Capital Management in a Solvency II World & the Role of Reinsurance

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SCOR

Overview – Why I Focus today on Capital Management?

Reminder – key objectives of Solvency 2

Improved consumer protection: It will ensure a uniform and enhanced level of policyholder protection across the EU. A more robust system will give policyholders greater confidence in the products of insurers.

Modernised supervision: The "Supervisory Review Process" will shift supervisors' focus from compliance monitoring and capital to evaluating insurers' risk profiles and the quality of their risk management and governance systems.

Deepened EU market integration: Through the harmonisation of supervisory regimes.

Increased international competitiveness of EU insurers

Effective Capital Management must sit at the very center of our businesses if we are to satisfy all our stakeholders:
Customers, Regulators & Shareholders

Capital Management in a Solvency II world & the role of Reinsurance

1	(Re)Insurers are increasingly becoming capital-driven companies
2	Setting the risk appetite framework is a prerequisite for defining an insurer's capital strategy
3	Internal models are driving a revolution for capital optimization
4	Reinsurance is a strategic tool in the capital management tool box of insurance companies

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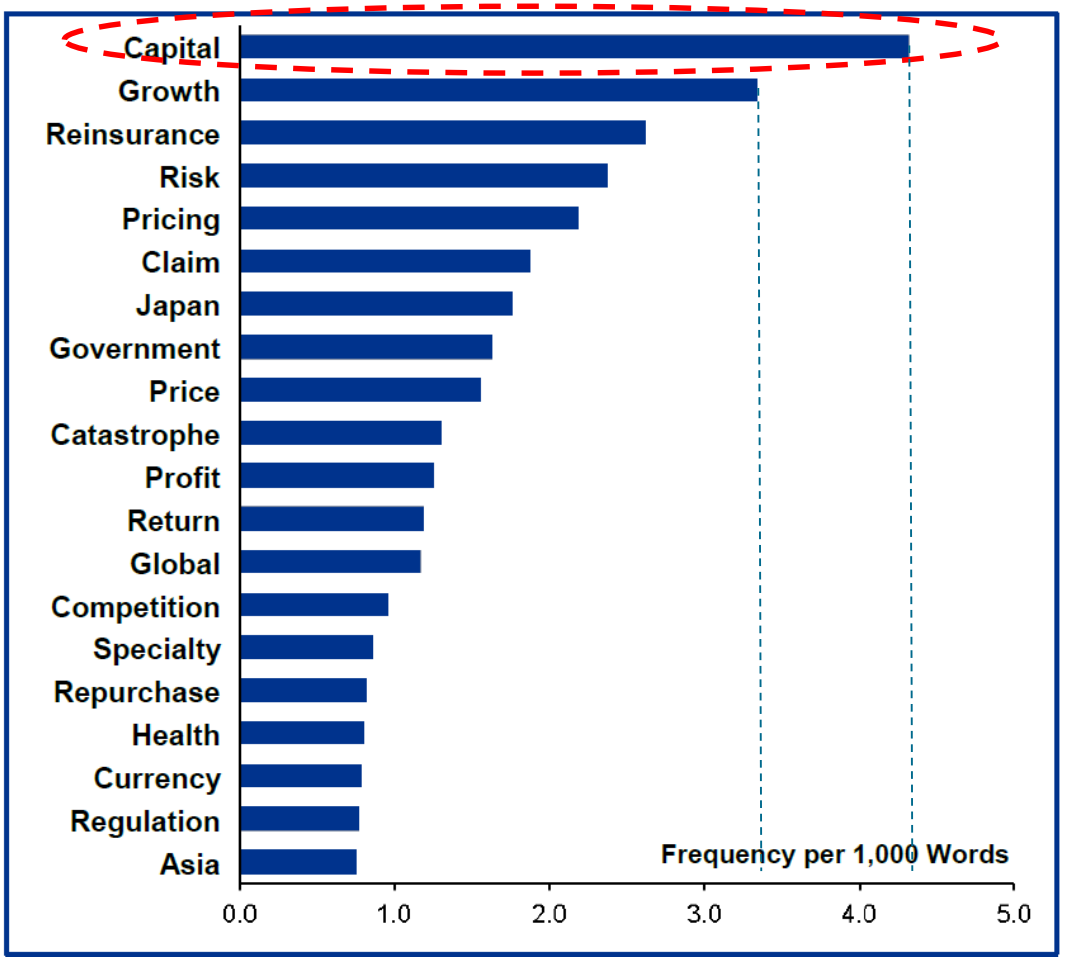
What is on our industry leaders' minds?
Capital is by far the biggest issue

Selected word frequency from H1 2014 results transcripts



Source: Aon Benfield. Based on a sample of 12 insurers and 8 reinsurers

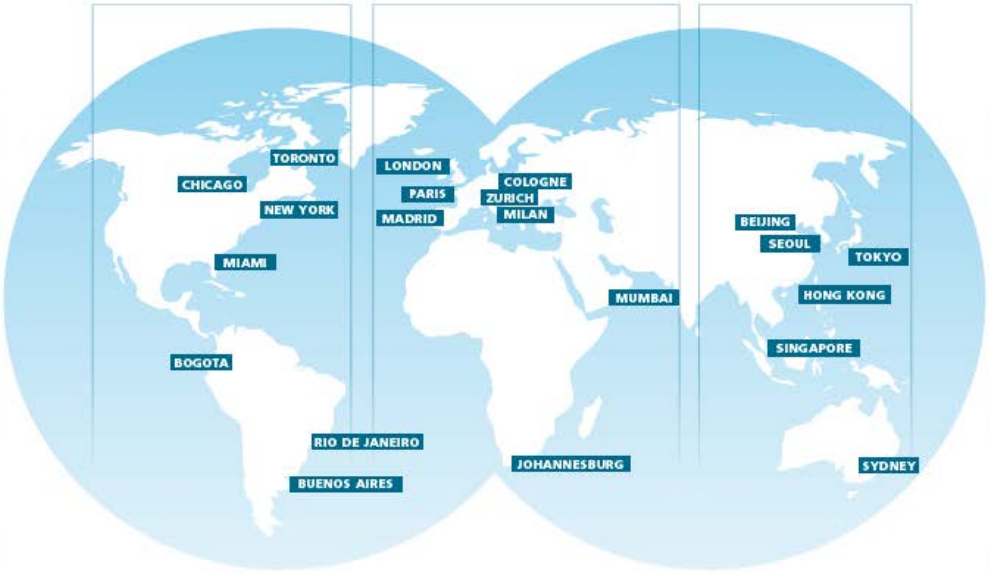
As regulatory pressures intensify, capital management becomes more complex for global (re)insurers

Capital stakeholders for a (re)insurance company

- Regulators
- Rating agencies
- Capital markets (equity, bonds, ILS)
- Clients

Asset side capital events

- Economic & Financial Crisis
- Deleveraging
- Low yield environ-ment
- Inflation / Deflation

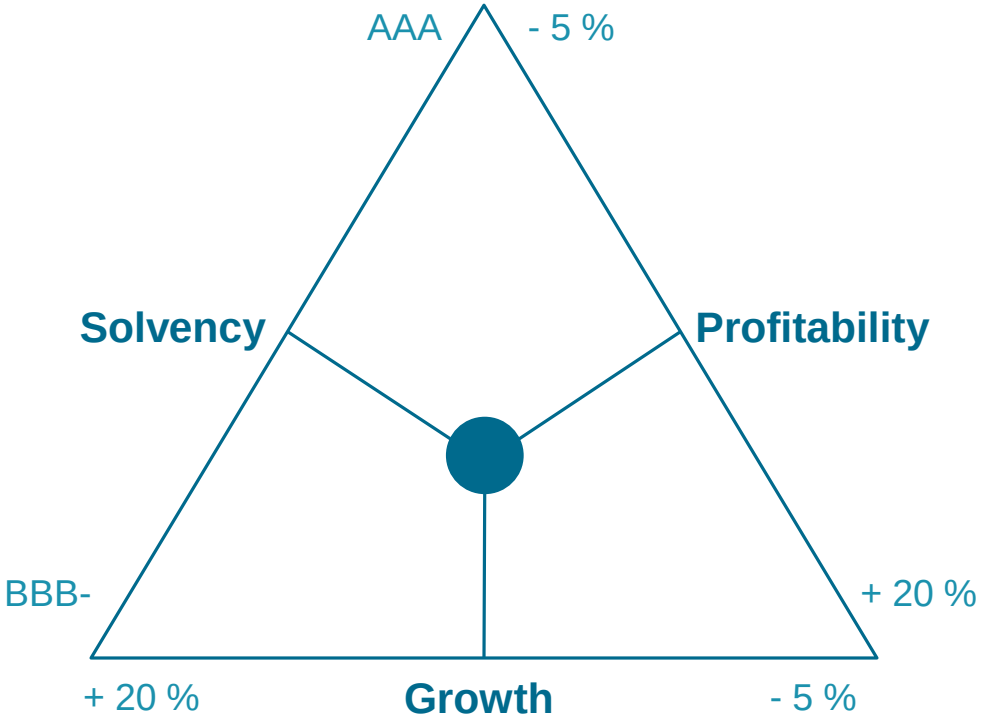


SCOR's worldwide network of entities

Liability side capital events

- Major Claims
- Emerging Risks
- Model Changes
- Inflation / Deflation

Capital stands at the confluence of seemingly conflicting objectives



Managing the capital of a (re)insurance company is all about optimizing under constraints

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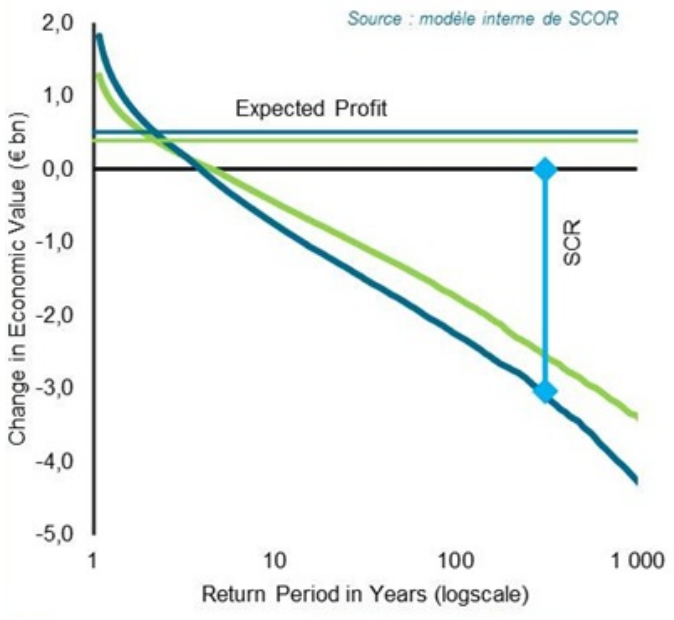
It all starts with the definition of an insurer's risk appetite

- An insurer's risk appetite defines the risks it will and will not take
- Risk appetite is personal and business specific

- Setting the risk appetite framework comes within the competency of the board

Profitability according to risk scenarii depends on risk appetite



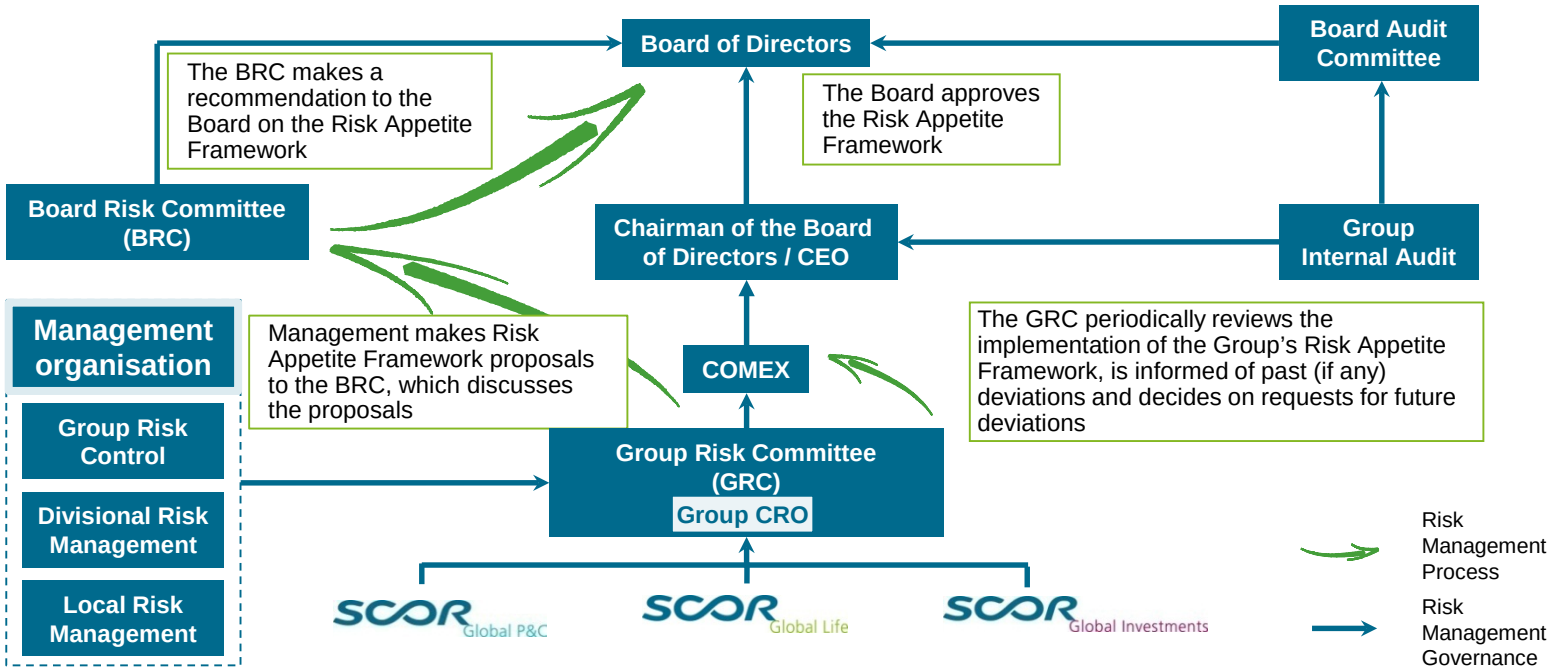
- A higher risk appetite leads to a higher profitability gap between favourable and adverse scenarios
- The blue curve corresponds to a higher risk appetite than the green one

Risk management is at the heart of an insurer's decision making

Strong governance, processes and controls support risk management

- The Management and the Board should be deeply involved in steering the Group's risk profile
- The risk appetite framework should be continually evolving to enhance management of risk and capital

The risk appetite framework is embedded in SCOR's decision making



SCOR's Risk Appetite Framework is an integral part of its strategic plan

	"Optimal Dynamics"	
Risk appetite	❑ A mid-level risk profile (after hedging) with a focus on the belly of the risk distribution, avoiding exposure to extreme tail events, but aligned with the increased size, diversification and capital base of the Group ❑ Volatility is controlled through diversification and Capital Shield Strategy	
Risk preferences	❑ Business focus on selected reinsurance risks ❑ Most mainstream insurance risks covered in Life and P&C, with a recalibration reflected in an increase in longevity risk and a slight increase in Nat Cat risk ❑ Low appetite for interest rate risk (at least in the short term) and no appetite for operational risk, clients' asset risk, financial D&O[1], GMDB[2] new business	
Risk tolerances	**Solvency target**	**Capitalization level** SCR, Buffer capital and flexible solvency target driving a process of gradual escalation and management responses
	System of limits	**Risk drivers *(probabilistic)*** Post-tax net 1:200 annual aggregate loss for each risk driver ≤ 20% Available Capital
		Extreme scenarios *(probabilistic)* Post-tax net 1:200 annual per-event loss for each risk ≤ 35% Buffer Capital
	Limits per risk in the underwriting and investment guidelines	
Footprint scenarios	Impact assessment of **past events (deterministic)**	

1) *Directors and Officers liability insurance*
2) *Guaranteed Minimum Death Benefit*

Risk driver losses are monitored to stay below the 20 % available capital limit that SCOR sets to itself

1) *Data is given for illustrative purposes and is not on scale*

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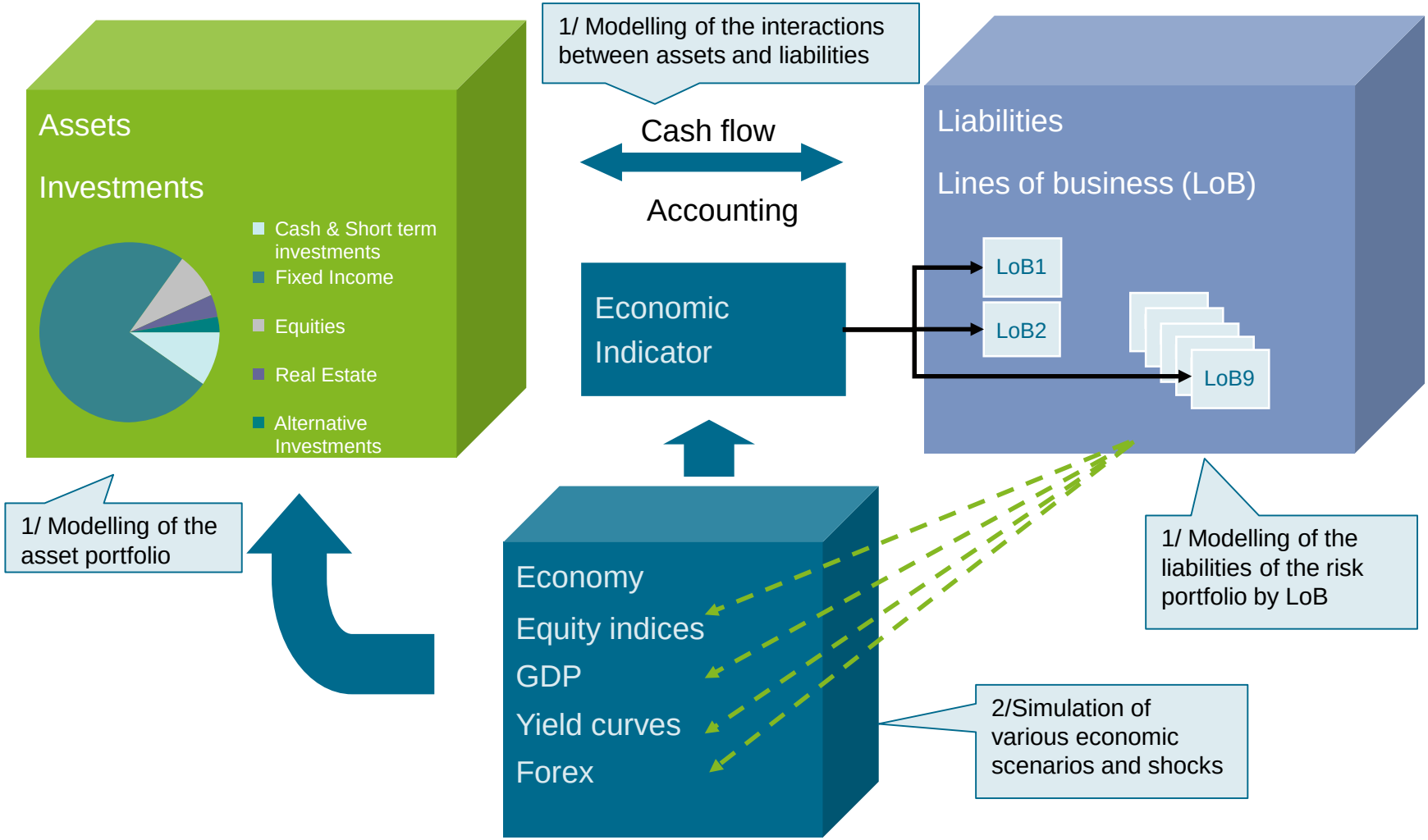
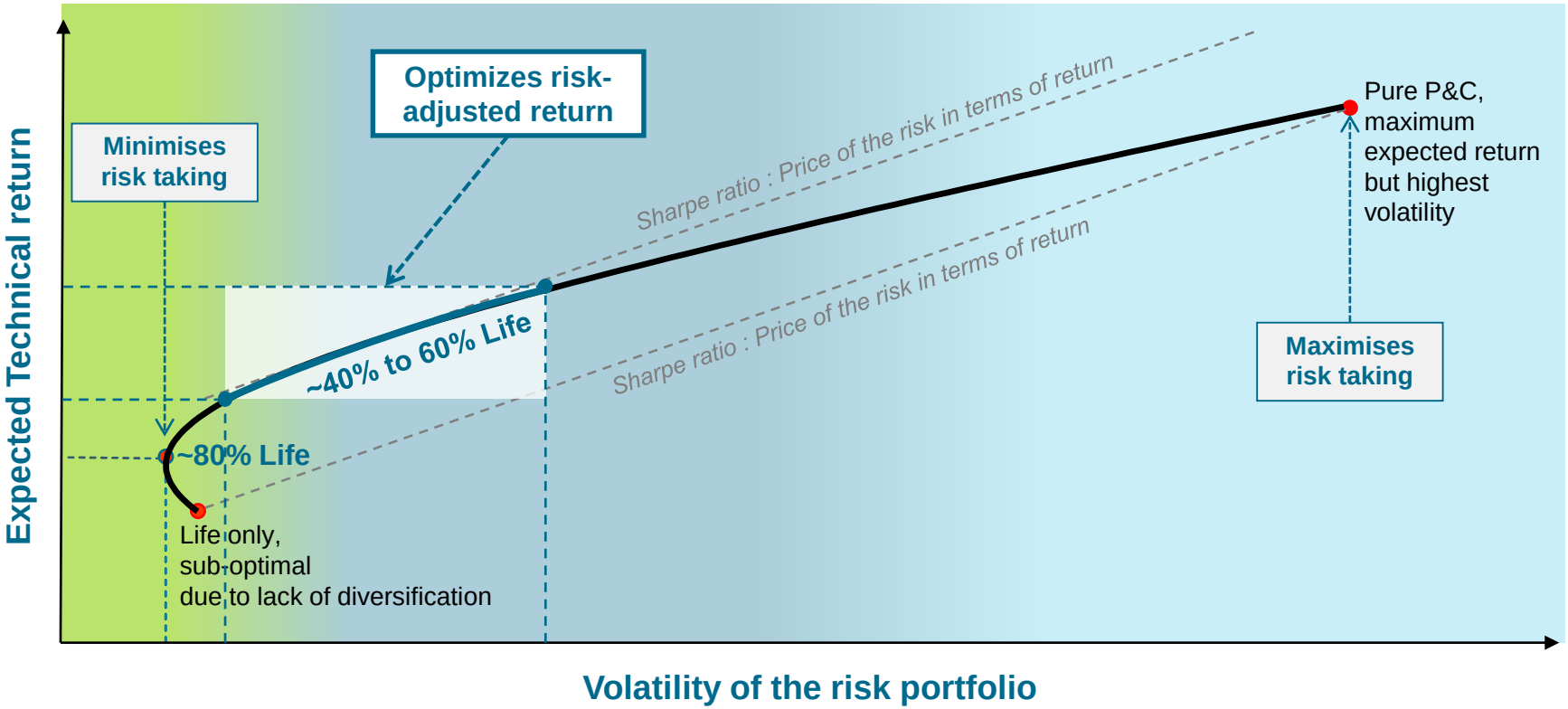
The revolution of Internal Models



SCR = VaR 99,5%, i.e. amount of capital needed to absorb losses by the end of the year with a 99,5% probability

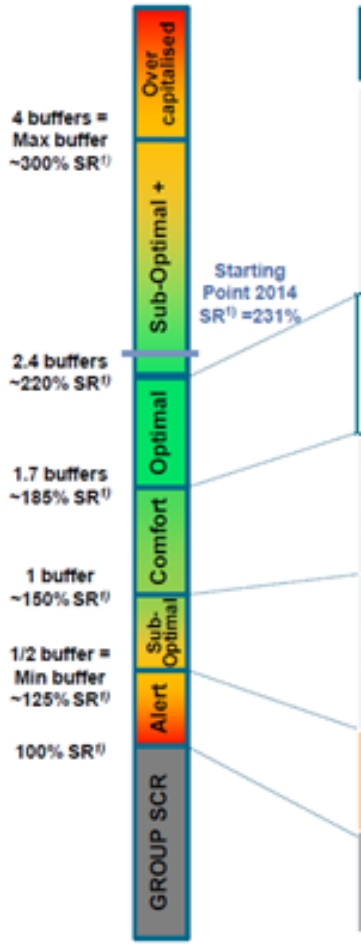
Diversification effects enable to maximize the risk/return ratio



Stylized representation of the expected technical return and volatility of the portfolio of a multi-line reinsurer as a function of the relative weights of P&C and Life business

Steering the Solvency Ratio
– an example for discussion from our 2014 IR materials

- The management responses reflect the dynamic process which enables SCOR to steer its risk and capital positions towards the optimal area.



Action	Possible management responses (examples)	Escalation level
Redeploy capital	✓ Consider special dividends ✓ Consider acquisitions ✓ Buyback shares / hybrid debt ✓ Increase dividend growth rate ✓ Reconsider risk profile, including capital shield strategy ✓ Enlarge growth of profitable business	Board/AGM
Fine-tune underwriting and investment strategy	✓ Permanent check and optimization to remain in the optimal zone	Executive Committee
Re-orient underwriting and investment strategy towards optimal range	✓ Improve selectiveness in underwriting and investment ✓ Improve the composition of the risk portfolio ✓ Optimize retrocession and risk-mitigation instruments e.g. ILS ✓ Consider securitizations	Executive Committee
Improve efficiency of capital use	✓ Issue hybrid debt ✓ Reduce and / or issue stock dividends ✓ Reconsider risk profile, including more protective capital shield ✓ Slow down growth of business ✓ Consider securitizations	Board/AGM
Restore capital position	✓ Consider private placement / large capital relief deal ✓ Consider rights issue (as approved by the AGM) ✓ Restructure activities	Board/AGM
Below minimum range - submission of a recovery plan to the supervisor[2]		Board/AGM

1) *The 2014 solvency ratio is available capital at year-end 2013 divided by the SCR as of that date, allowing for planned business in 2014*
2) *When Solvency II comes into force - Article 138 of the Solvency II directive. Subject to approval of SCOR's internal model for use under Solvency II. It is expected that applications for approval can be made beginning in April 2015*

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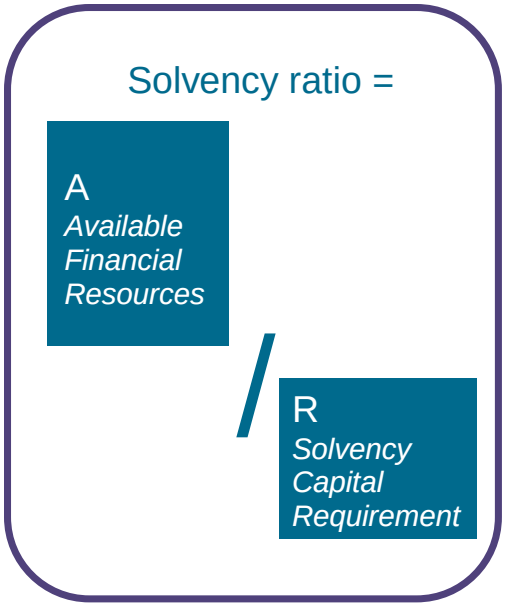
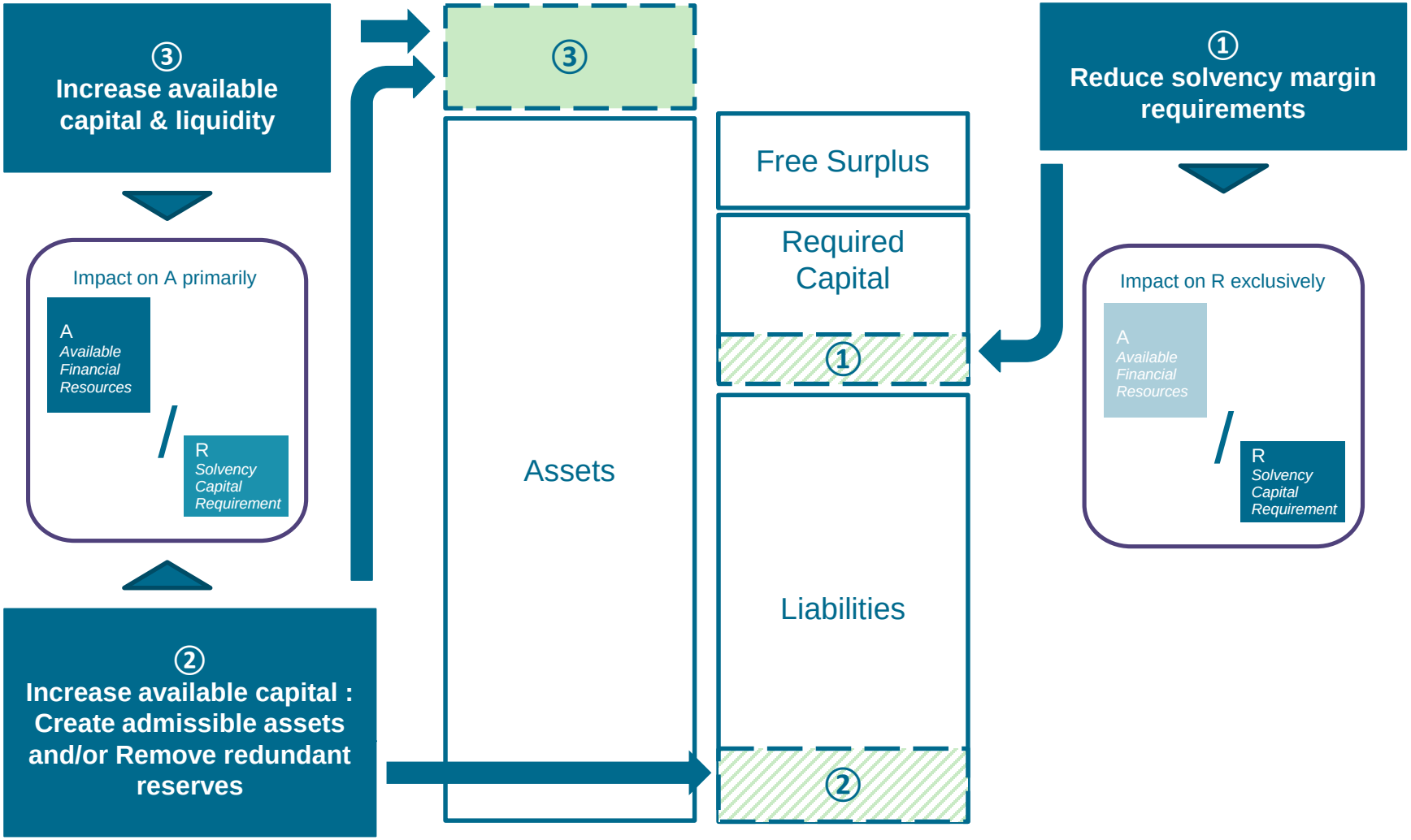
Reinsurance is an efficient steering tool for the solvency ratio

- **Reinsurance can contribute to a Solvency Ratio enhancement through**
  - **An increase of the available resources**
  - **Or a reduction of the required capital**
  - **Or both**

- **Reinsurance provides an overall Solvency Ratio protection / immunization against adverse deviations**



Reinsurance is an efficient steering tool for the solvency ratio



Reinsurance is an efficient steering tool for the solvency ratio

1 Reduce Solvency Margin Requirement

- Solutions aiming to
  - Release solvency requirement
  - Improve risk diversification
  - Improve profitability indicators
- Solutions most often applied to capital intensive blocks

Structures

- Wide range of solutions varying from simple structures (quota-share) to more sophisticated structures (stop-loss)

2 Increase Available Capital / Create admissible asset and/or Remove redundant reserve

- Solutions aiming to
  - Remove redundancies, conservatism from reserving requirement
  - Improve profitability indicators
  - Transform inadmissible / intangible assets into admissible assets
- Solutions most often applied to long-term business with stringent reserving rules

Structures

- Wide range of solutions varying from simple structures (quota-share) to more sophisticated structures (stop-loss)

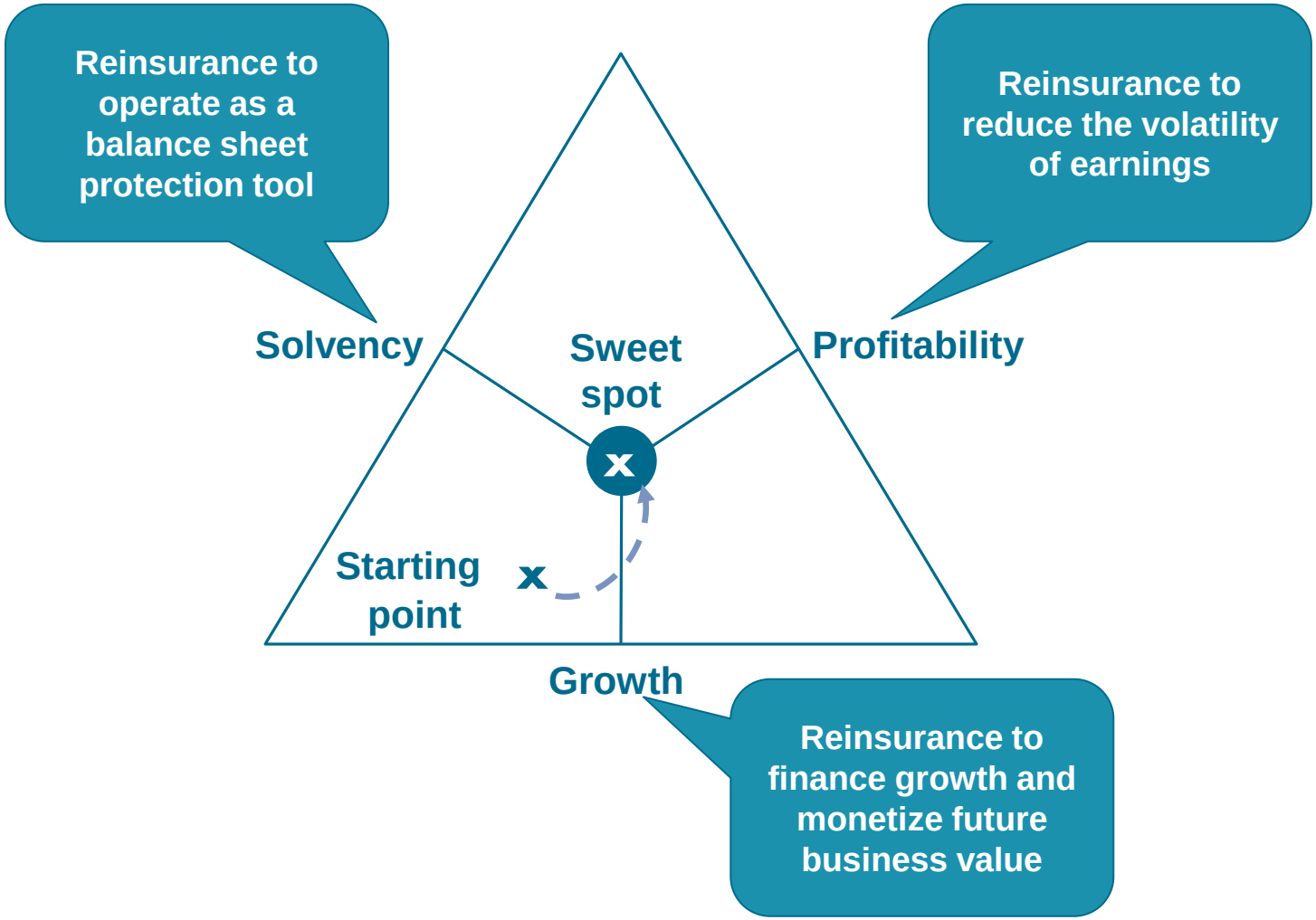
3 Increase Available Capital & Liquidity

- Solutions aiming to
  - Provide capital and Cash
  - Transform inadmissible / intangible assets into admissible / tangible assets
- Solutions most often applied to long-term business

Structures

- VIF monetization
- New Business financing solutions

When solving the equation, reinsurance therefore represents a strategic capital management tool for insurers

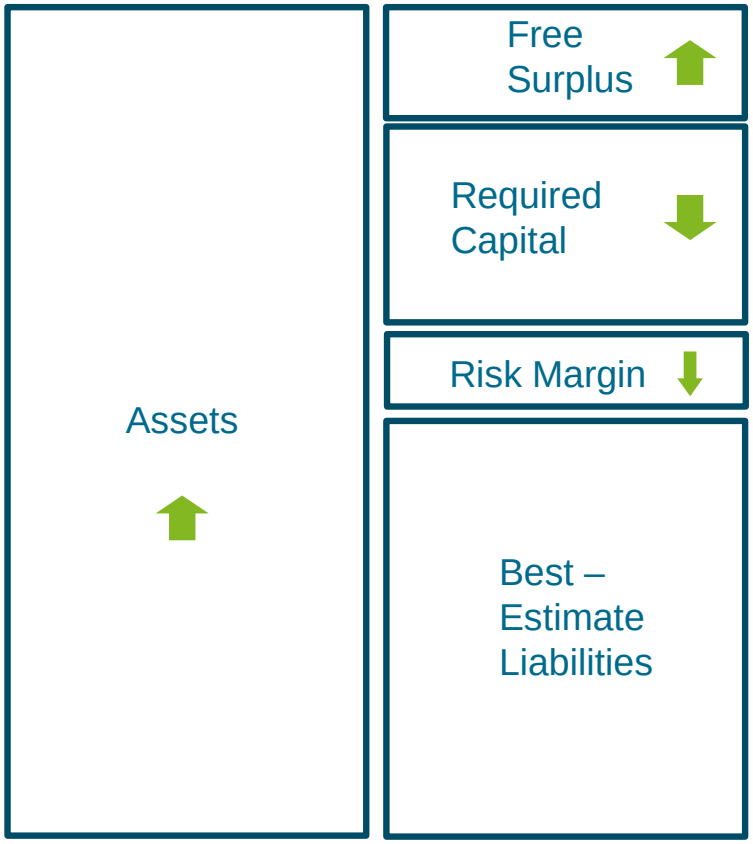


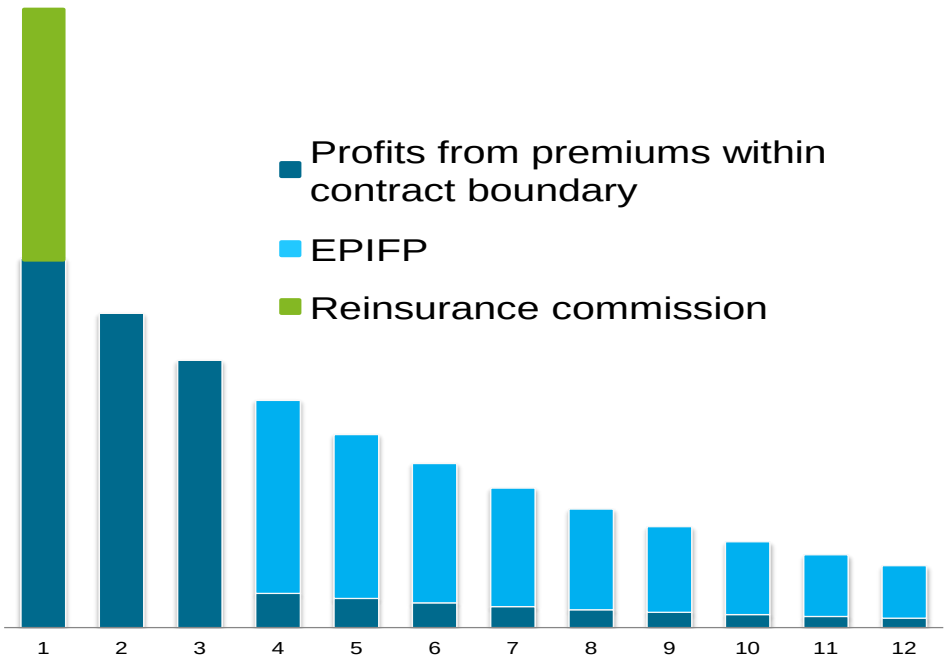
How SCOR's Financial Solutions can help

Objective	Solutions
Mitigate redundant capital	▪ Quota-share ▪ Stop-loss ▪ Tailor-made solutions depending on the risk profile
Reduce longevity risk exposure	▪ Longevity swap
Alleviate contract boundaries constraint	▪ "VIF extension"
Reduce market risk exposure	▪ Contingent capital solutions ▪ Tailor-made solutions
Manage balance-sheet volatility	
Enhance risk diversification benefits / Improve biometric risk exposure	▪ Fee-based quota-share ▪ Retrocession / Co-reinsurance
Enhance geographical diversification benefits	▪ Risk pooling
Enhance capital fungibility	▪ Reserve relief ▪ Solvency relief ▪ VIF monetization ▪ Tailor-made solutions
M&A financing / Market entry / NB financing	▪ VIF monetization ▪ NB financing

"VIF extension"
Recognition of VIF beyond Solvency II contract boundaries

Impact illustration



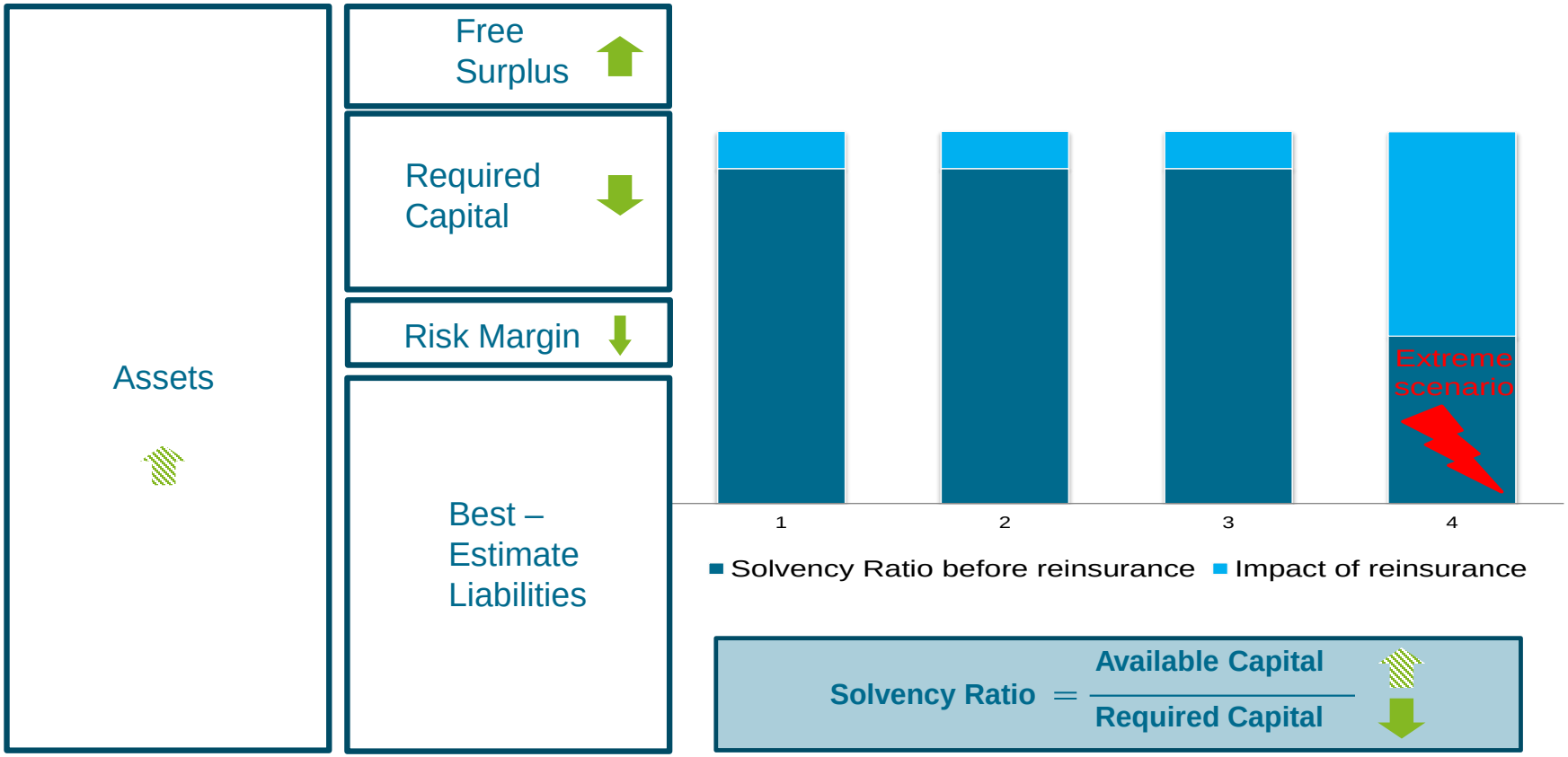


$$\text{Solvency Ratio} = \frac{\text{Available Capital}}{\text{Required Capital}}$$

- Reinsurance commission increases assets
  - *There is also a slight decrease due to cession of profits within contract boundaries*
- Required capital and risk margin slightly decrease as arrangement offers protection against adverse deviations within contract boundaries
  - *There is also a slight increase in required capital due to counterparty risk introduced by reinsurance contract*

Contingent "VIF monetization"
Protection against adverse scenarios

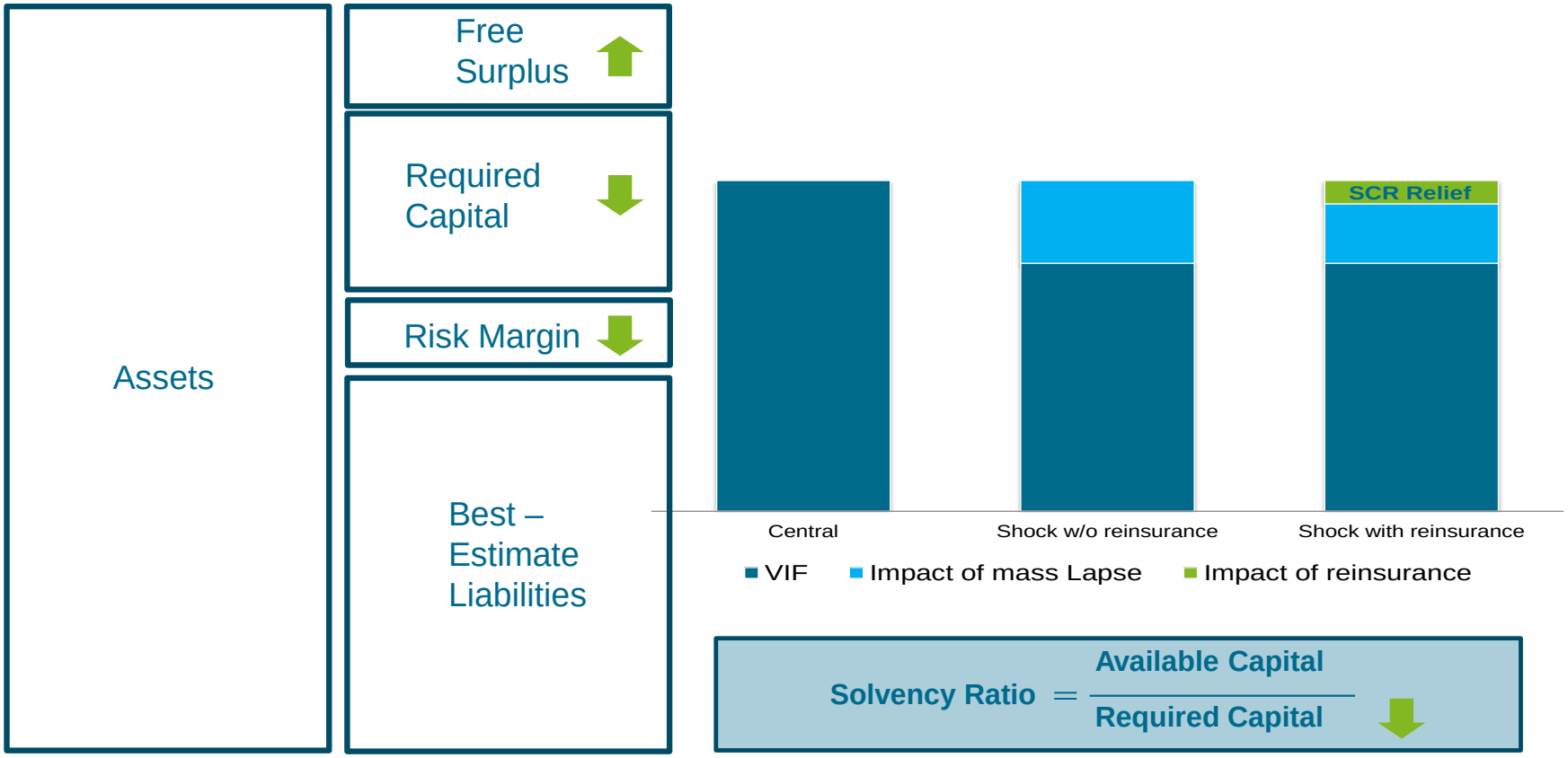
Impact illustration



- Assets increase by the reinsurance commission when option is exercised
  - *Some marginal negative impact from reinsurance costs*
- Required capital and risk margin decrease provided the treaty is triggered under scenarios covered by Solvency II
  - *There is also a slight increase in required capital due to counterparty risk introduced by reinsurance contract*

“Mass-Lapse Stop-Loss”
Protection against mass lapse risk

Impact illustration



- No material impact on assets
  - *Some marginal negative impact from reinsurance costs*
- Required capital decrease as the structure aims to capture SII shock
- Risk margin slightly decrease. Impact will depend on the duration of the coverage.

Quota-share
Comprehensive coverage

Impact illustration

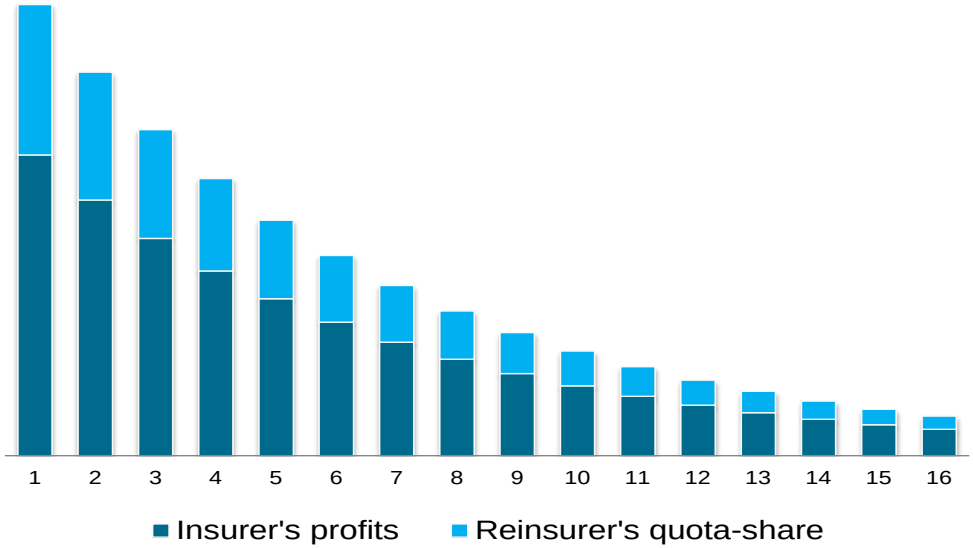
Assets

Free Surplus

Required Capital

Risk Margin

Best – Estimate Liabilities

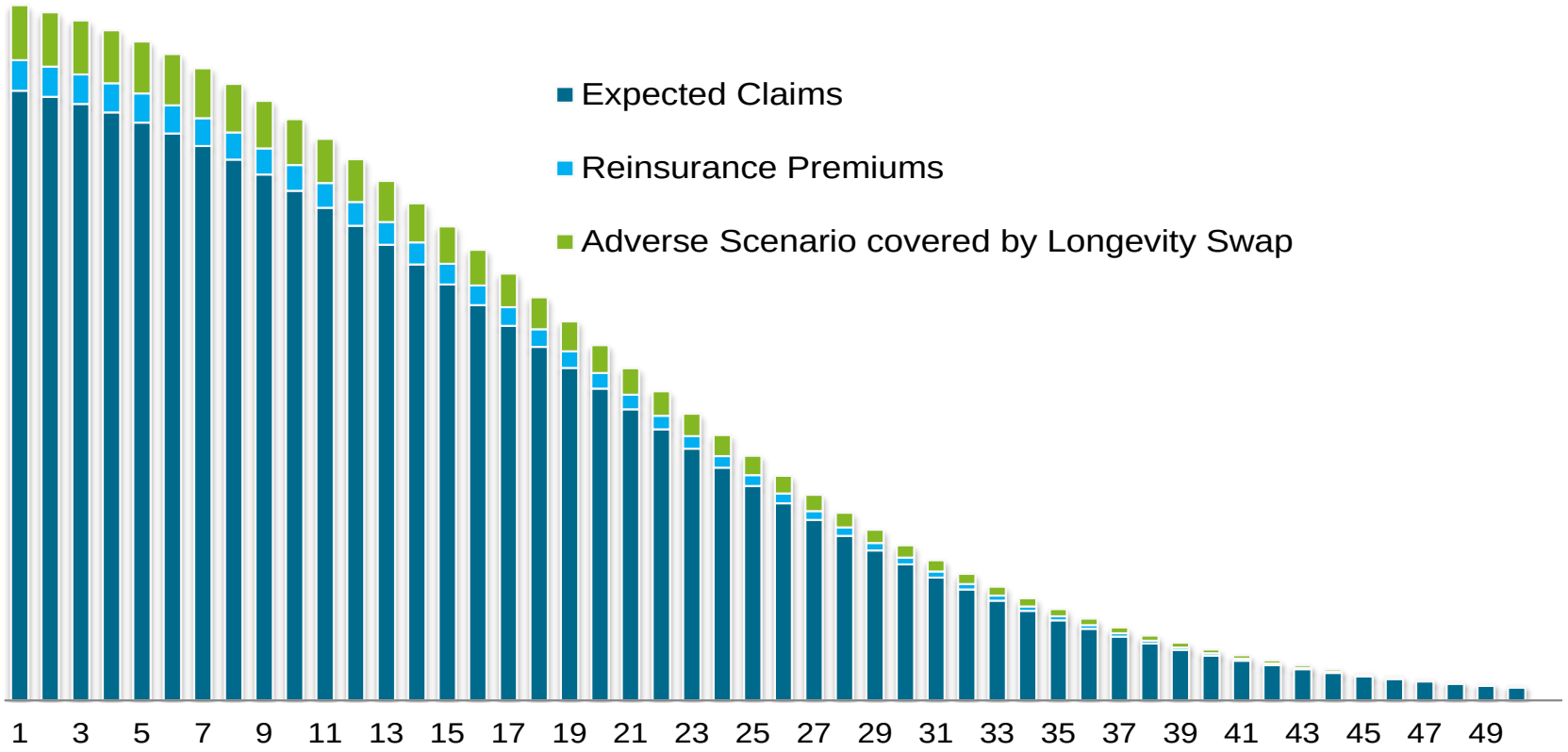


$$\text{Solvency Ratio} = \frac{\text{Available Capital}}{\text{Required Capital}}$$

- Assets are reduced by ceded profits and reinsurance costs
  - *Some mechanisms can be added (eg. profit sharing) to reduce profit cession*
- Required capital and risk margin reduce proportionally

Longevity Swap
reduce longevity exposure

Transaction structure



Under a longevity swap, the reinsurer covers actual claims (= variable leg) and cedant pays expected claims and reinsurance premiums (= fixed leg)

Conclusion – Why I Focused today on Capital Management?

Reminder – key objectives of Solvency 2

- Improved consumer protection
- Modernised supervision
- Deepened EU market integration
- Increased international competitiveness of EU insurers

Effective Capital Management means that:

- (Re)Insurers are increasingly becoming capital-driven companies
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Questions ???

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