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making financial sense of the future

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Current issues in general insurance
P. Claude Lefebvre, FCAS, FCIA, MAAA



Capital – Reinsurance Strategy Under Solvency II

12 May 2011

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Agenda

- Basics and Objectives of Solvency II
- Standard Formula or Internal Model – QIS5 Results
- Reinsurance and Capital Management
- Counterparty Risk
- Final Remarks

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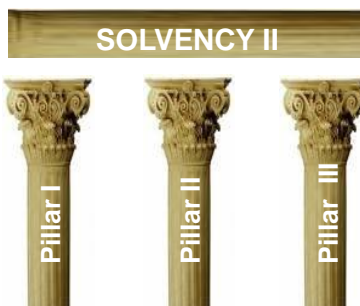
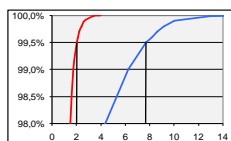
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Basics and Objectives of Solvency II

Solvency II – The Basics

Capital Requirements

- Internal Model
- Standard Formula (QIS5)



Governance and Risk
Management

Transparency
and Disclosure



Solvency II

Objectives and The Realities

- An ambitious undertaking
- Politically charged
- IFRS and Basel II
- Widely criticised
- Significant undertaking
- Work in progress

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Solvency II – Capital and Risk Management

- Pillar 1 – Focus on underwriting and counterparty risk



- Pillar 2 – Implement capital management framework

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Standard Formula or Internal Model – QIS5 Results

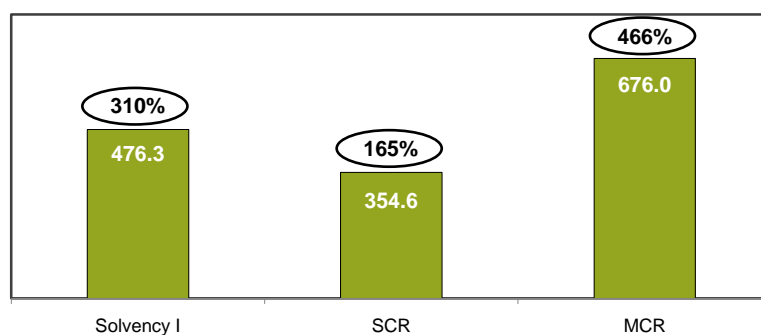
QIS5 Results

Overall Surplus and Requirements – Solo Entity Level



EIOPA Report on the fifth
Quantitative Impact Study (QIS5)
for Solvency II

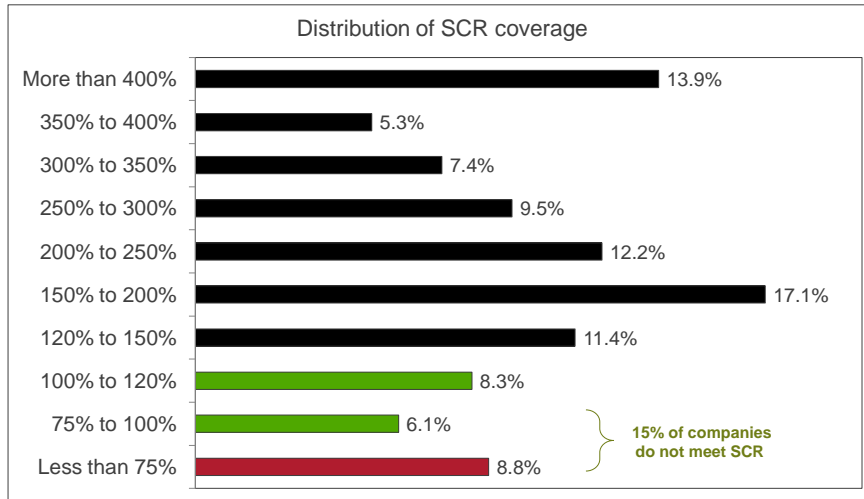
Solvency I and QIS 5 Surpluses (in €bn)



Surplus: Eligible Own Funds in excess of Capital Requirements

Coverage Ratio: Eligible own funds / Capital Requirement

Solvency II – QIS5 Study



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Solvency II – QIS5 Study

No apparent need for
a great deal of
additional capital at
this time

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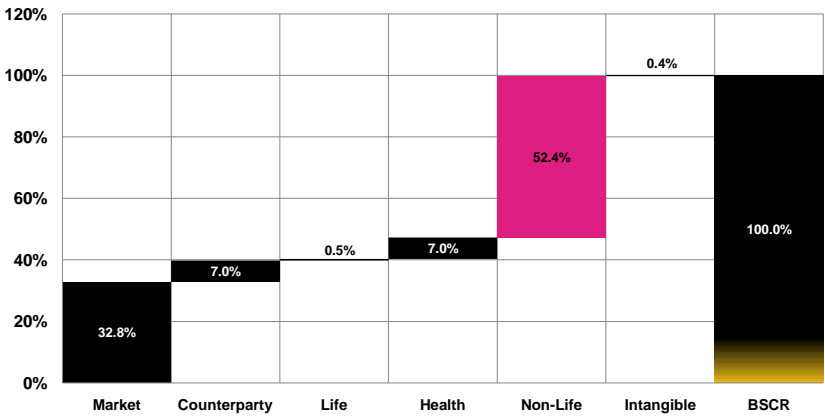
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QIS5 Results

SCR – Non-Life on Solo Entity Level

Diversified BSCR – Non-life undertakings (solo)



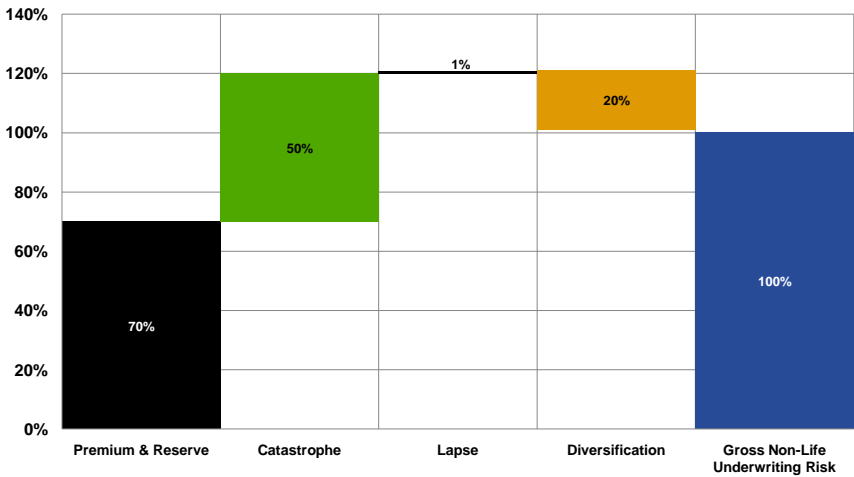
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QIS5 Results

Non-Life Underwriting Risk on Solo Entity Level



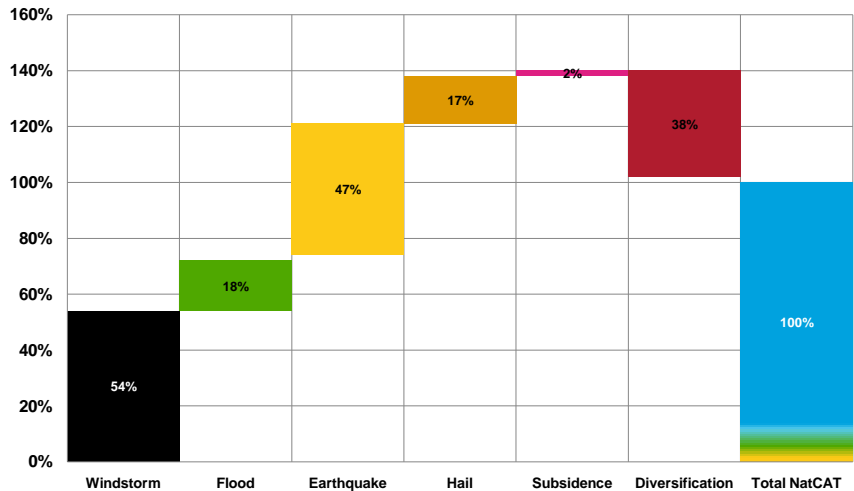
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QIS5 Results

Non-Life Nat Cat Risk on Solo Entity Level



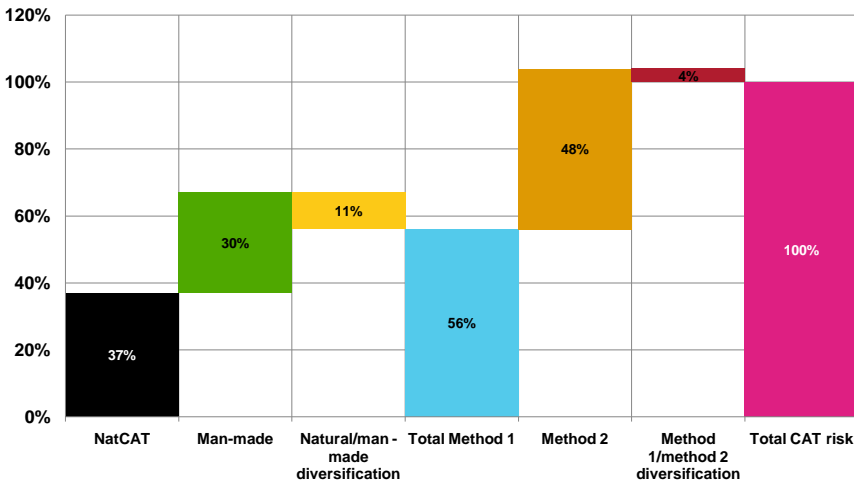
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QIS5 Results

Non-Life Cat Risk on Solo Entity Level



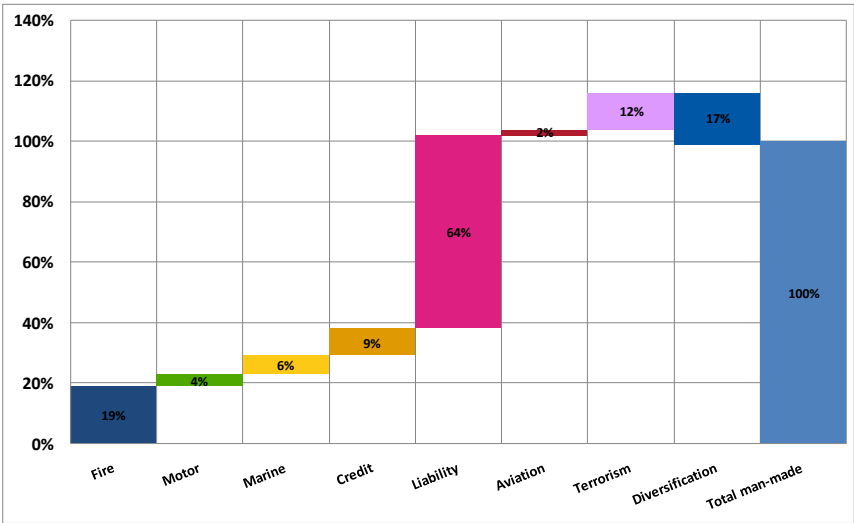
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QIS5 Results

Non-Life Cat Risk on Solo Entity Level



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Reinsurance and Capital Management

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Solvency II – Impact on Reinsurance Market

Potential Benefits

- Greater transparency
- Convergence in reporting
- Improved reinsurance security
- Stronger insurance-linked securities (ILS) market
- Transitional periods should limit disruption

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Solvency II – Impact on Reinsurance Market

Drawbacks and Risks

- Increased regulatory burden
- Potential increase in consolidation
- More intense and volatile U/W cycles

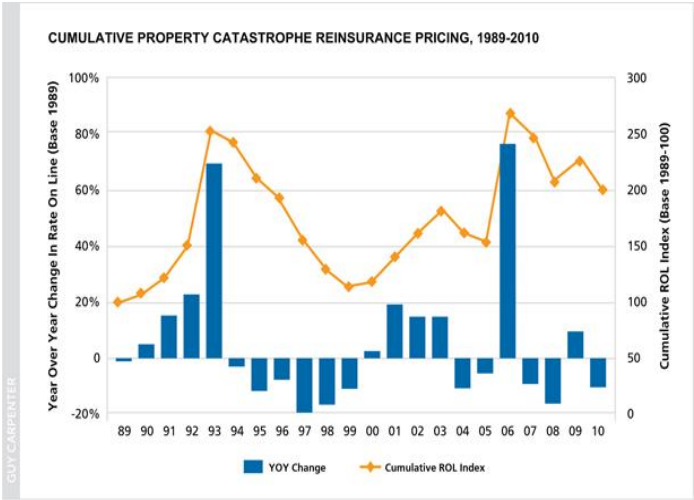
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Unintended Effects of Solvency II

Potential Impact on the U/W Cycle



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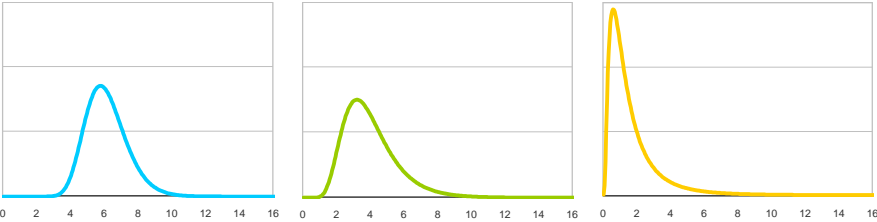
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Solvency II

Pitfalls of Managing Capital Using VaR Measures

PROBABILITY DENSITY FUNCTIONS OF THREE (RE)INSURANCE PORTFOLIOS WITH THE SAME VaR



Portfolio	VaR	TVaR
Blue	\$10.0 M	\$10.7 M
Green	\$10.0 M	\$11.4 M
Yellow	\$10.0 M	\$13.4 M

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Solvency II – Impact on Reinsurance Market

- Higher capital requirements
 - Standard formula
 - Internal models
 - Onerous risk charges
- Reinsurers expected to benefit
 - Inability to raise capital
 - Purchasing of more reinsurance
 - Inexpensive vehicle
 - Increased revenue

Solvency II

Reducing Risk (and Required Capital Levels)

- Reinsurance Solutions
 - Proportional
 - Non-Proportional
 - Aggregate or Stop Loss
- Alternative Risk Mitigation Techniques
- Diversification and Divestitures
 - New lines of business
 - Mergers and Acquisitions
 - Exiting lines of business

Solvency II – Reinsurance Solutions

Standard Formula vs. Internal Model

- Proportional Treaties
- Excess of Loss Treaties
- Aggregate Covers or Stop Loss

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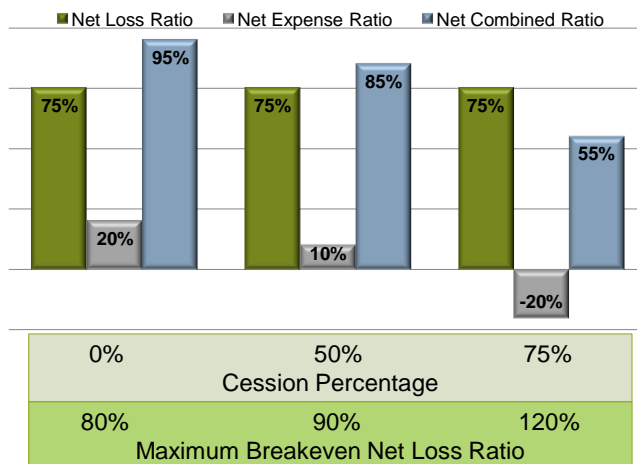
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Reducing Capital Charges

Ceding Commission Example

Gross Assumptions	
Loss Ratio	75%
Expense Ratio	20%
Combined Ratio	95%
Ceding Commission	30%



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Reinsurance and Counterparty Risk

Reinsurance Usage

Understanding Counterparty Risk

- Core component of Solvency II
- Reinsurance creates counterparty risk
- Offsetting capital charges
- Proposed method uses financial ratings
- Complex approach

Final Remarks

Solvency II Challenges

- Soft market
- Recent Cat frequency
- Weak investment returns
- Recession and inflation
- Implementation costs
- Resource constraints

Solvency II

Changing the Landscape of Reinsurance

Cui bono?

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