



# Creating a Global Solvency Regime for Insurers Modelling challenges & the role of actuaries

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Stuart Wason  
International Actuarial Association

# Global trends affecting insurers

## Globalization

- Increased globalization and concentration within the insurer and reinsurer marketplace ➔ emergence of global titans
- Financial sector convergence
- Systemic risks (e.g. prolonged downturn in interest yields; sharp and prolonged drop in equity values; flu epidemics; weather related losses etc.)
- Trend outcomes:
  - Greater recognition of the importance of financial system stability
  - Greater role for international standards setters (e.g. IAIS, International Accounting Standards Board, International Actuarial Association etc.)



# Global trends affecting insurers

## Governance

- Various corporate failures and scandals (e.g. Enron, Allied Irish Banks, WorldCom, Credit Lyonnais, Bre-X, Barings Bank etc.)
- Insurance sector not immune (e.g. HIH in Australia, Equitable in UK, AIG etc)
- Outcomes:
  - Board reform
  - Risk management
  - Realistic assessment (valuation) of risks
  - Need for greater transparency
  - Need for improved disclosure of risks

# Importance of risk management Insurer stakeholder developments

- CEIOPS - Report on Prudential Supervision of Insurance Undertakings (2002)
  - Analyzing the full causal chain improves supervisory practice
  - Review of solvency needs to be broad and encompass governance and risk management
  - Further work to be done
    - Risk management systems, internal control & people issues need further examination
    - Solvency requirements and trigger levels need to be linked to a firm's risk exposures

# IAIS Cornerstones

- Cornerstone I: The solvency regime addresses the robustness of the insurer to meet its liabilities both **short term and over a longer time span**.
- Cornerstone II: The solvency regime is **sensitive to risk**, and is explicit as to which risks, individually and in combination, lead to a regulatory financial requirement and how they are reflected in the requirement.
- Cornerstone IV: The solvency regime requires a valuation methodology which makes optimal use of and is **consistent with information provided by the financial markets** and generally available data on insurance technical risks.
- Cornerstone VIII: The solvency regime allows a set of **standardised** and more **advanced** approaches to determine the solvency requirements, and includes the use of **internal models** if appropriate.

# Modelling Challenges

## Models must....

- Be used and understood throughout the insurer
- Be transparent to third parties
- Reflect company risks and risk management
- Be validated to insurer experience & calibrated to financial markets
- Use reliable experience studies for developing assumptions
- Be subject to suitable approvals, controls, internal audit and periodic independent review

# Role of Actuaries

- Actuaries through their education, experience and professionalism are already actively involved in the modelling of risks (e.g. product pricing, liability valuation, investment management, risk management etc.).
- Within the insurance industry, actuaries are used by insurers, consultancies, supervisors and by insurance industry stakeholder groups
- The Groupe Consultatif is the European voice of the actuarial profession
  - Current major focus is on Solvency II with CEIOPS
- IAA is the international voice and standard setter for the profession
  - “Towards a Global Framework for Solvency Assessment” © IAA 2004
  - International Actuarial Standards of Practice related to the financial reporting standards of the IASB
  - Risk Margin Working Party (ToR supplied by IAIS)
  - Internal model standards (in cooperation with the IAIS)





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*Thank you! You can contact me at [swason@compcorp.ca](mailto:swason@compcorp.ca)*

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