

ENTERPRISE RISK MANAGEMENT

ERM

Symposium

Where Cutting Edge Theory Meets State of the Art Practice

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ORSA for Insurers – A Global Concept

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Table of Contents

- **Early developments in regulatory frameworks**
- **UK experience**
- **Solvency II/EU experience**
- **Canadian experience**
- **Key messages for insurers and regulators**

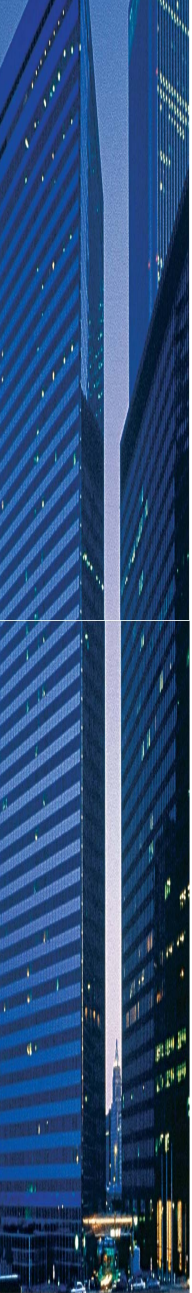
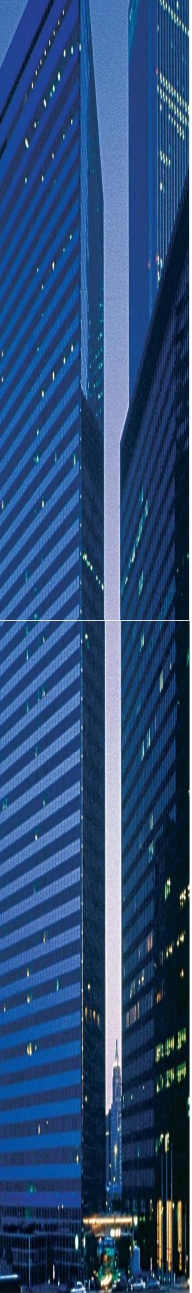


Table of Contents

➤ **Early developments in regulatory frameworks**

- **UK experience**
- **Solvency II/EU experience**
- **Canadian experience**
- **Key messages for insurers and regulators**



Early development in regulatory frameworks

- ORSA (Own Risk and Solvency Assessment) concept is now embedded in both IAIS standards and in Solvency II within Europe
- ORSA development is expanding in other jurisdictions
- ORSA origins can be traced to:
 - UK FSA insurance sector reforms requiring firms to develop internal models of their risks; Individual Capital Adequacy Standards (ICAS)
 - Canadian OSFI introduced Dynamic Capital Adequacy Testing (DCAT) to Boards around 1993
 - Increasing use of internal models for valuation, capital and risk management purposes by the industry and regulators alike (e.g. Swiss Solvency Test, variable annuities in US and Canada etc)
 - Increased recognition of the need for Pillar 2 and Pillar 3 measures by regulators
 - Increased recognition of the importance of ERM

IAIS Standards – ICP 16 ERM

- 16.11 The solvency regime requires the insurer regularly to perform its own risk and solvency assessment (ORSA) to assess the adequacy of its risk management and current, and likely future, solvency position.
 - The ability of an insurer to reflect risks in a robust manner in its own assessment of risk and solvency is supported by an effective overall ERM framework, and by embedding its risk management policy in its operations
- 16.12 The solvency regime requires the insurer's board and senior management to be responsible for the ORSA.
 - Responsibility for the ORSA rests at the top level of the insurer's organization, the insurer's board and senior management
- 16.13 The solvency regime requires the insurer's ORSA to encompass all reasonably foreseeable and relevant material risks including, as a minimum, underwriting, credit, market, operational and liquidity risks and additional risks arising due to membership of a group. The assessment is required to identify the relationship between risk management and the level and quality of financial resources needed and available.

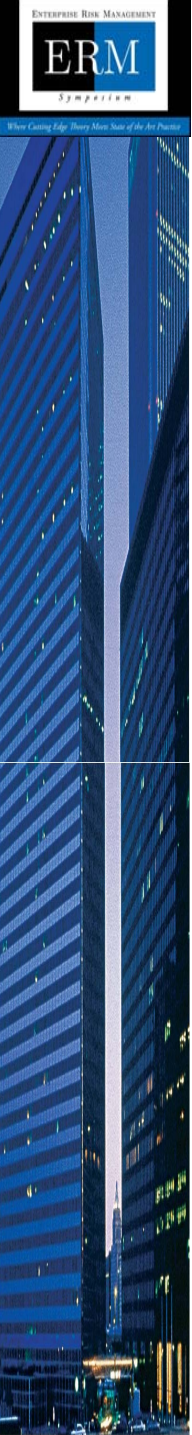


Table of Contents

- **Early developments in regulatory frameworks**
- **UK experience**
 - **Overview of the ICAS regime**
 - **Key successes and lessons learned**
- **Solvency II/EU experience**
- **Canadian experience**
- **Key messages for insurers and regulators**

UK experience - overview of the ICAS regime

- Under ICAS, firms are required to undertake regular assessments (ICA) of the amount and quality of capital that is adequate for the size and nature of its business
 - Main components of ICA for life insurers including equities, fixed interest, credit, longevity, operational and persistency risks
- Having reviewed a firm's assessment, and taking into account other available information, the regulator forms its own view of the capital that is adequate for the risk profile and gives Individual Capital Guidance (ICG)
- The most common reason for adding capital to a firm's ICA is that the regulators have not been satisfied with the degree of justification or supporting evidence for the key assumptions in the model, in particular those that describe the dependency between risks (i.e. correlation assumptions or risk drivers) and the determination of the diversification benefit

UK experience - key successes and lessons learnt

- Key successes
 - The investment in modeling capability has been successful, the ICA models are very much the industry's view of how best to demonstrate adequate capital
 - Marked progress in Board's understanding of the ICA and the quality of their oversight and governance of the ICA process
 - The ICA is increasingly being used as a key decision-making tool such as a dividend payment, reinsurance program or change in investment policy
- Lesson learnt
 - Embedding a risk management system within a firm requires considerable investment outside the quantification/actuarial areas, there remains a gap between ICA modeling and the ground-level risk quantification/decision making systems
 - Firms need to demonstrate a clearly thought-out rationale in setting assumptions supplemented by data analysis and benchmarking against their peers
 - The results of the ICA cannot be regarded as robust without using sensitivity-testing to identify the key assumptions and the impact of these assumptions being wrong
 - Firms should be able to demonstrate that operational risk assessments have been subject to robust and objective challenge and validation, and that they are consistent with other risk-management information that is used across the business

Table of Contents

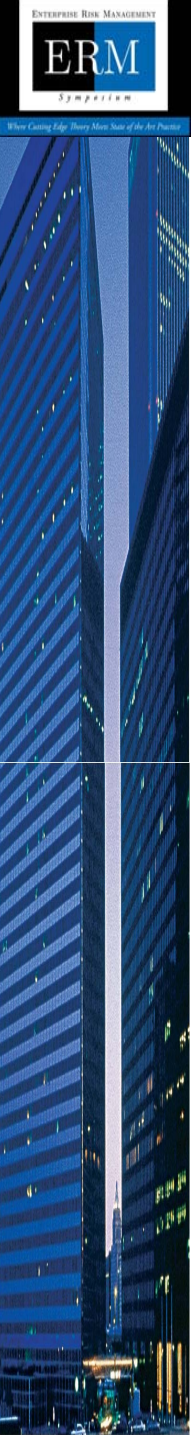
- Early developments in regulatory frameworks
- UK experience
- **Solvency II/EU experience**
 - What does the ORSA involve?
 - CEIOPS Issues Paper on ORSA
 - The role of actuaries in a Solvency II world
- Canadian experience
- Key messages for insurers and regulators

What does the ORSA involve?

- ORSA must include, at least, consideration of:
 - The insurer's overall solvency needs, taking into account the specific risk profile, approved risk tolerance limits and business strategy
 - Continuous compliance with the Solvency II requirements for technical provisions and solvency capital
 - The degree to which the insurer's risk profile deviates from the assumptions underlying SCR, calculated with the standard formula or with its partial or full internal model
- ORSA should not be a one-off exercise or a single report. ORSA could be defined as a documented process and it should be a fundamental part of the risk management system for an insurer
- In addition to being an internal risk management process for an insurer, the ORSA forms part of the supervisory process but it does not itself create a further capital requirement
- ORSA should be proportionate to the nature, scale and complexity of the risks inherent in the business

CEIOPS Issues Paper on ORSA

- The CEIOPS Issues Paper provides five principles which should be observed in respect of the ORSA
 - The ORSA is the responsibility of the insurer and should be regularly (at least annually) reviewed and approved by the insurer's administrative or management body
 - The ORSA should encompass all material risks that may have an impact on the insurer's ability to meet its obligations under insurance contracts
 - The ORSA should be based on adequate measurement and assessment processes and form an integral part of the management process and decision making framework
 - The ORSA should be forward-looking, taking into account the insurer's business plans and projections
 - The ORSA process and outcome should be appropriately evidenced and internally documented as well as independently assessed



The role of actuaries in a Solvency II world

- Under Solvency II, the formal roles of the Appointed Actuary will no longer exist and as a result the role of actuaries will be significantly different to what it is today
- There will be a clear role for the actuarial function in contributing to the risk management
 - Actuaries can contribute to the ORSA process given their quantitative understanding of insurance risks and also other quantifiable risks like market risks and counterparty default risks
 - Actuaries are playing a central role in asset liability management especially related to participating business or products with embedded options
- Although the current statutory roles will cease to exist, the need for actuarial expertise will be greater than at present
 - A key challenge for companies will be the definition and delineation of the roles and responsibilities which will form part of the ORSA process

Table of Contents

- **Early developments in regulatory frameworks**
- **UK experience**
- **Solvency II/EU experience**
- **Canadian experience**
- **Key messages for insurers and regulators**

Canadian experience

- Canada has had many of the key ingredients of ORSA for many years
 - A-4 (Capital Targets – Federally Regulated Insurance Companies)
 - Evaluate the inherent risk within each significant activity of an insurer and examine the quality of risk management applied to mitigate these risks
 - Assess both the level and direction of net risk of the significant activity
 - E-18 (Stress Testing)
 - Used to evaluate the potential effects on an institution's financial condition, of a set of specified changes in risk factors, corresponding to exceptional but plausible events
 - Including both scenario testing and sensitivity testing
 - DCAT (Dynamic Capital Adequacy Testing)
 - A process of analyzing and projecting the trends of an insurer's capital position given its current circumstances, its recent past, and its intended business plan under a variety of future scenarios
 - Allows the actuary to inform the insurer's management about the implications that the business plan has on capital and to provide guidance on the significant risks to which the insurer will be exposed
- OSFI will develop a new guideline in a year to package together all the key aspects of ORSA

Canadian experience

- DCAT is a report primarily intended to inform senior managers and company directors of:
 - the risks faced by the company,
 - the consequences to the company if those risks are realized, and
 - mitigating action that the company can take.
- DCAT is a *risk management* tool.
- DCAT required by OSFI and governed by professional actuarial and OSFI guidance/standards
- Regulator / supervisor also receives a copy of the DCAT (Financial Condition) report that goes to the Board.

Canadian experience

- Almost 2 decades of DCAT practice useful to those starting ORSA
- The Good:
 - Forced the development of multi-year scenario based modeling of financial results
 - Discussion of key risks and potential mitigating actions with Board and regulator
 - Most valuable Pillar 2 technique especially when combined with other stress and scenario testing
- The Bad:
 - Too many actuaries have regarded DCAT as a regulatory compliance exercise
 - Lack of linkage to ERM and to senior management
 - Wide range in practices/liberal assumptions
 - Failure to consider the unthinkable/risk linkages/tail risk etc
- Other Lessons:
 - DCAT development has been a journey not achieved overnight
 - Key benefits arise from increased communication about ERM and improved governance
 - Better to have good risk management discussions founded on basic models than poor discussions due to overly complex and difficult to understand models
 - OSFI rates DCAT's (*quality of the reports as well as relative strength of the future financial condition of insurer*) to help OSFI assess solvency & the *actuarial function*

Table of Contents

- **Early developments in regulatory frameworks**
- **UK experience**
- **Solvency II/EU experience**
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Key messages for insurers and regulators

- Insurers
 - Insurers that approach the ORSA as a management tool will be more successful at integrating it into their business and unlocking its value
 - An effective ORSA can provide useful insights into the capital efficiency of the business and management actions needed in the future
 - The ORSA will enable companies to evaluate the long-term capital efficiency of particular products and assist in the design of new policies
- Supervisors
 - Supervisors will want to see evidence that the ORSA is an integral part of the insurer's risk, capital and value management system, and will use the ORSA to understand the firm's attitude towards risk management
 - ORSA also requires insurers to compare their risk profile and provisions for risk with those assumed in their regulatory requirements. This assessment will be of interest to supervisors who will want to ensure the regulatory requirements are appropriately calibrated
 - ORSA development will be a journey, not achieved overnight, and key benefits will arise from increased communication about ERM and improved governance