

50
years

somewhat
different



Financial solutions

Sustainable and profitable business well worth the price

Dr. Klaus Miller, Member of the Executive Board

Financial solutions: a solid contributor to our bottom line

EBIT contribution 2011 - 2015

**Hannover Re
Life & Health**

EUR 1,316 m.

Financial solutions

EUR 510 m.

Risk solutions

EUR 805 m.

Longevity

EUR 102 m.

Mortality

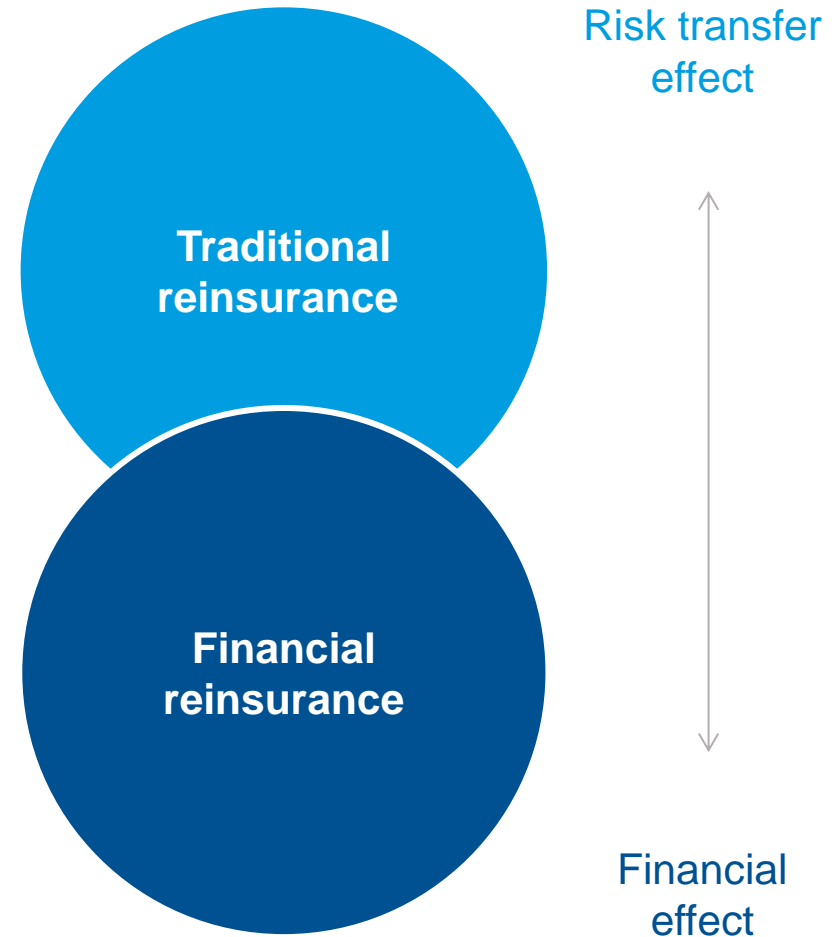
EUR 703 m.

Morbidity

Financial solutions: reinsurance transactions ...

... including transfer of biometric risks and financing components

- ▶ Financial and traditional reinsurance
 - Achieving risk transfer and financial objectives
- ▶ Traditional reinsurance
 - Transferring insurance risk to reduce the risk and volatility in the ceding company's results
- ▶ Financial reinsurance
 - Structured reinsurance agreement going beyond risk management and aiming to achieve one or more specific financial objectives for the ceding company



Financial solutions: an alternative means to access capital ...

... to pursue new business, increase capital reserves, etc.



Reinsurer's toolbox

Capital
optimisation

Easing investment
restrictions

Financing redundant
reserves

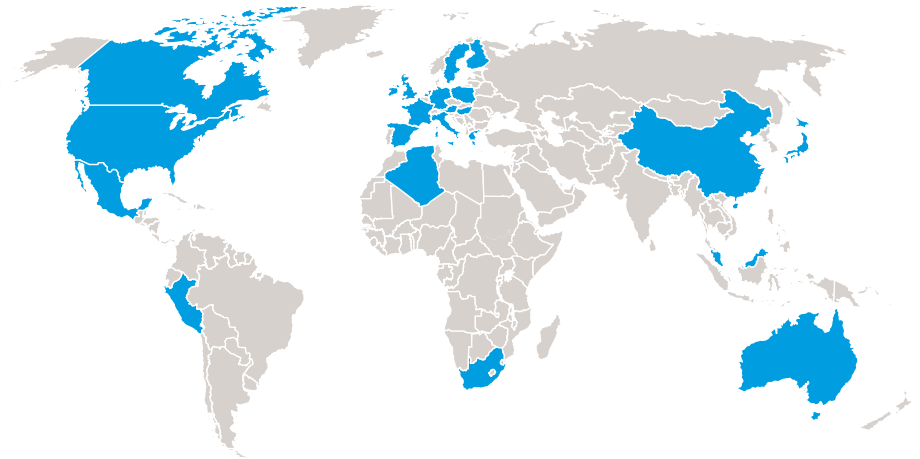
Liquidity
increase

Risk is the currency in which we get paid for our service

Our extensive track record

We have successfully facilitated structured transactions right around the world

Algeria		Italy	
Australia		Japan	
Austria		Liechtenstein	
Barbados		Luxembourg	
Bermuda		Malaysia	
Canada		Mexico	
China		Netherlands	
Finland		Poland	
France		Singapore	
Germany		South Africa	
Gibraltar		Spain	
Hong Kong		Sweden	
Hungary		United Kingdom	
Ireland		United States	



- ▶ Cash financing (acquisition costs & BATs)
- ▶ Start in Germany, UK, US followed by a worldwide roll-out
- ▶ XXX, AXXX, Solvency I relief, Solvency II, C-Ross, AG48, etc.

One important distinction: cash vs. non-cash

Depending on the client's objectives and required liquidity



Cash financing

- ▶ Transaction starts with one or more cash payments from reinsurer to ceding company
- ▶ Initial amount is recuperated in the following years (incl. reinsurer's expected margin) or not if profits are not high enough due to higher claims or lapses than anticipated



Non-cash financing

- ▶ Transaction just starts with an initial claim against the reinsurer
- ▶ Claim reduces over time if and when profits emerge: outstanding amount (if any) at the end of the agreed treaty term will be settled in cash

16.4% of total gross L&H premium

Financial solutions 2015

3.5

billion EUR

Cash financing

940

million EUR

Outstanding financing

7.3

percent

Expected rate of return

- ▶ As at 2015
- ▶ Gross figure

- ▶ As at 2015¹⁾
- ▶ 2014: EUR 961 m.

- ▶ Before costs
- ▶ Altern. RoR: 5.3%²⁾

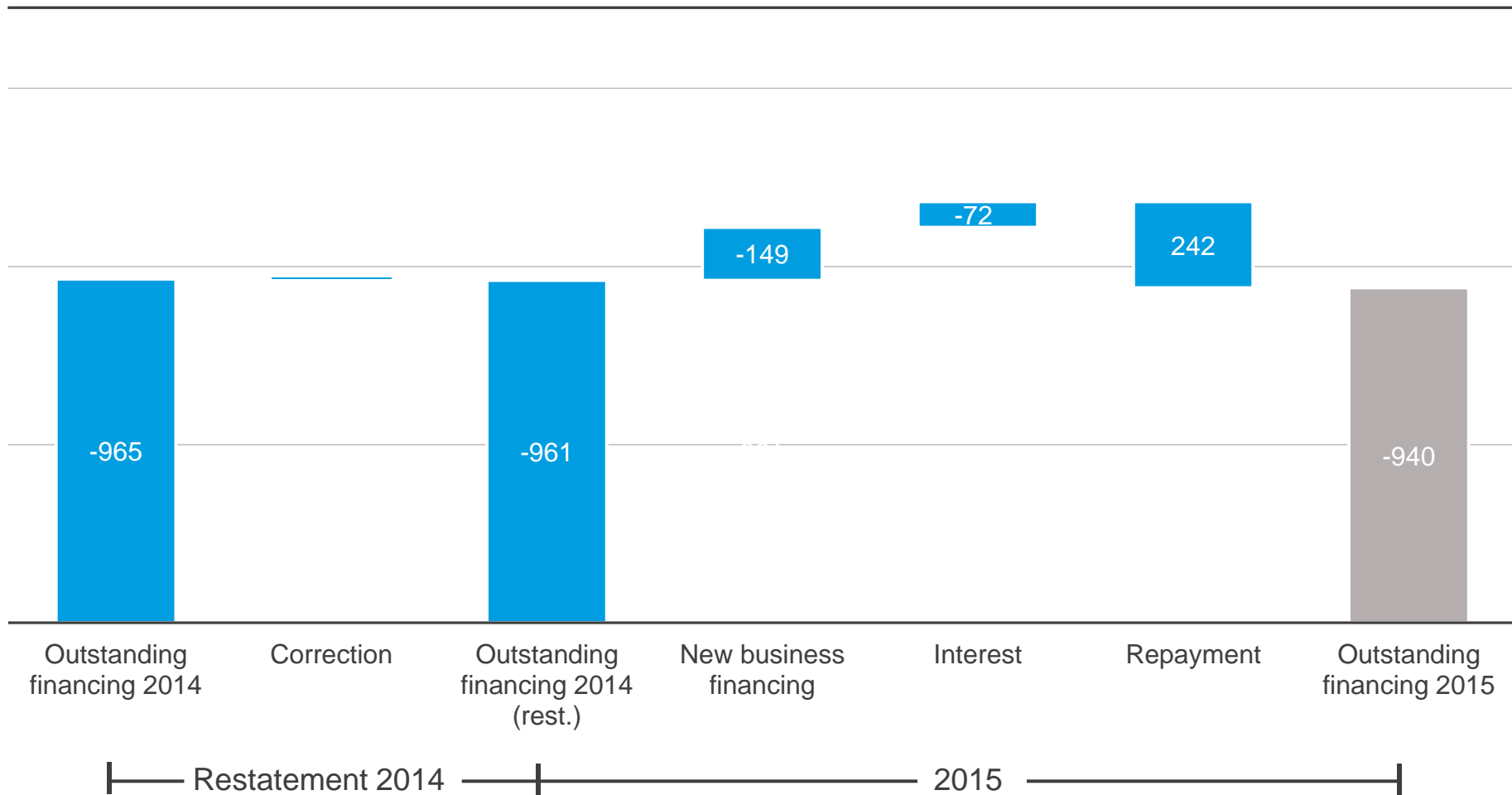
1) New business 2015: EUR 149 m.

2) Incl. failure

Same business but different markets over the years

Development of cash financing business life and health

in m. EUR



Decrease in outstanding financing (OF) of EUR 21 m.

Analysis of change for the financial year 2015

in m. EUR

Underwriting year	OF 31 Dec 2014 (rest.)	Calculated interest 2015 ¹⁾	Actual repayment 2015 ²⁾	OF 31 Dec 2015	Actual expected RoR	Alternative RoR incl. failure
≤ 2006	-147	-17	48	-116	6.63%	5.49%
2007	-8	0	1	-6	5.35%	4.61%
2008	-178	-6	19	-166	7.95%	7.73%
2009	-43	-2	23	-22	9.41%	6.54%
2010	-51	-10	28	-33	8.77%	4.43%
2011	-118	-13	55	-77	10.09%	4.28%
2012	-124	-6	30	-100	7.31%	3.92%
2013	-110	-4	7	-107	8.65%	3.30%
2014	-182	-13	32	-163	7.56%	5.24%
2015	0	0	0	-149	4.94%	4.07%
Total	-961	-72	242	-940	7.29%	5.32%

$$- 961 - 72 + 242 - 149 = - 940$$


1) Incl. change of actually expected IRR in comparison to previous year

2) Partly preliminary figures

Alternative capital sources

Financial solution repayments are subject to business performance

Financial reinsurance



Debt

Hybrid capital

Equity

Securitisation

What sets reinsurance apart:

- + Covers losses above capital provided
- + Reduces risk-based capital
- + Rapid implementation
- + Low transaction cost
- + Low minimum size

Individual life insurance financing landscape

A general timeline of the past 15 years in the US

Recent evolution capital financing

● 2000 - 2005
Life financing
via coinsurance

● 2005 - 2007
Captives fund
XXX reserves
within the capital
markets via
securitisations

● 2008
Financial crisis:
funded structures
become very
difficult to execute

● 2009 - 2010
Regulators open to
alternative financing
solutions

Banks offer
conditional LOC
solutions but need
to hedge risks

● 2011 - 2014
Increased use of
captive structures
and varying forms
involving unfunded
structures

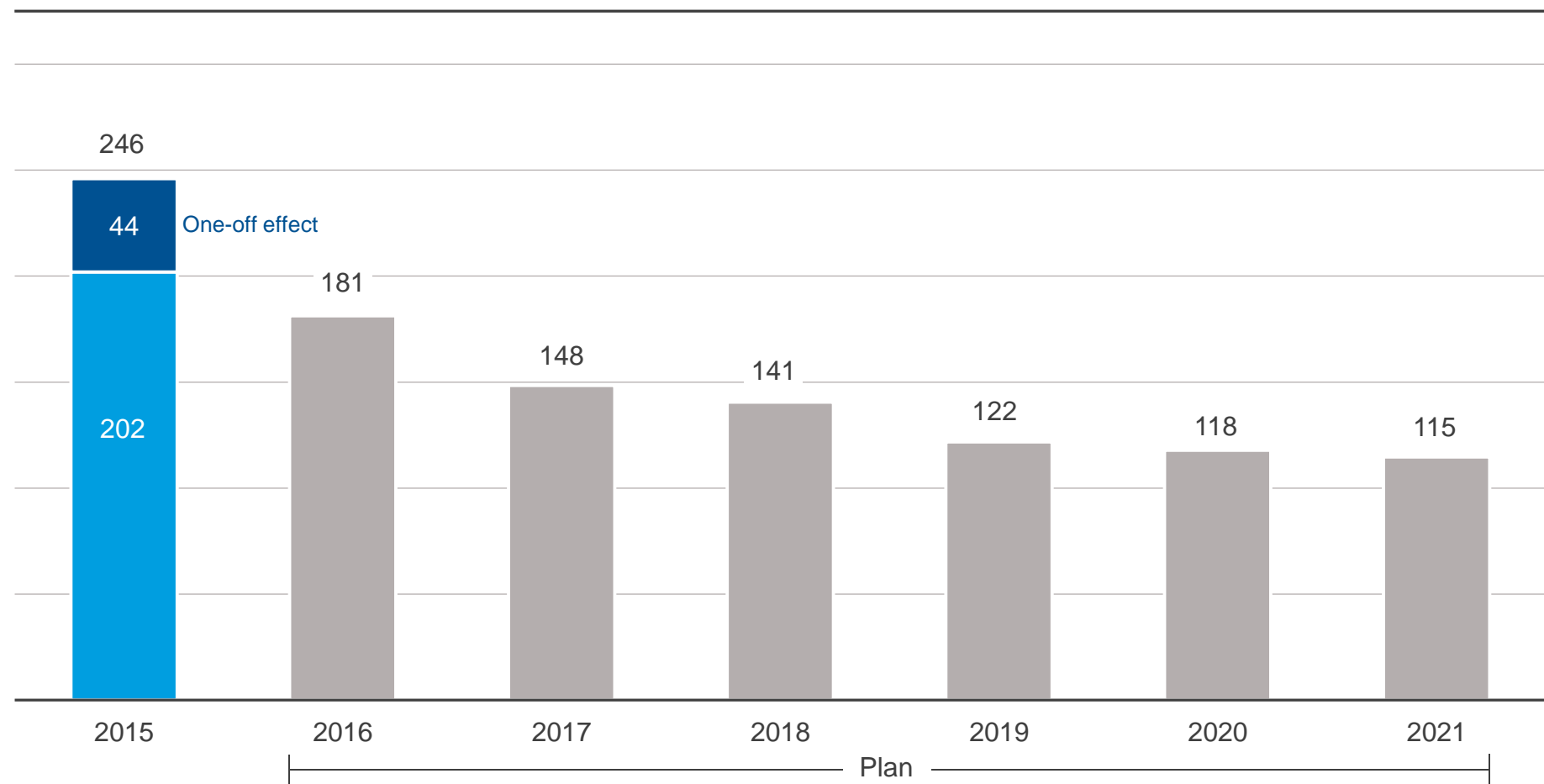
● Going forward
AG48 will provide
extra guidance:
use of captives
and alternative
forms of capital
financing

Development of in-force US financial solution business

Spike in 2015 due to one-off effect

Run-off profits of current in-force block

in m. USD



No new business or renewals, before internal expenses

Hannover Re is 4 x "best in class by transaction type"

Reinsurer capability differentiation, US only 2015

Company	XXX	AXXX	Surplus relief	RBC	EV monetisation	Cash financing	Cont. capital
Hannover Re	48%	43%	18%	15%	3%	8%	3%
Peer 1	40%	23%	13%	13%	5%	5%	✗
Peer 2	15%	13%	3%	3%	✗	3%	✗
Peer 3	18%	20%	18%	20%	3%	3%	5%
Peer 4	✗	✗	✗	3%	✗	3%	✗
Peer 5	3%	✗	✗	✗	✗	✗	✗
Peer 6	8%	✗	3%	✗	✗	✗	✗
Peer 7	✗	3%	3%	✗	3%	3%	✗
Peer 8	✗	✗	✗	✗	5%	✗	✗

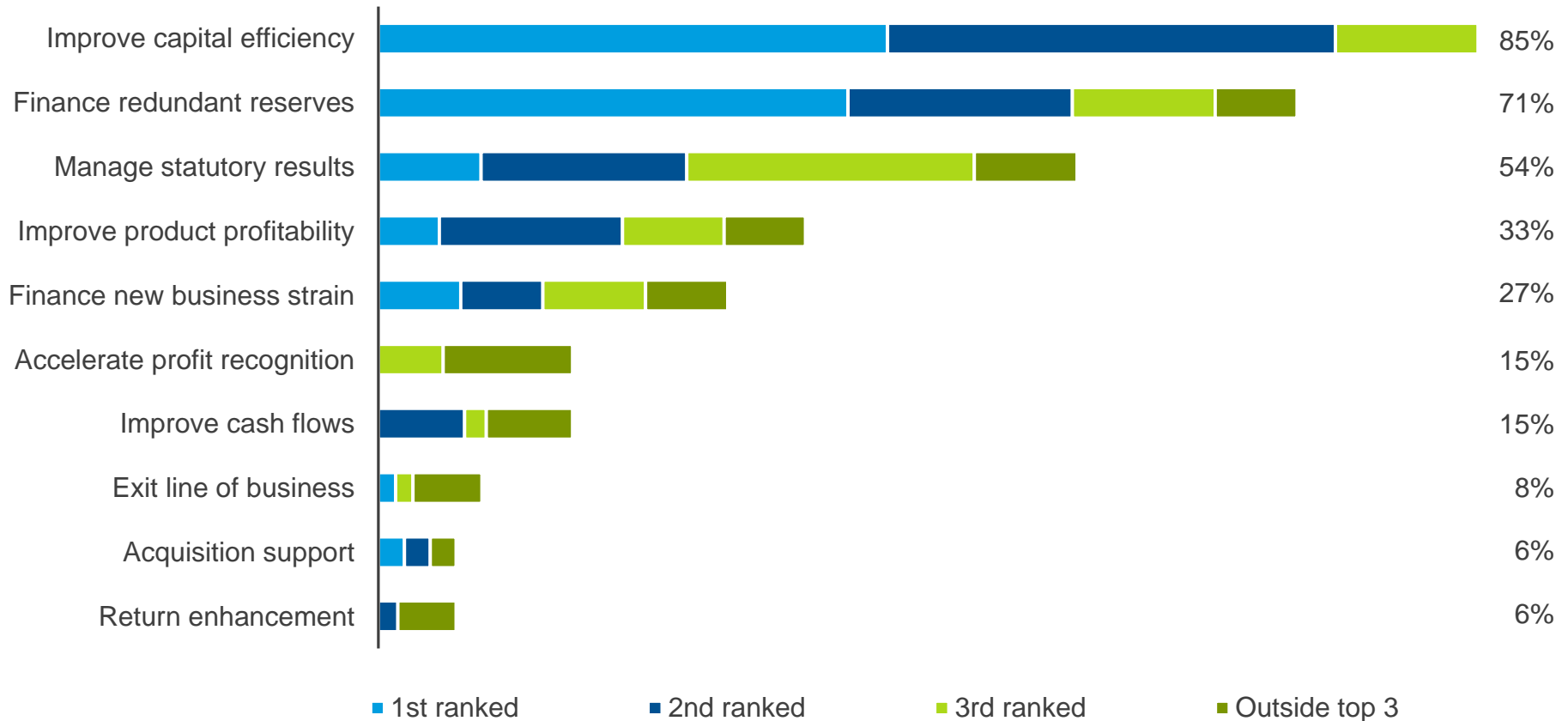
Source: NMG survey; ✗ = no citations

Percentages represent the total number of 'Best in Class' nominations for each reinsurer divided by the total number of respondents who answered this question.

Main motivation: improvement of capital efficiency

Structured financial solution usage, US only 2015

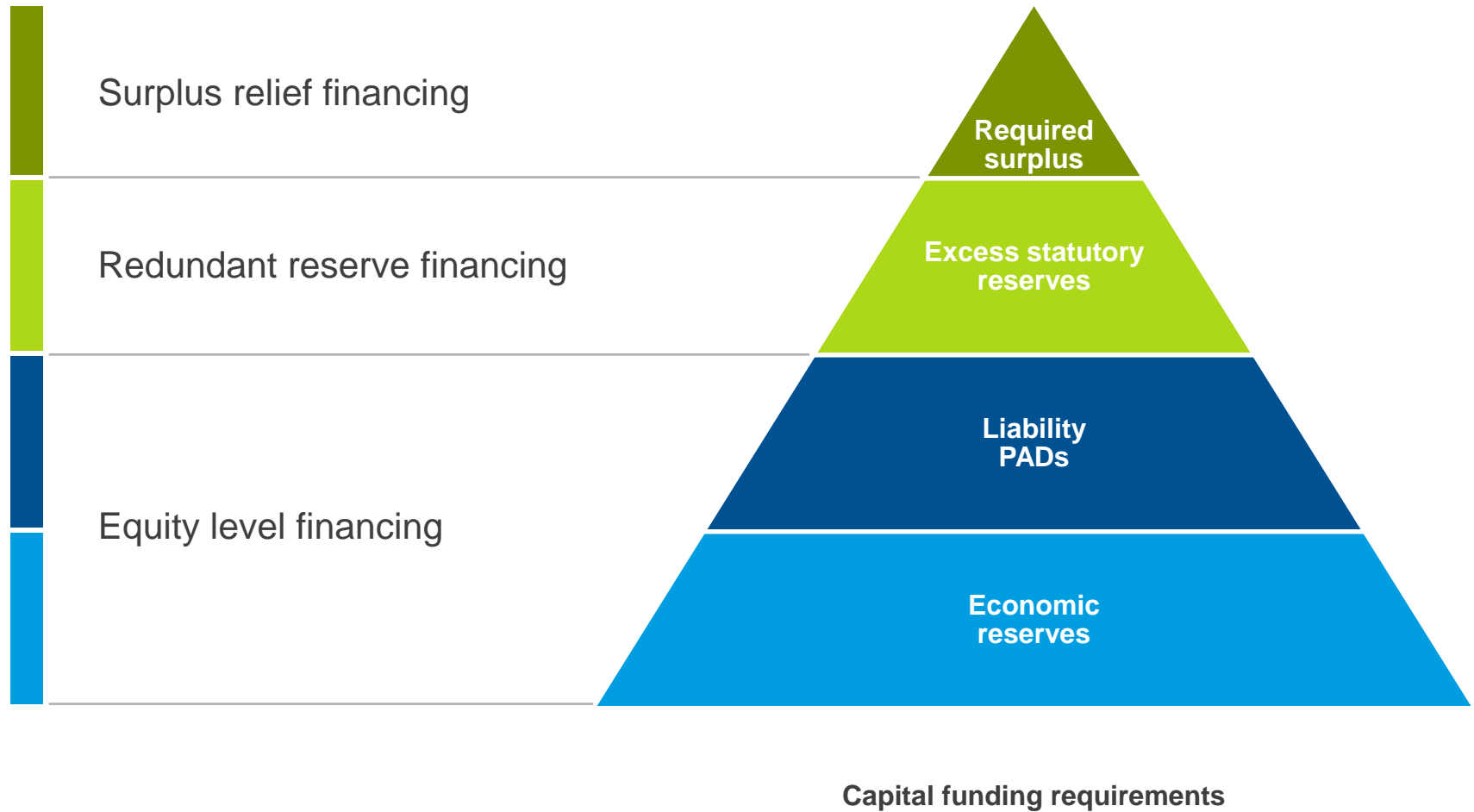
All respondents



Source: NMG survey
Only factors cited by more than one key decision maker are shown

Capital funding has varying costs

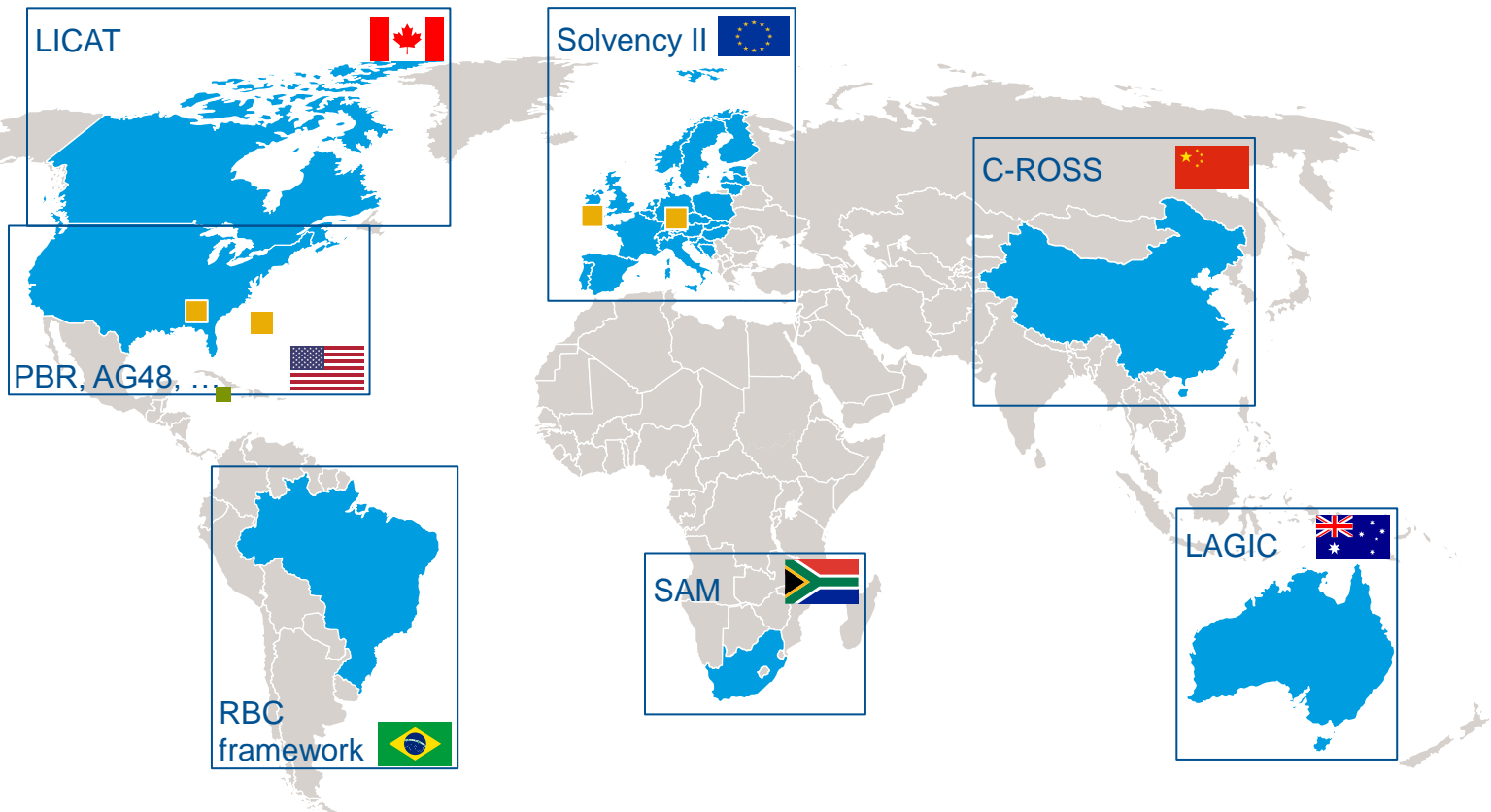
Asset subordination view



Maslow's hierarchy of needs

Business opportunities in a dynamic global environment

Our clients benefit from our deep knowledge of local markets and regulations



■ Hannover Re entities with special financial solutions expertise and offerings (Bermuda, Germany, Ireland, USA)

AG: Actuarial Guideline

C-ROSS: China Risk Oriented Solvency System

LAGIC: Life & General Insurance Capital Standards

LICAT: The Life Insurance Capital Adequacy Test

PBR: Principle-Based Reserving

RBC: Risk-Based Capital

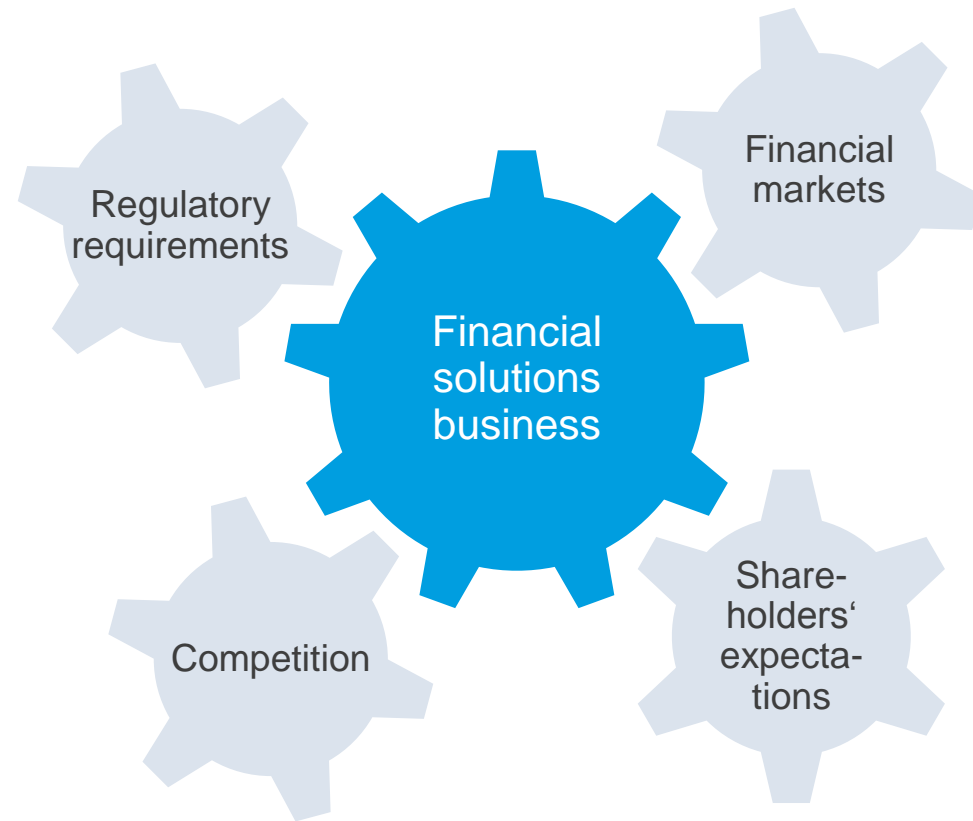
SAM: Solvency Assessment and Management

We are confident about the further development

Biggest “threats”:

- ▶ Financial markets become predictable and stable
- ▶ Shareholders are happy with lower RoEs
- ▶ Competition decreases (FinTechs never take off)
- ▶ Regulators relax their requirements significantly

↳ Not the most likely scenario



A success story with a promising future

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