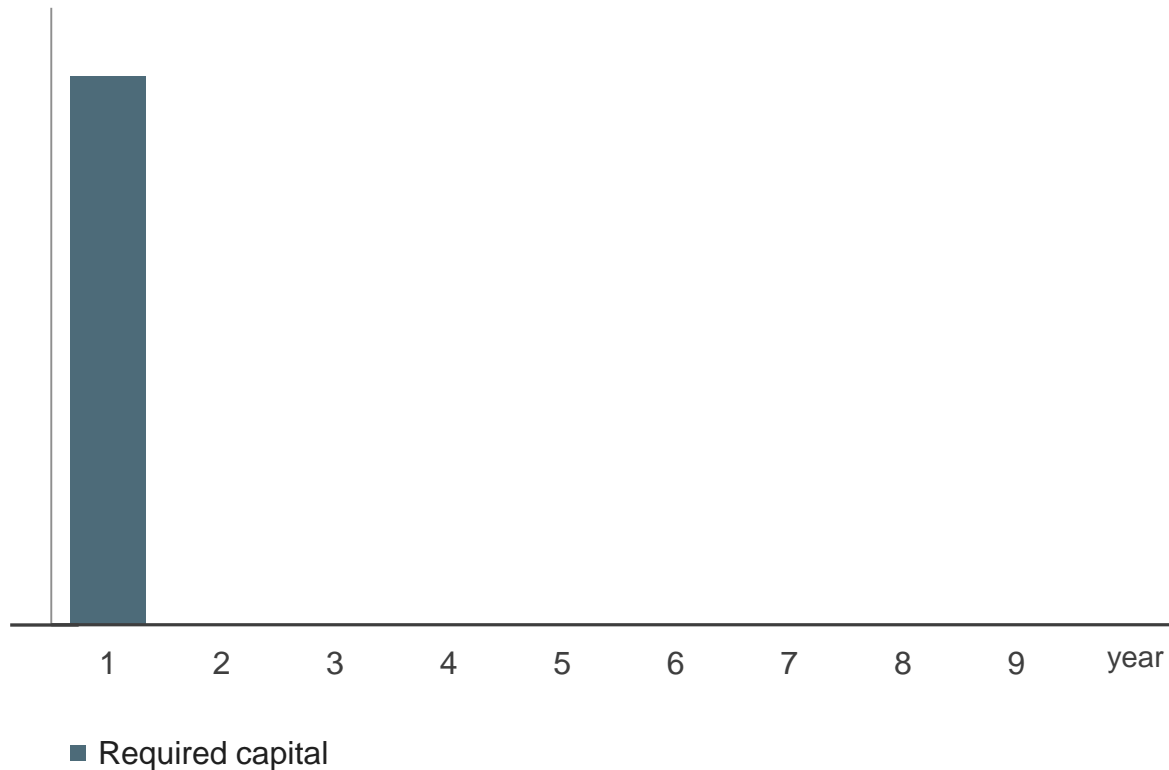


\* PVFP: Present Value of Future Profits

# Insights into the VNB

## How to calculate the required capital?

### Required capital per projection year



- ▶ One full simulation (as demonstrated on the previous slide) calculates the required capital for just one year

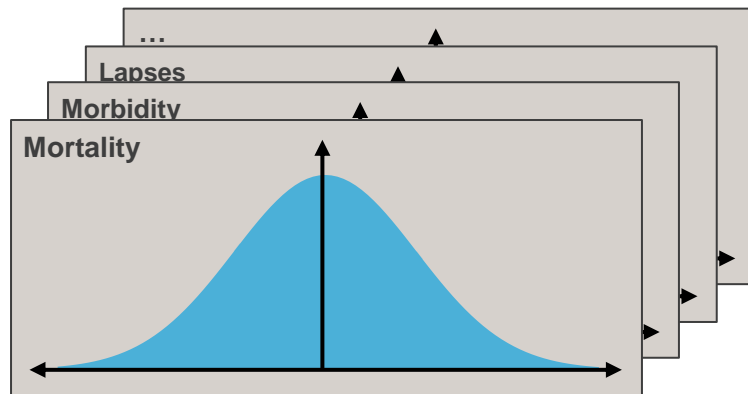
# Insights into the VNB

## How to calculate the required capital?

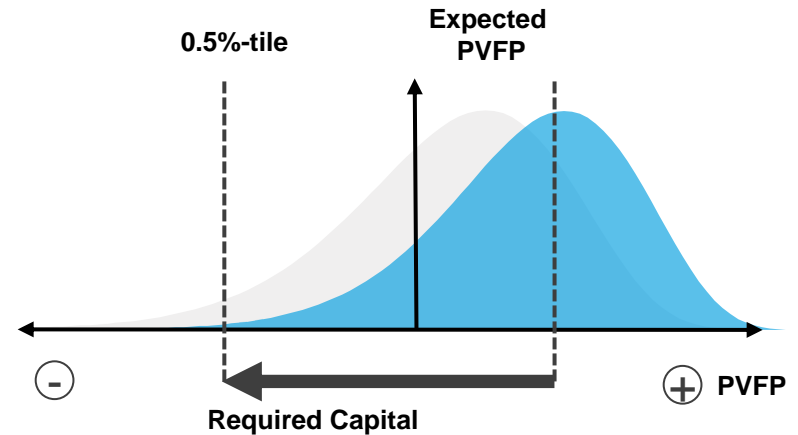
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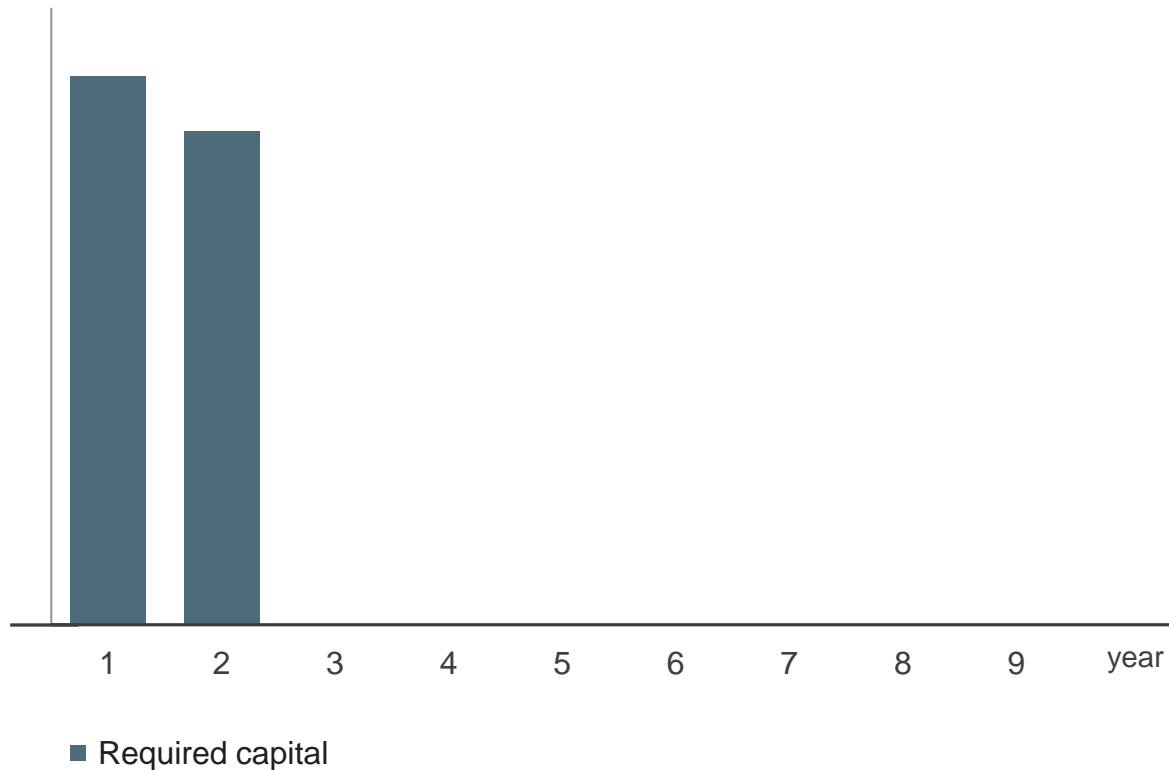


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# Insights into the VNB

## How to calculate the required capital?

### Required capital per projection year



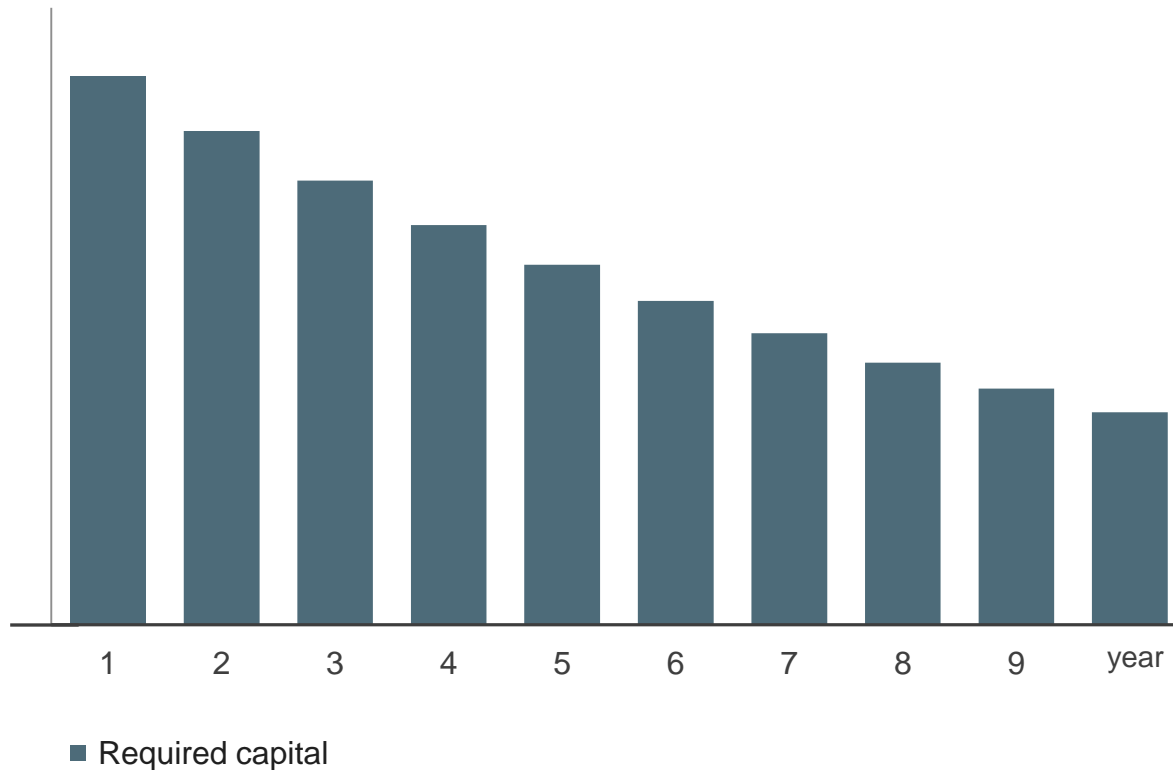
- ▶ One full simulation (as demonstrated on the previous slide) calculates the required capital for just one year
- ▶ The required capital of the following years is calculated analogously



# Insights into the VNB

## How to calculate the required capital?

### Required capital per projection year

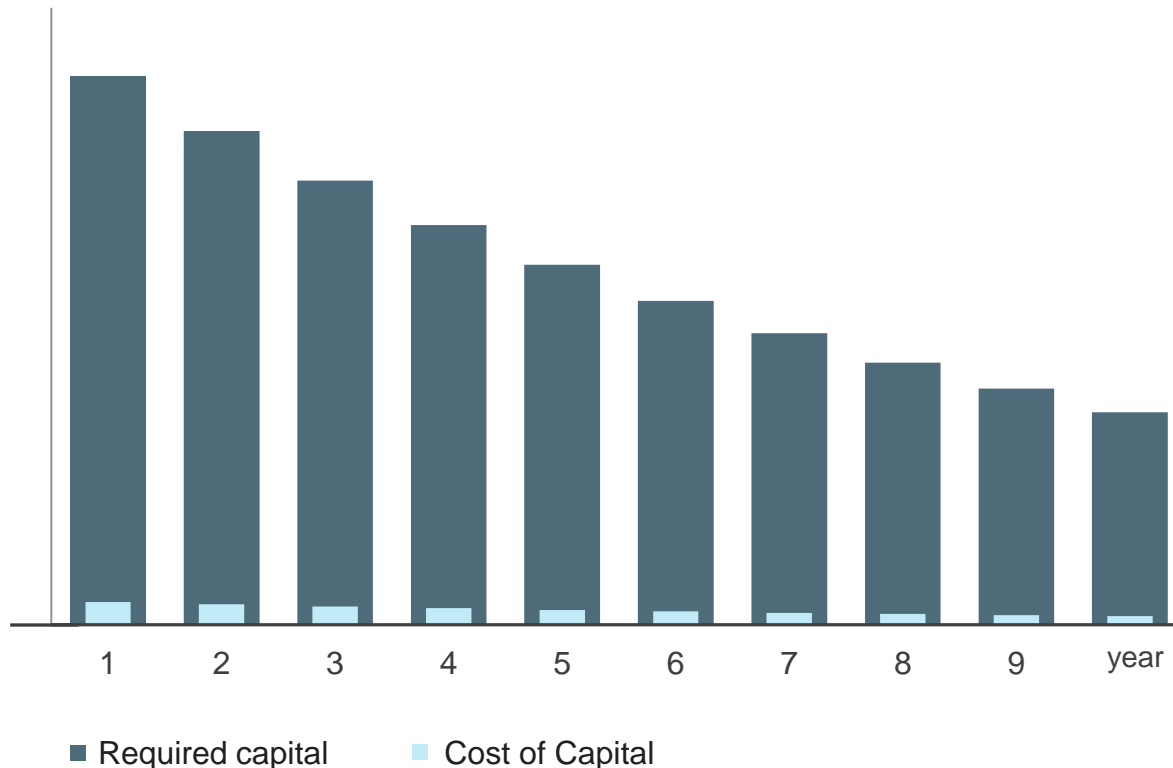


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# Insights into the VNB

## How to calculate the Cost of Capital?

### Required capital per projection year

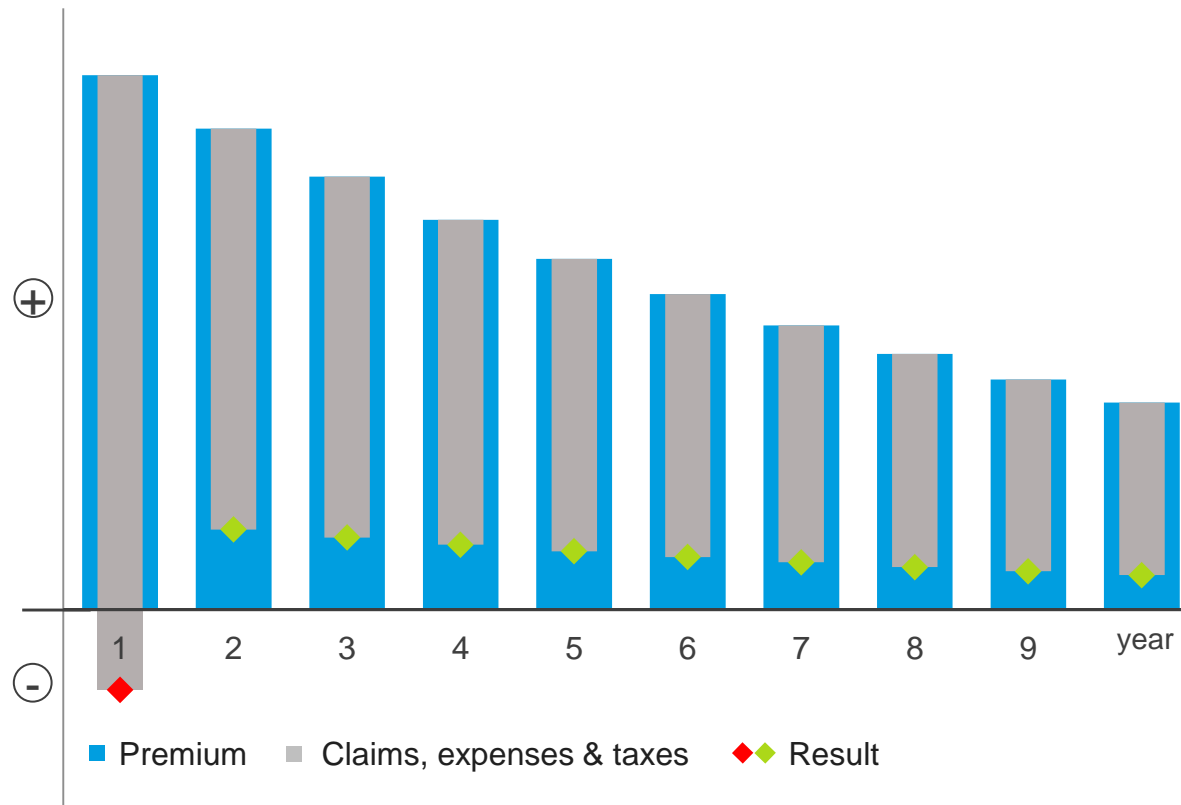


- ▶ One full simulation (as demonstrated on the previous slide) calculates the required capital for just one year
- ▶ The required capital of the following years is calculated analogously
- ▶ Cost of Capital (CoC) is based on required capital and cost rate according to the MCEV principles

# Insights into the VNB

The VNB is based on projected future statutory annual results

## New business projection for the portfolio of one underwriting year

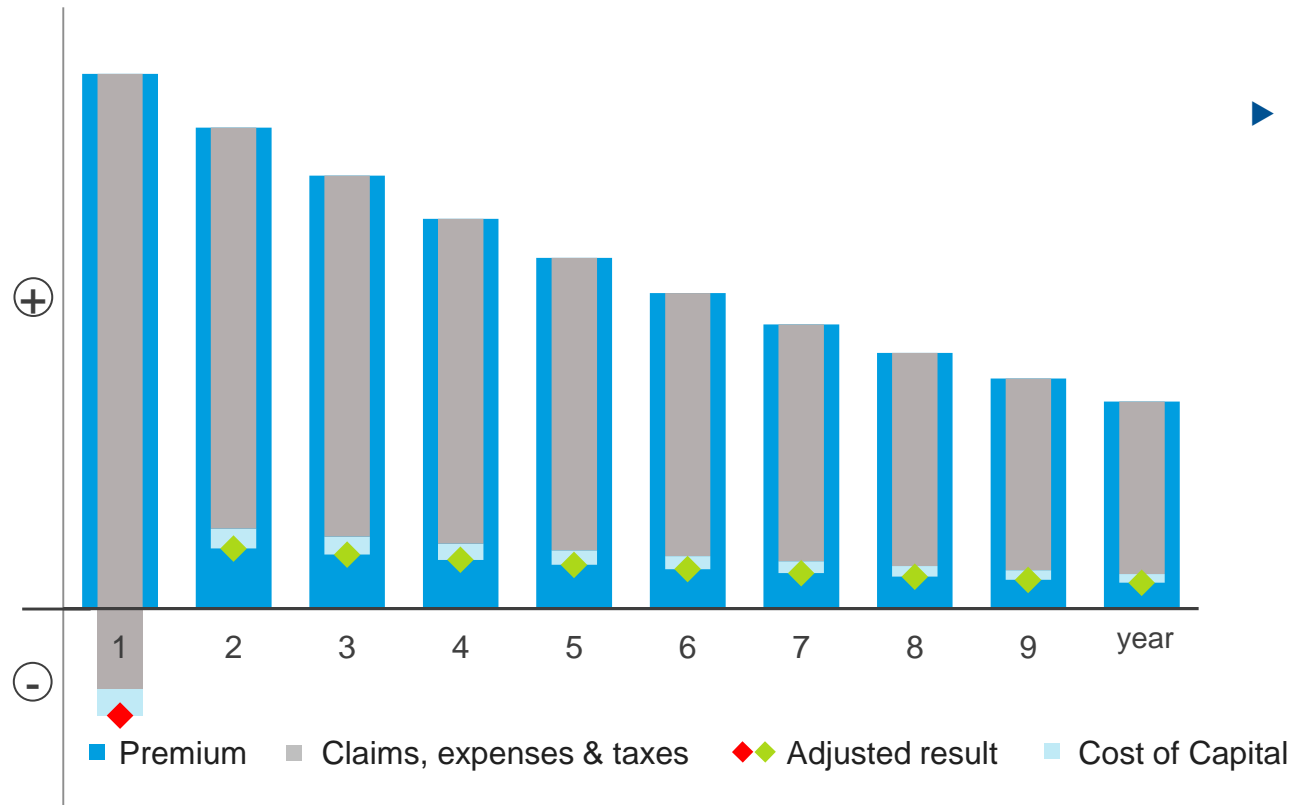


- ▶ The VNB is based on a best estimate projection of the future statutory results of the new business
- ▶ The costs of the required capital need to be deducted from the results

# Insights into the VNB

The VNB is based on projected future statutory annual results after CoC

## New business projection for the portfolio of one underwriting year

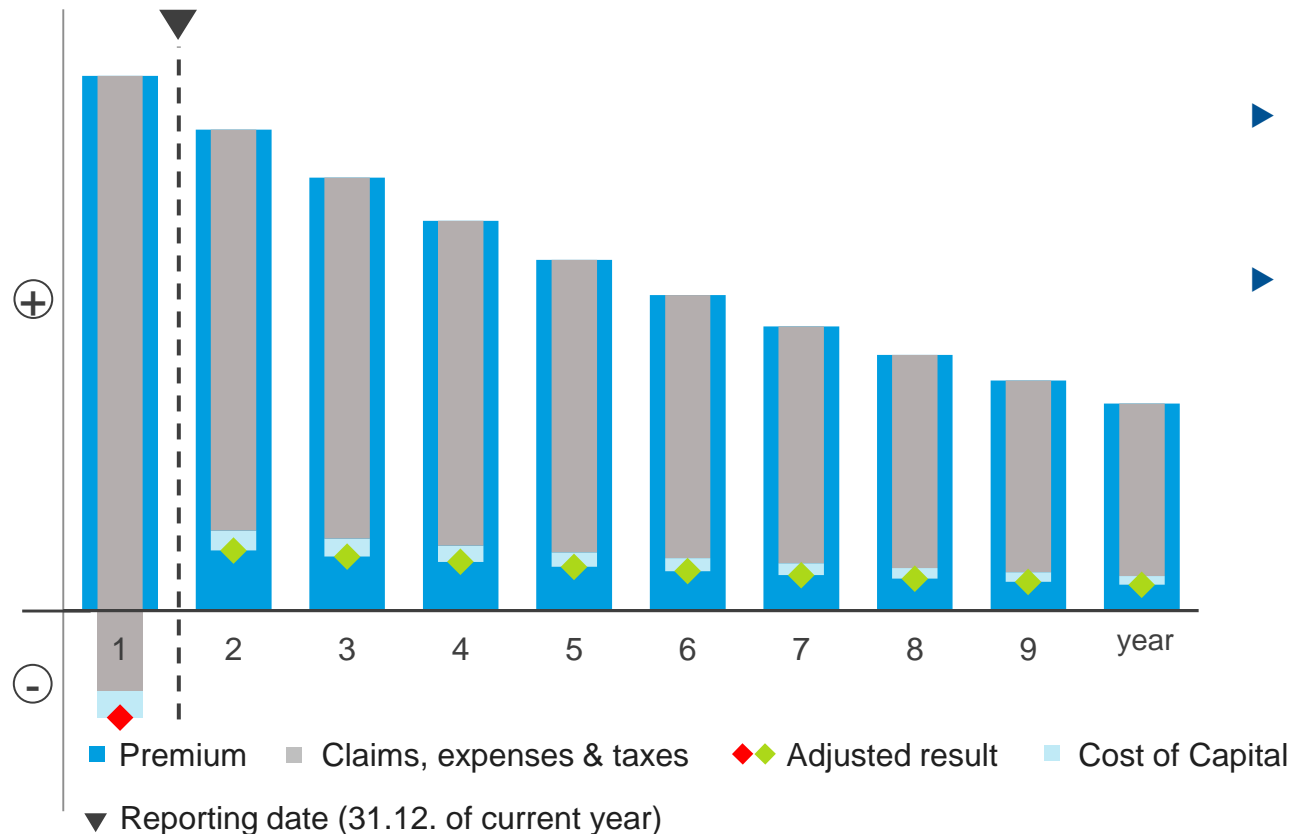


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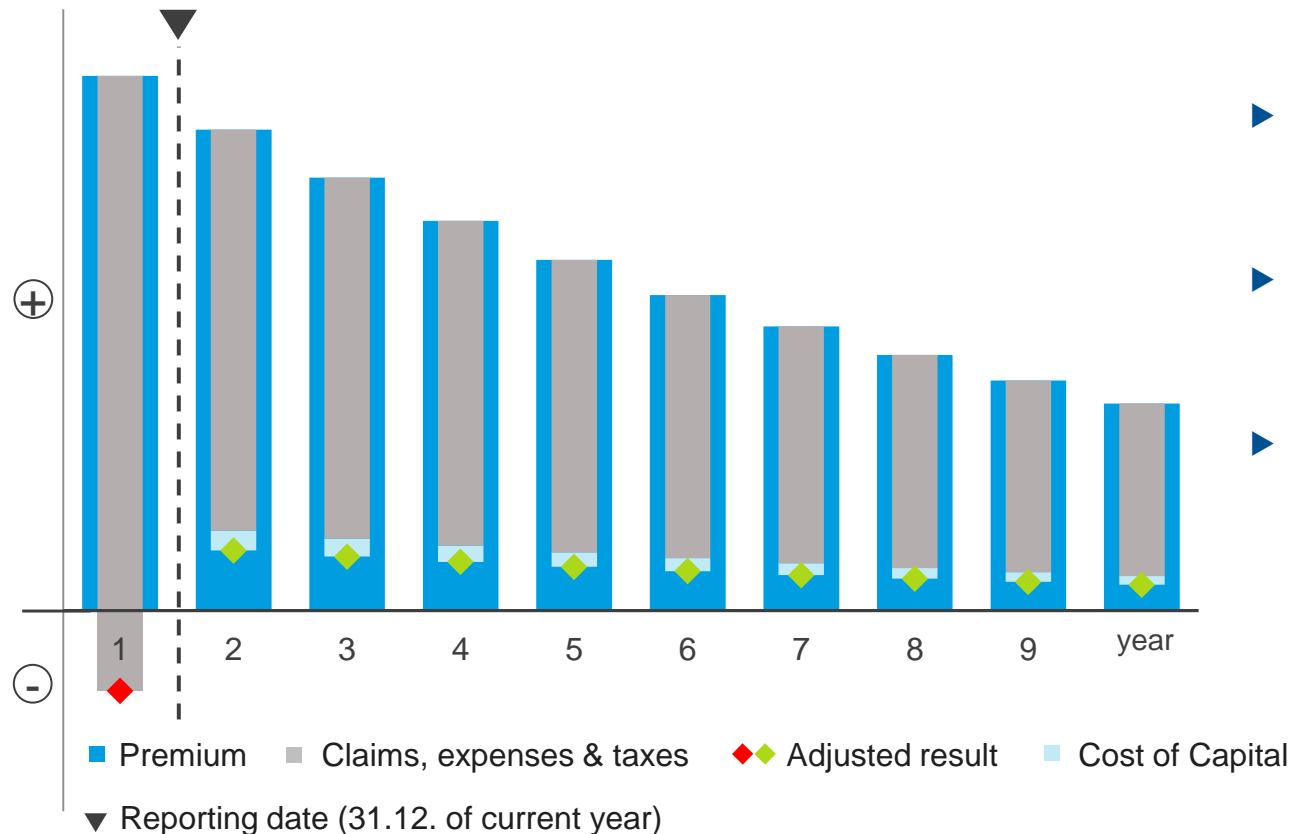


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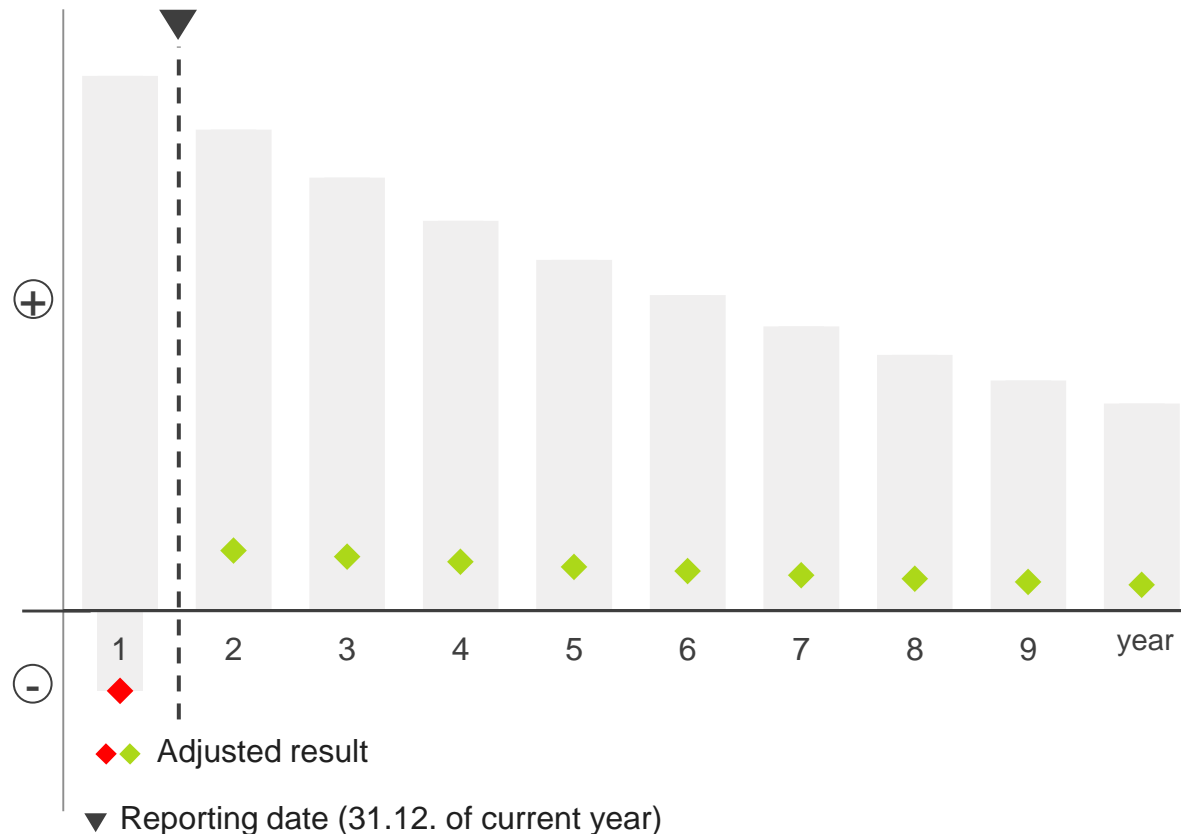


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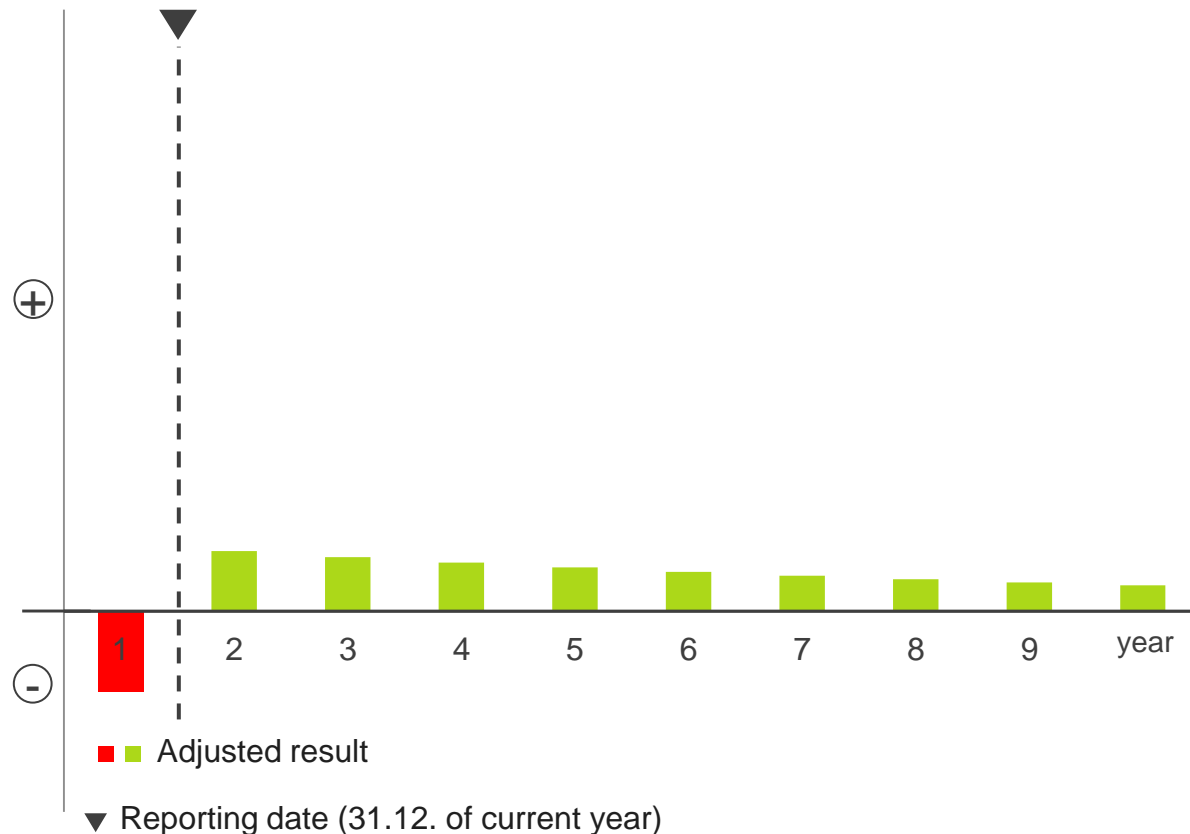


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- ▶ For further explanation we only look at the (adjusted) results

# Insights into the VNB

The VNB is based on projected future statutory annual results after CoC

## Projection of results after cost of capital for one underwriting year



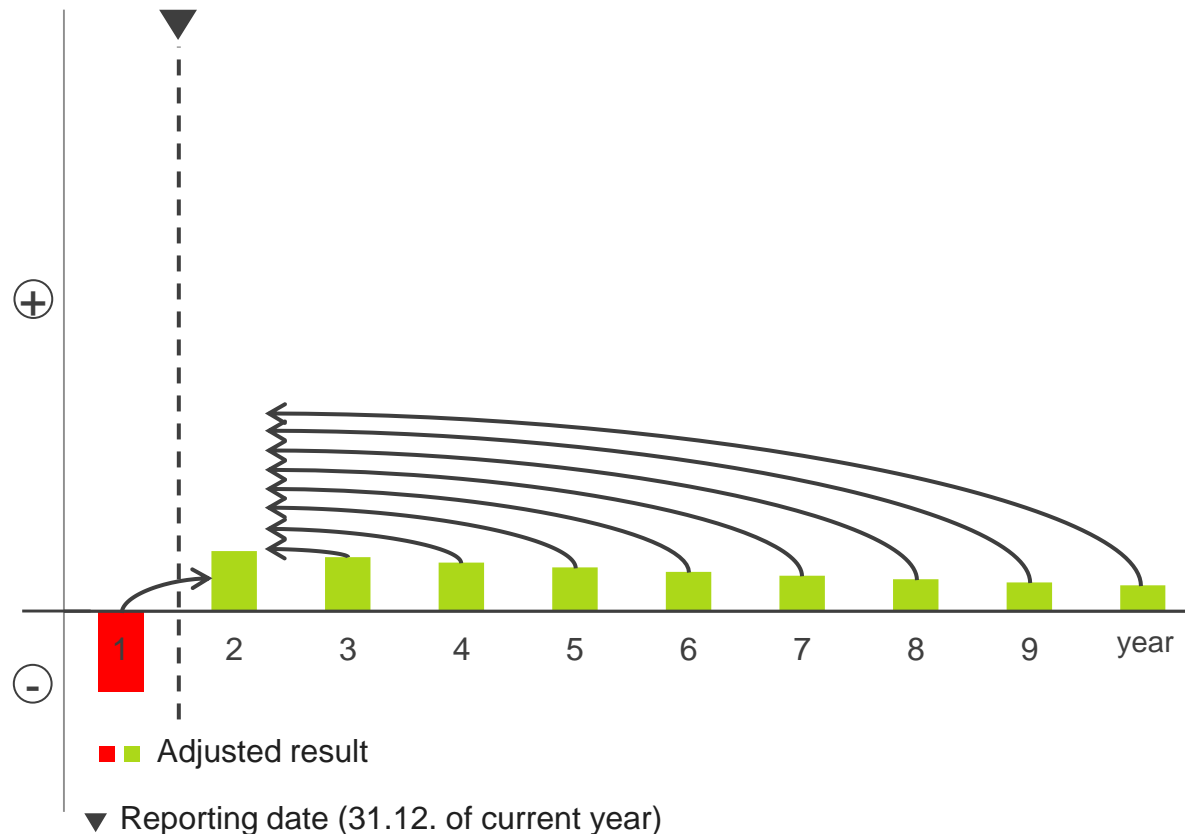
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# Insights into the VNB

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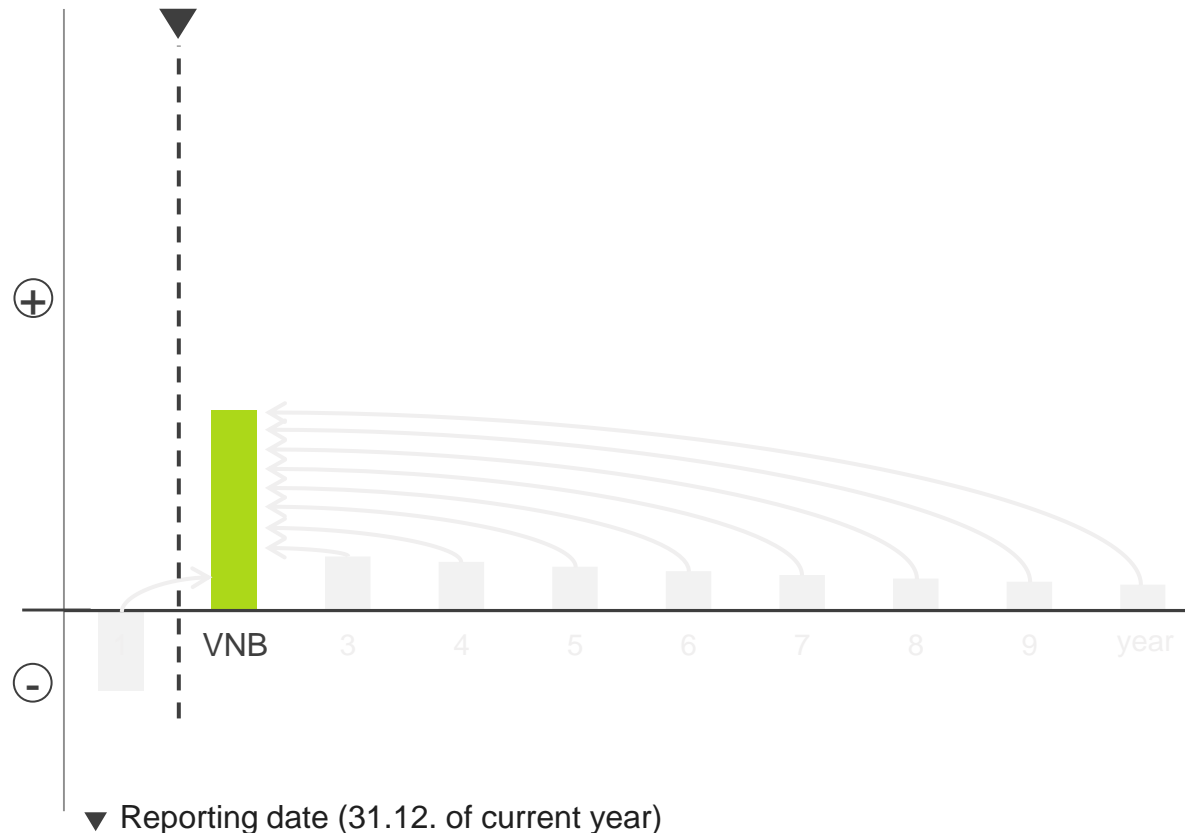


- ▶ The VNB is the time value at the end of the first year of
  - the already realised results of the first year
  - and the expected future adjusted results (after cost of capital)

# Insights into the VNB

The VNB is based on projected future statutory annual results after CoC

## Projection of results after cost of capital for one underwriting year



- ▶ The VNB is the time value at the end of the first year of
  - the already realised results of the first year
  - and the expected future adjusted results (after cost of capital)

# Insights into the VNB

## Hannover Re L&H's VNB 2013 based on the MCEV report

### 3. New Business

#### 3.1 Value of New Business

The Value of New Business (VNB) for the year 2013 is shown in Table 5.

The new business contribution in 2013 for the Domestic Operations is driven by UK longevity swap transactions as well as

morbidity and health business written by the branches in Asia and France. The new business value for the Foreign Operations mainly stems from traditional US mortality business and structured Yearly Renewable Term (YRT) transactions written by the US, Bermudian and Irish subsidiaries.

Table 5: Value of New Business (VNB)

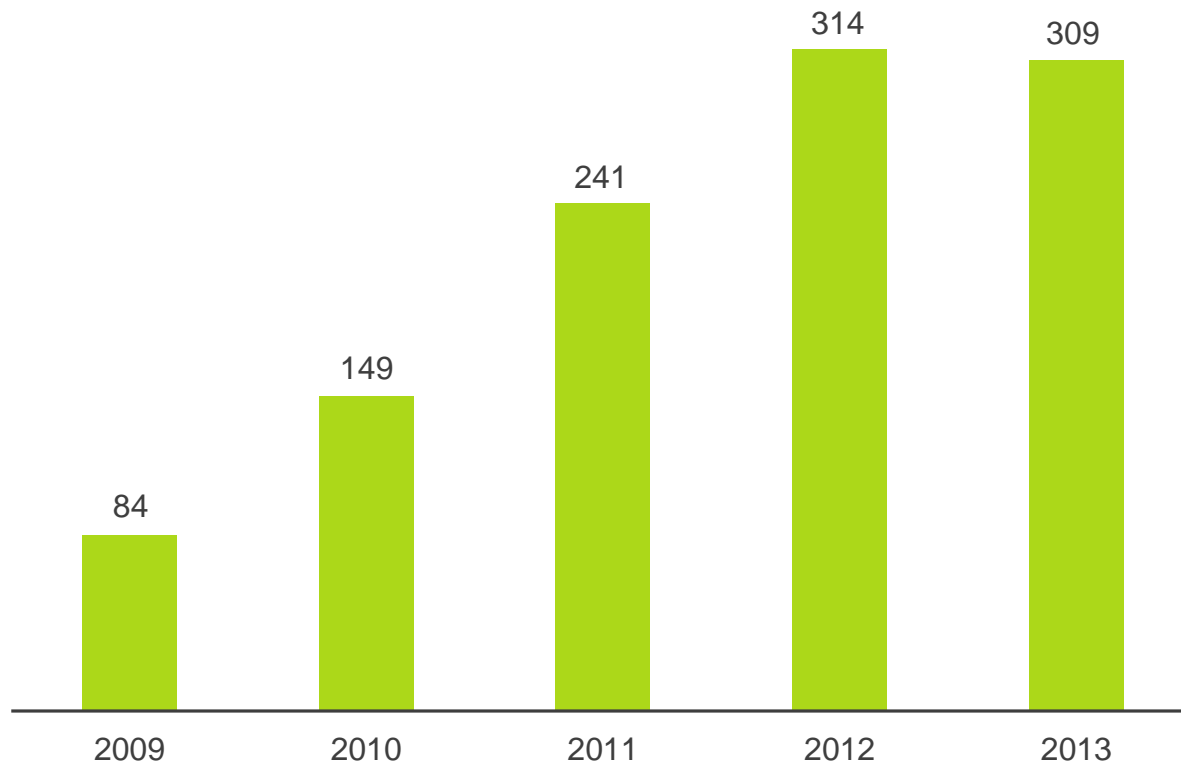
in EUR million	Domestic Operations	Foreign Operations	Total
Profit/Loss on New Business during year (P/L)	(89.9)	8.3	(81.6)
Present Value of New Business Profits (PVNB)	217.6	233.0	450.7
Cost of Residual Non-Hedgeable Risks (CoRNHR)	(27.1)	(18.0)	(45.1)
Frictional Costs of Required Capital (FCoRC)	(8.4)	(7.1)	(15.4)
Financial Options and Guarantees (FOGs)	0.0	0.0	0.0
<b>Value of New Business (VNB)</b>	<b>92.3</b>	<b>216.2</b>	<b>308.5</b>



# Insights into the VNB

## Hannover Re L&H's VNBs between 2009 and 2013

**VNB of Hannover L&H Re between 2009 and 2013** in m. EUR



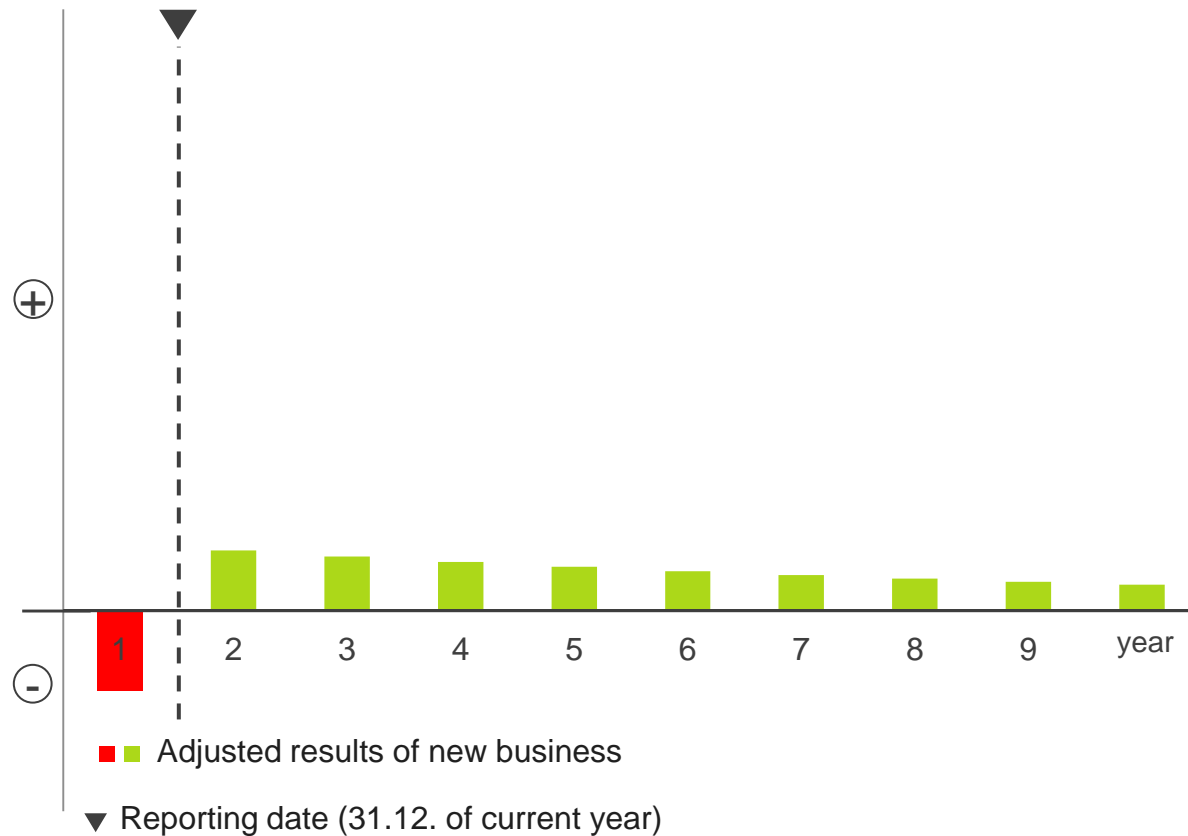
► Within the last 5 years Hannover Re L&H generated a total VNB of EUR 1,096 m.

# Insights into the VNB

## From Value of New Business to Value In-Force

### Projection of results after cost of capital for one underwriting year

- ▶ Every new business year adds a new stream of annual adjusted results

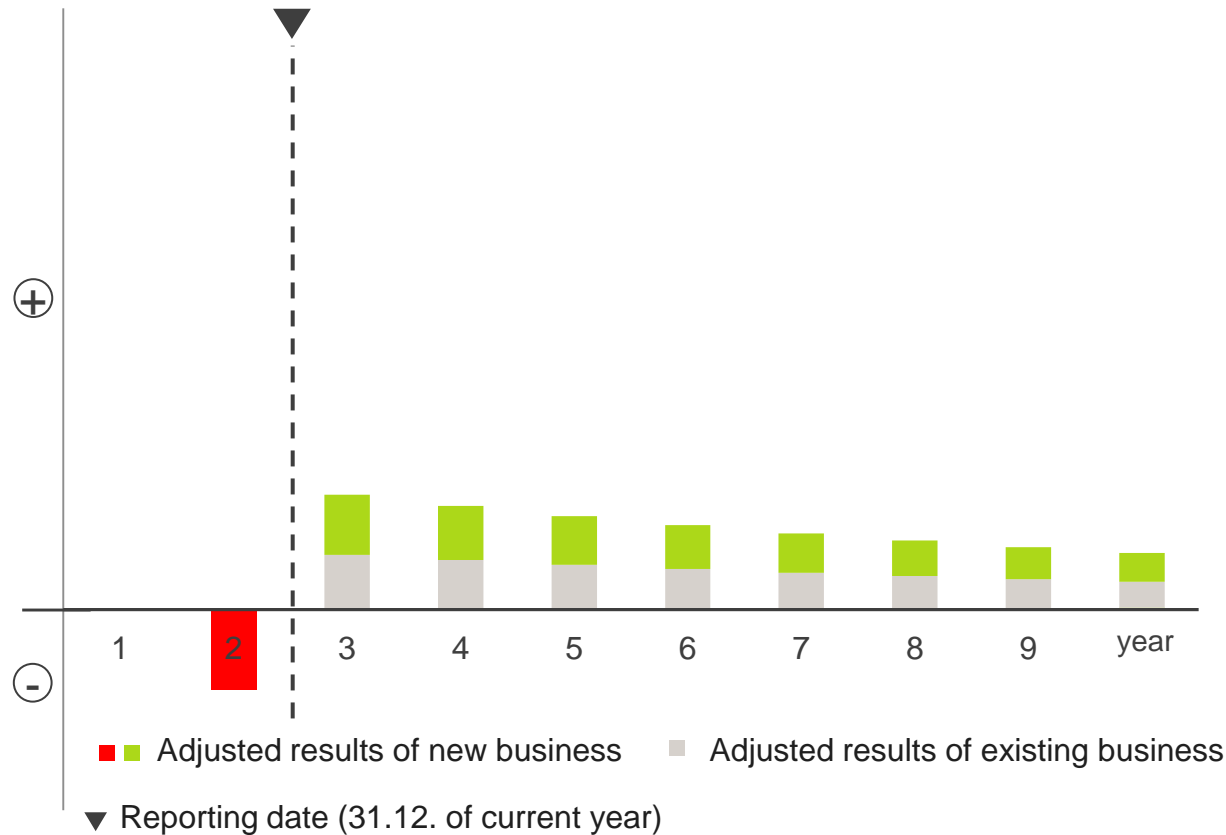


# Insights into the VNB

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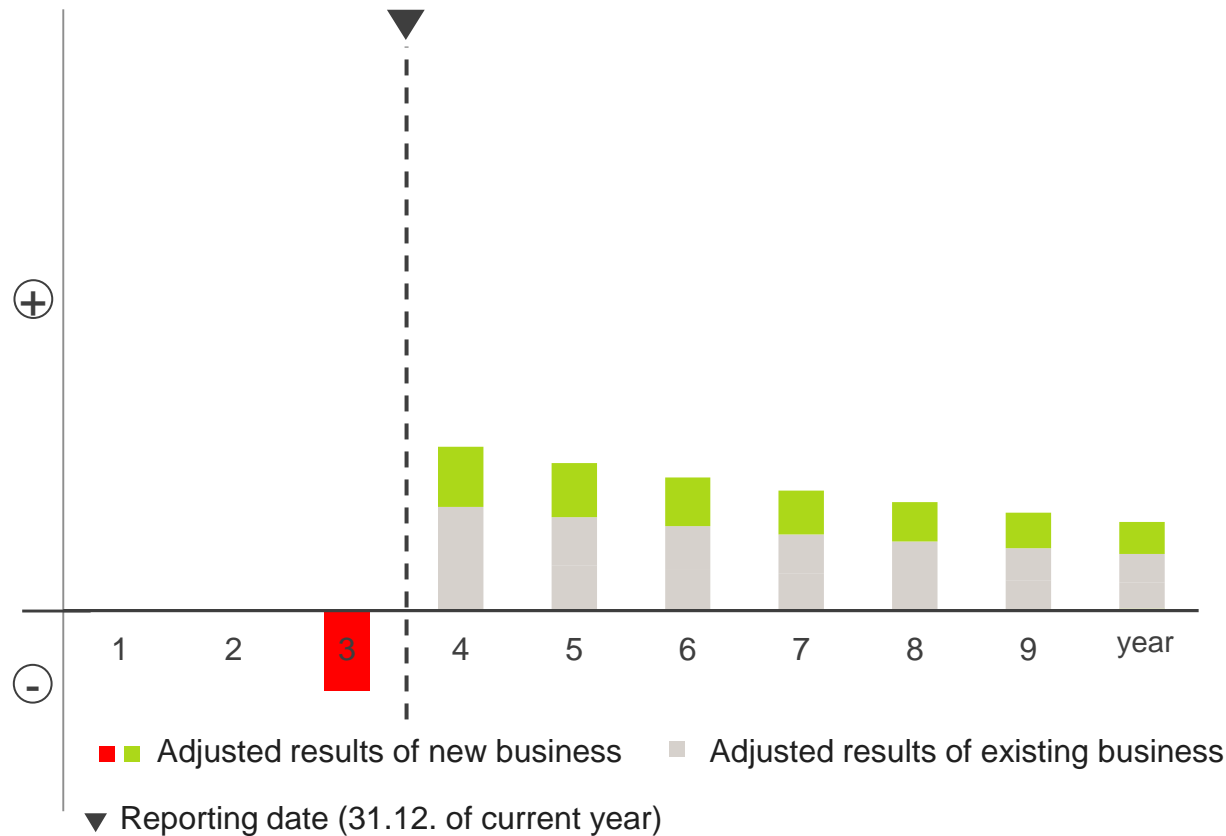


# Insights into the VNB

## From Value of New Business to Value In-Force

### Projection of results after cost of capital for one underwriting year

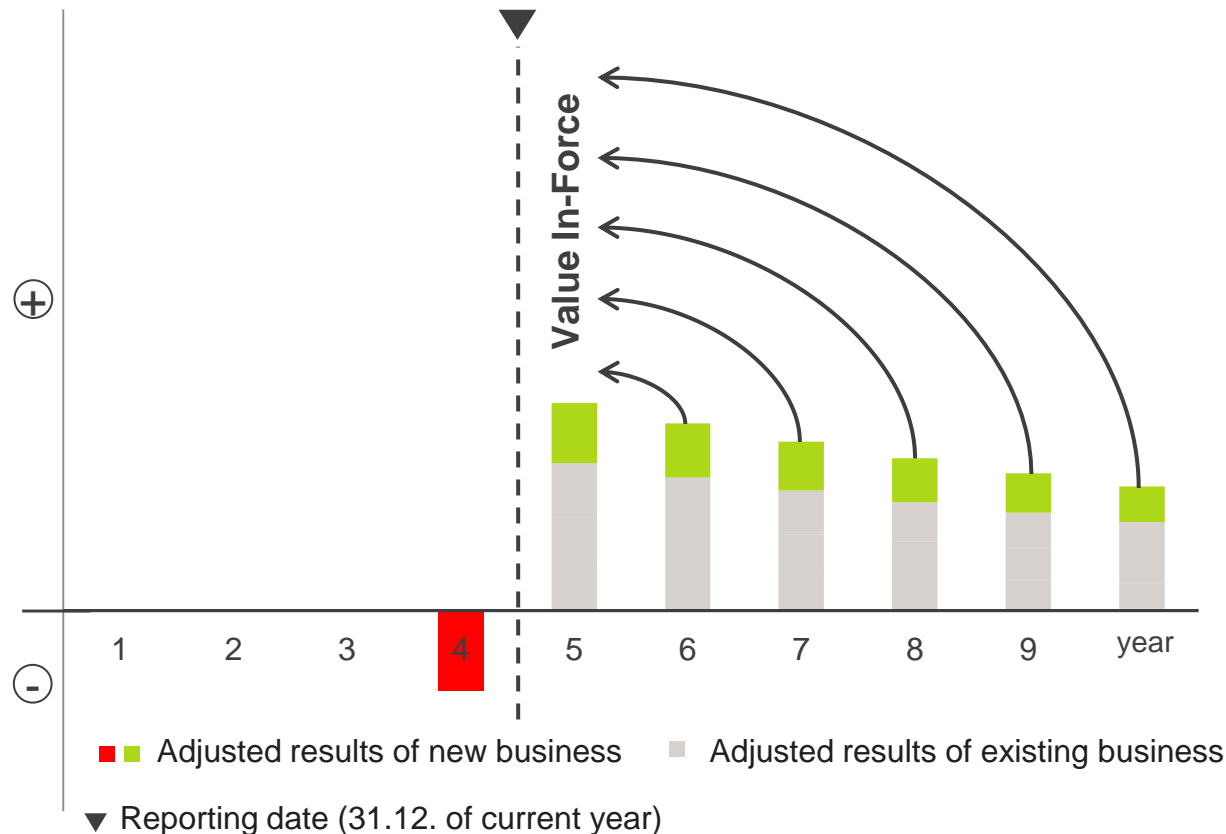
- ▶ Every new business year adds a new stream of annual adjusted results



# Insights into the VNB

## From Value of New Business to Value In-Force

### Projection of results after cost of capital for one underwriting year



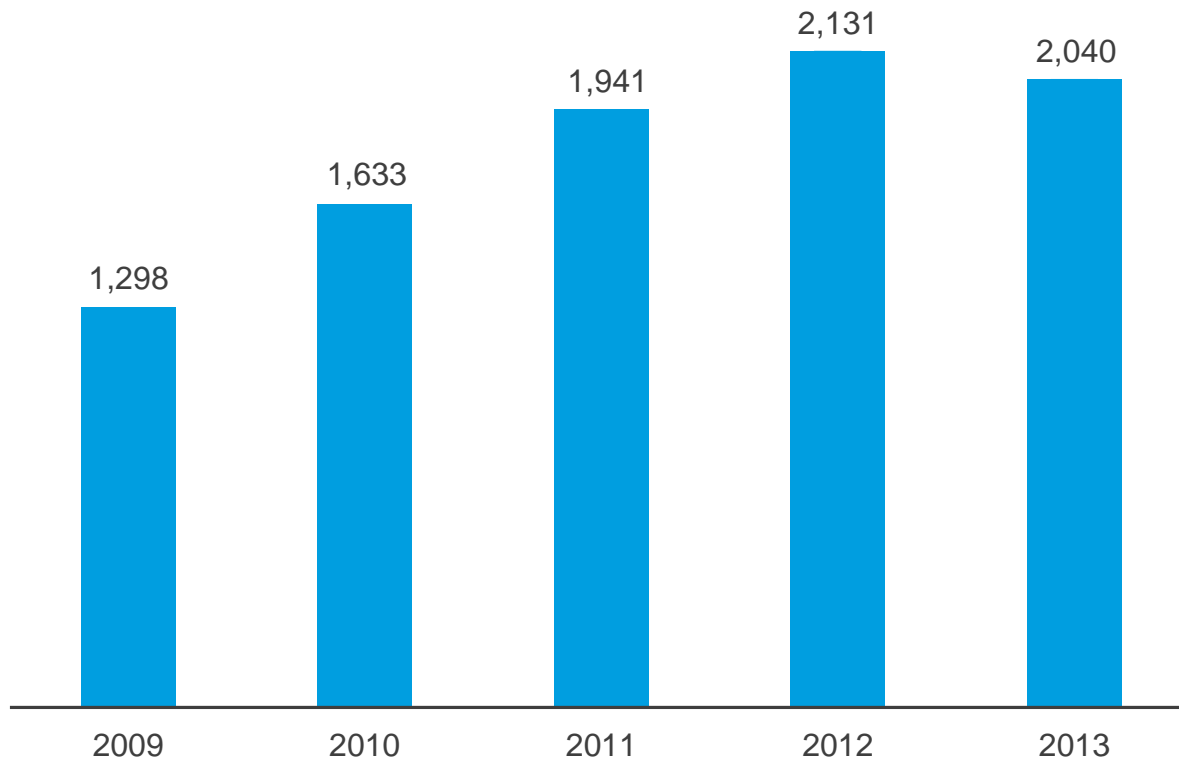
- ▶ Every new business year adds a new stream of annual adjusted results
- ▶ The Value In-Force (VIF) is the present value of the future adjusted results
- ▶ The VIF is also influenced by
  - experience variances
  - model changes
  - assumption changes
  - changes in interest rates



# Insights into the VNB

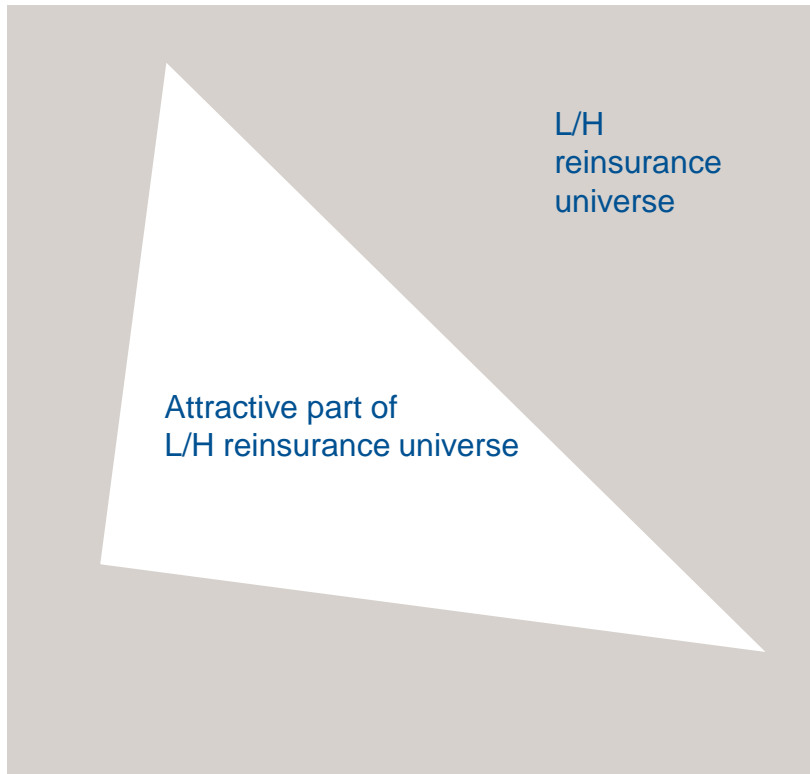
## Hannover Re L&H's VIF between 2009 and 2013

VIF of Hannover Re L&H between 2009 and 2013 in m. EUR



# Hannover Re L&H strategy

We build on our current positioning and set of solutions. . .



## Definition

△ Positive VNB value expected

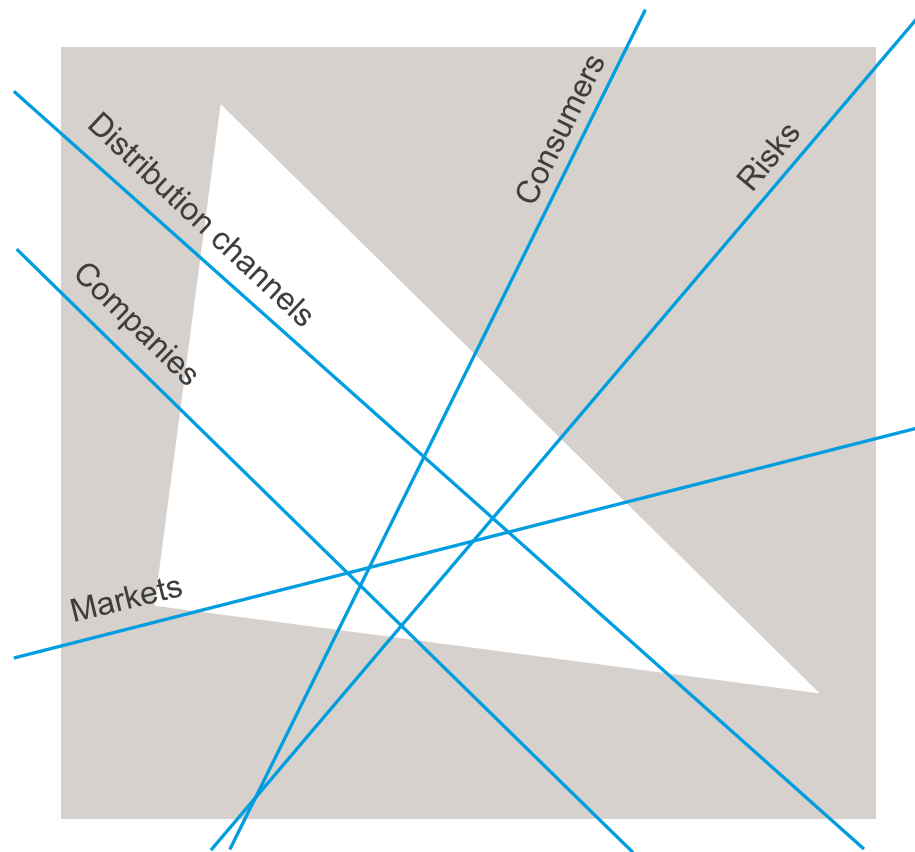
## Goal

To outperform the worldwide growth of the L/H business in △ over a 3-year rolling period

**We concentrate on the attractive part of the reinsurance universe**

# Hannover Re L&H strategy

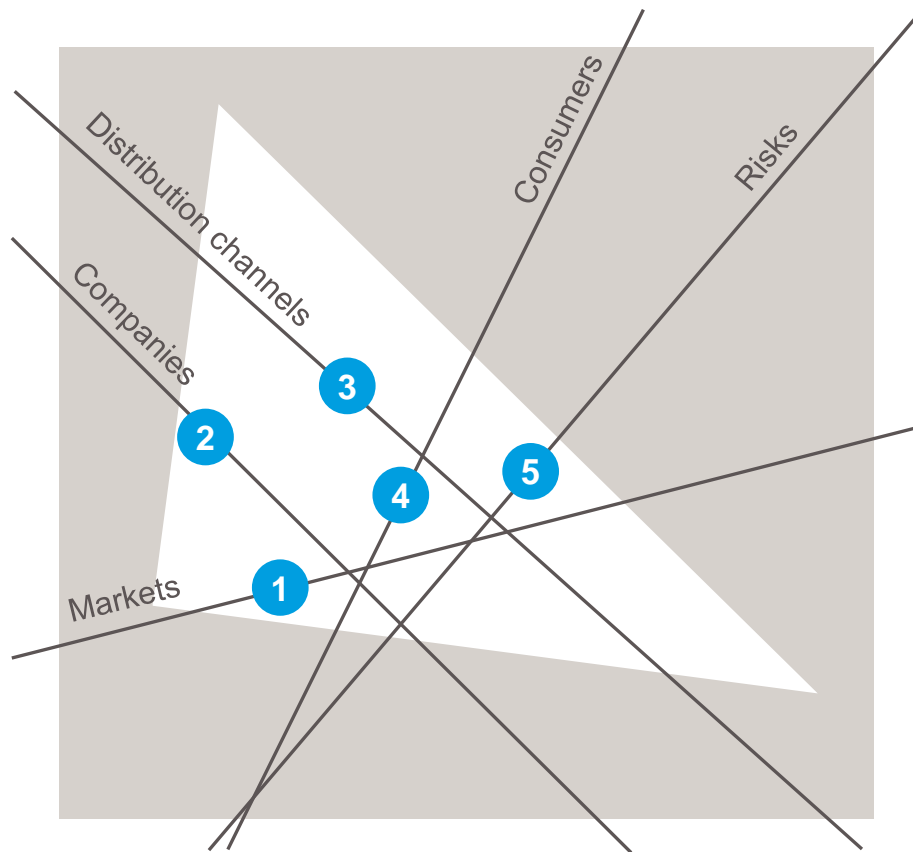
. . .and expand our presence by a strong focus



■ L/H reinsurance universe    ▲ Attractive part of L/H reinsurance universe

# Hannover Re L&H strategy

...and expand our presence by a strong focus



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

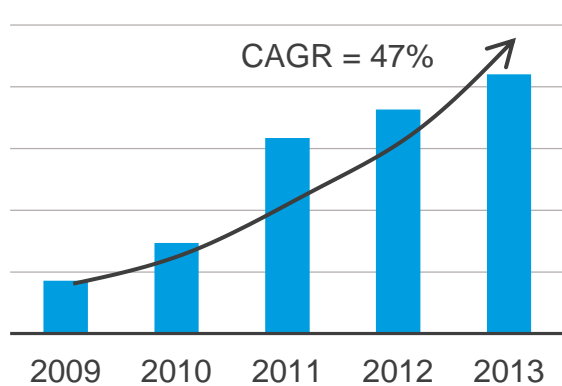
■ L/H reinsurance universe    ▲ Attractive part of L/H reinsurance universe

# Hannover Re L&H strategy

## Spotlight on some initiatives

### Takaful business

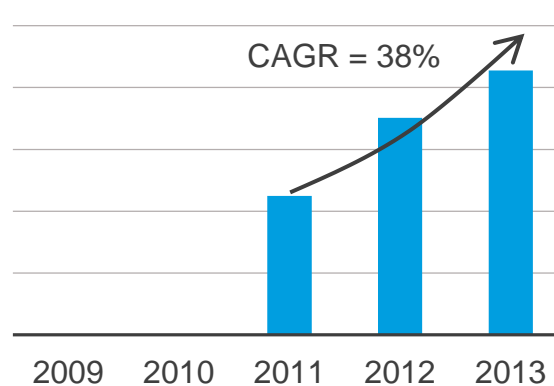
L&H premium



- ▶ 2008: establishment of Hannover Re Takaful, Bahrain
- ▶ Focus on Islamic customers in the Middle East

### Global health initiative

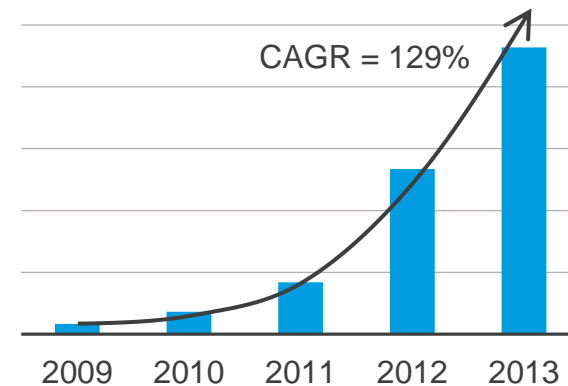
L&H premium



- ▶ 2011: strategic decision to take a more active position in the global health market
- ▶ Today, already around 15% of L&H premium is from health business

### Business distributed online

L&H premium



- ▶ 2012: decision to position our POS systems for online distribution
- ▶ Different local initiatives and partnerships
- ▶ Still on a moderate level, but with exuberant growth rates

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