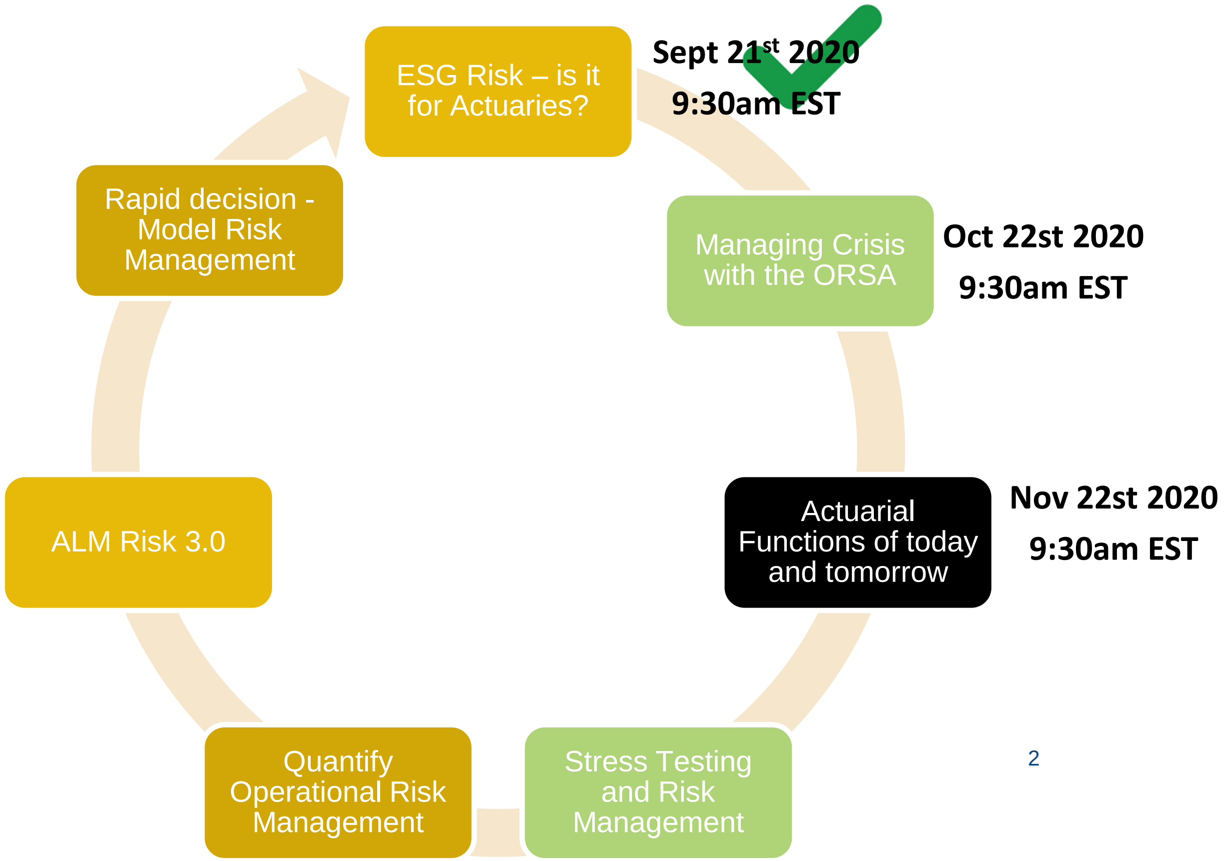
AFIR ERM – ORSA

22 October 2020

IAA AFIR ERM Section
presenting the IAA Risk Book Series

Moderated by: Annie Tay FIAA CERA

2020 – 2021 Risk Book Series – a chat with the authors and international leading actuarial experts:



REGISTRATION AND PARTICIPATION

- This webinar is **free for all AFIR-ERM members, IAA section members and IAIS members.**

About the speakers and moderator

Malcolm Kemp FIA CERA – Chair of the Actuarial Association of Europe’s Risk Management Committee; Member of the IAA AFIR ERM Section Board; Advisory Scientific Committee of the European Systemic Risk Board.

- Risk and quantitative finance actuary, with over 35 years’ experience in insurance and investment management.
- Author of three books on quantitative finance, on Market Consistency, Extreme Events and Systemic Risk. Co-Author of the IAA Risk Book.
- Visiting Lecturer at Imperial Business School, London.

Christiaan Ahlers FASSA FIA – Head: Actuarial Division of the Prudential Authority, the prudential regulatory authority in South Africa.

- Career regulator leading the Actuarial Division in the Risk Support Department. Responsible for the implementation, embedment and supervision of the Solvency Assessment and Management framework, of which the ORSA constitutes an important component.
- Educator for ASSA and part-time lecturing for University of Pretoria (Actuarial Science).

About the speakers and moderator

Annie Tay FIA CERA - Moderator

- INED for Audit and Risk Committees including for the IAA and the CII.
- Insurance practitioner with over 20 years of experience. Specializes in Corporate Development, Life Insurance, Finance and Investments and Risk Management.

DISCLAIMER

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AFIR-ERM

Finance, Investment & ERM

Managing Crisis and Creating Value-Add from the ORSA Process

Malcolm Kemp FIA CERA

22 October 2020

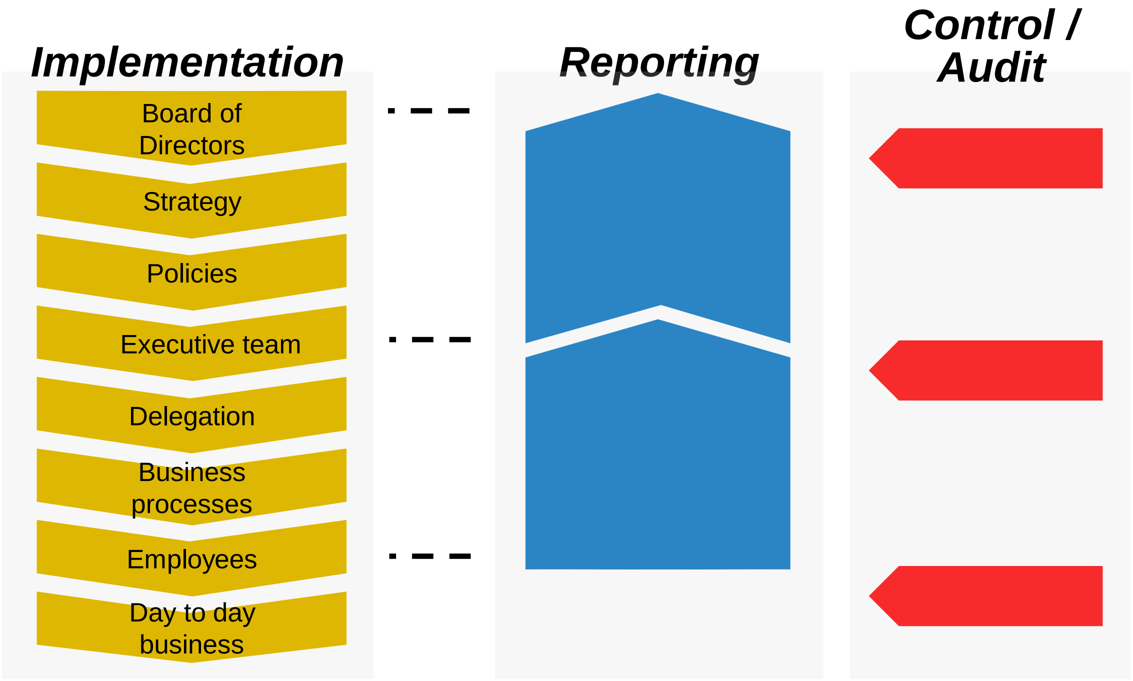
Agenda

- Own Risk and Solvency Assessment (ORSA)
- IAA and other support material
- Value-Add from the ORSA process

Own Risk and Solvency Assessment (ORSA)

Own Risk and Solvency Assessment (ORSA)

- Firm needs:
  - Adequate capital
  - Employees ‘fit’ to carry out its business activities
  - A process for achieving a complete and holistic risk understanding of the business
- An ideal ORSA connects full risk picture with governance and internal control system



Source: adapted from Bernardino, G. (2011)

ORSA

- **Aims** to ensure that insurers identify and assess all risks that they are (or could be) exposed to, maintain sufficient capital to face these risks, and develop and better use risk management techniques in monitoring and managing these risks
- **Is** a process for an overall and holistic risk understanding, viewed from the management and/or supervisory body
- **Provides** a comprehensive picture of the firm’s risks
- **Gives** the supervisor insight into the level of quality of the management’s and Board’s risk understanding
- **Links** the risk picture with the firm’s risk management system and internal control system
- **Captures** risks before they are quantifiable
- **Is** a process that should include unquantifiable knowledge about risks (so should not focus just on risks that are quantifiable)

ORSA

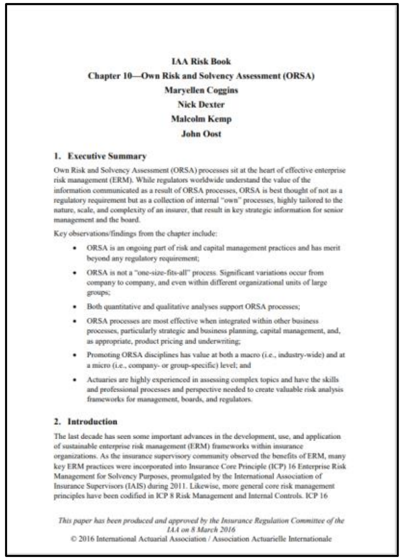
- **Is not**
  - A (new) rules-based solvency calculation
  - A *pre-defined* process. The firm needs to develop its own (efficient) self-assessment process
  - (Under Solvency II) A process (key function) which as a starting point can be outsourced
  - A process with one concrete number as its output
- Has many similarities with Individual Capital Adequacy Assessment Programme (ICAAP) and equivalents applicable to other parts of the financial services industry, e.g. banks
  - ORSA called ICAAP in Australia
  - Note: banks also now subject to ILAAP (covering liquidity)

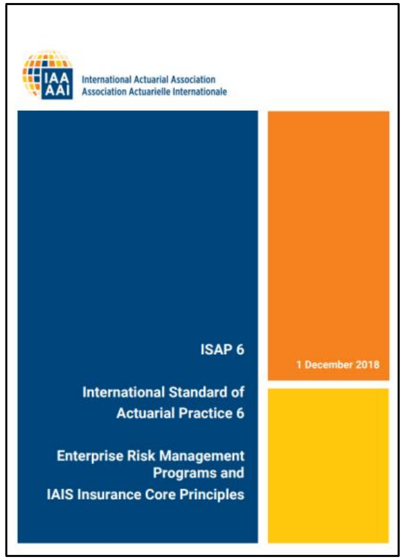
IAA and other support material

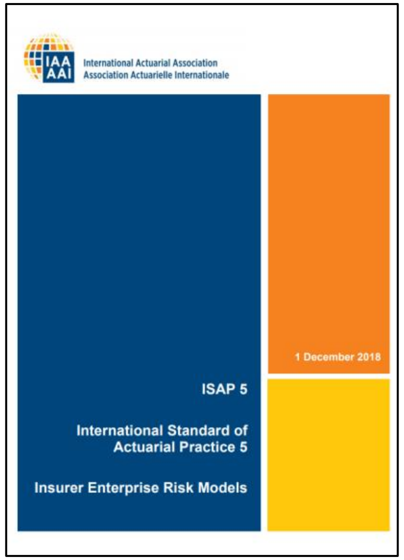
IAA and other support material

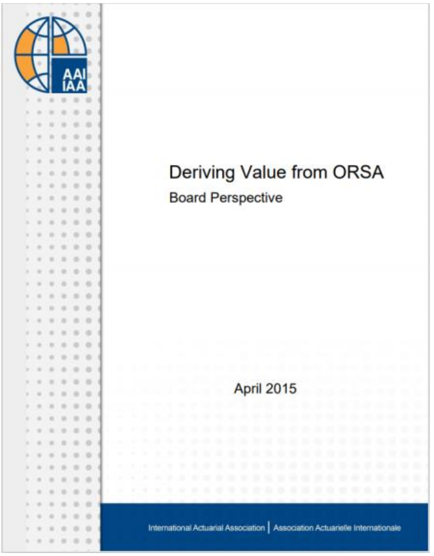
- International Actuarial Association (IAA), IAA Member Associations and other actuarial communities like AFIR/ERM have developed support material for actuaries assisting with ORSAs. E.g.
  - IAA Risk Book (Chapter 10) *Own Risk and Solvency Assessment (ORSA)*
  - International Standards of Actuarial Practice on *Enterprise Risk Management Programs* (ISAP 6) and *Insurer Enterprise Risk Models* (ISAP 5)
  - Other IAA papers and documents such as *Deriving Value from ORSA: Board Perspective* and *International ORSA Regulatory Requirements Chart*
- Actuarial Association of Europe (AAE) focuses on Solvency II ORSA
  - European Standard of Actuarial Practice (ESAP 3) *Actuarial practice in relation to the ORSA process under Solvency II*
  - EAN 1: *European Actuarial Note on ESAP 3 and ORSA*

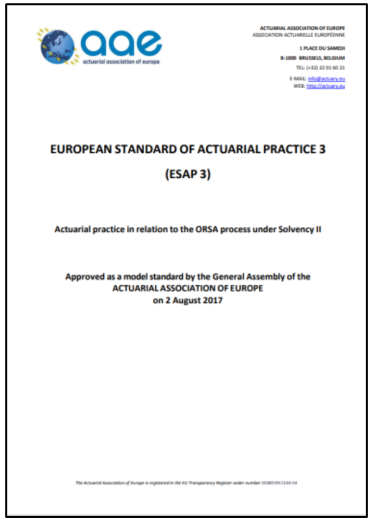
Texts draw on regulatory guidance

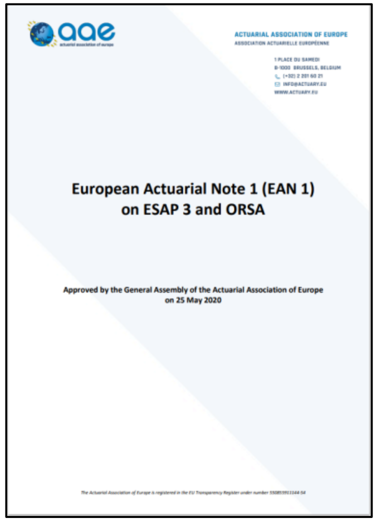


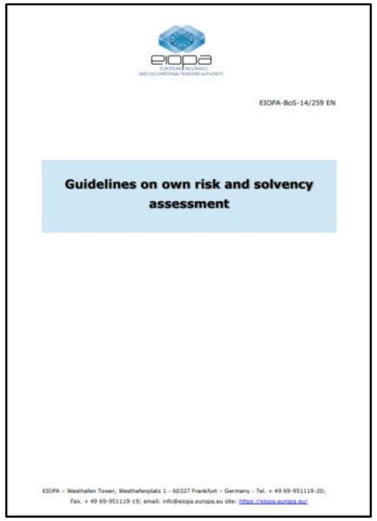


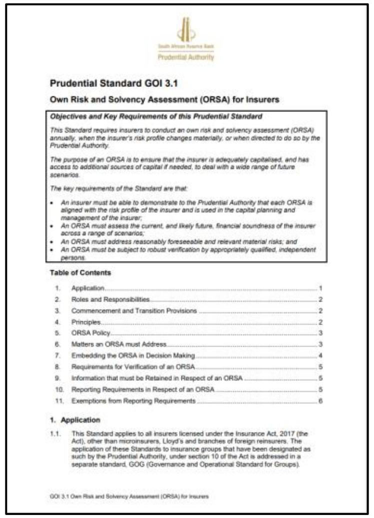








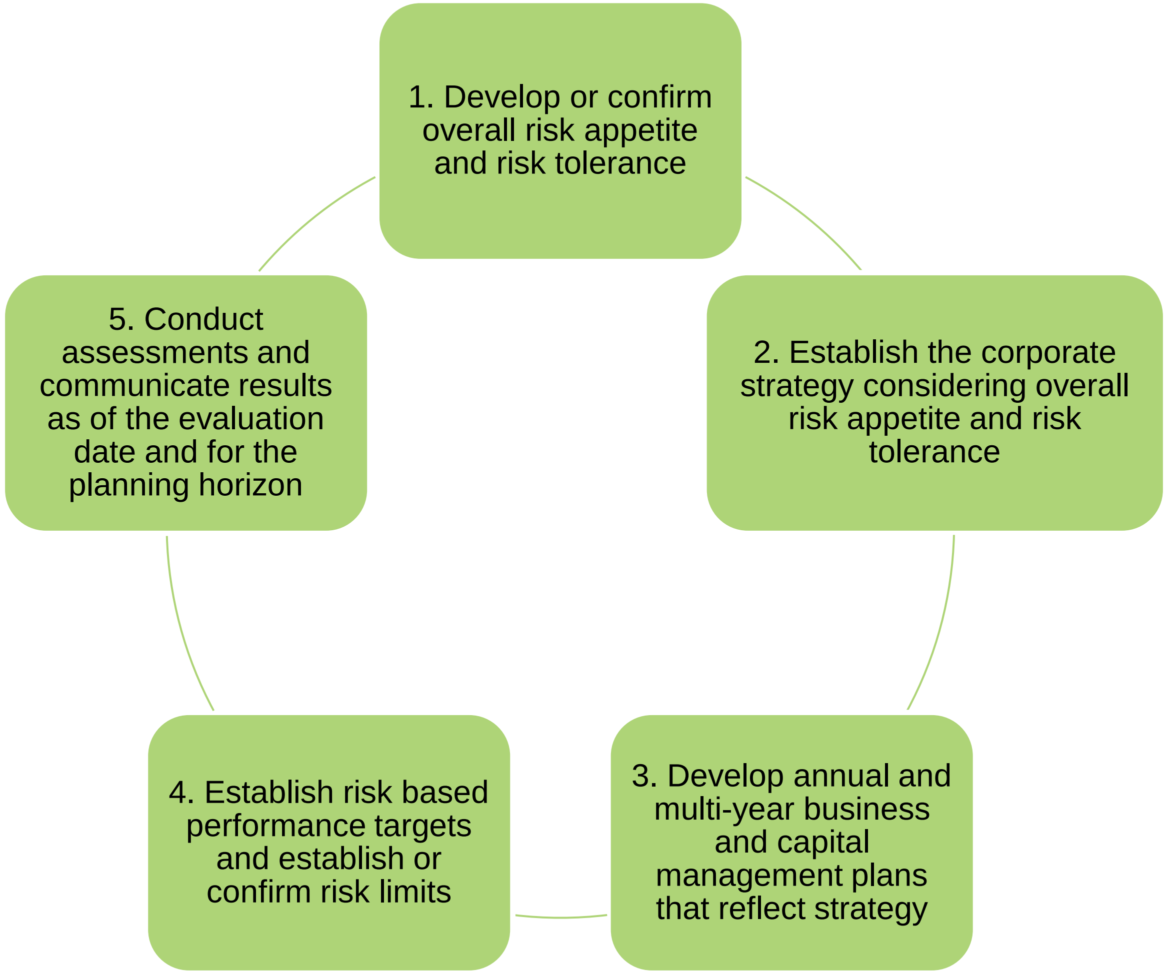




Sources and copyrights, see individual links

“Own” perspectives

- Steps include:
  - Identify and prioritise key risks (gross and net, current and emerging)
  - Assess risks and capital adequacy (stress and scenario testing, “own” quantification of required capital, risk aggregation)
  - Communicate and report
  - Assess process itself (e.g. key expert judgements, potential weaknesses, scope for improvements)



Source: adapted from IAA Risk Book (Chapter 10)

“Regulator” perspectives

- A focus on:
  - Assessment of overall solvency needs (own *and* relevant regulatory capital requirements)
  - Forward-looking, i.e. include medium and longer term perspectives and projections
  - Incorporate company’s risk appetite, tolerance and limits
  - “Use test” – include results in business activities and decision-making
  - Group-wide ORSAs: need to include group-specific considerations, such as liquidity and fungibility of capital
  - Documentation
- EIOPA ORSA Guidelines also e.g. cover
  - Role of Board, reconciliation of ORSA balance sheet with regulatory capital balance sheet, continuous compliance with e.g. regulatory capital requirements, appropriateness of Pillar 1 SCR computation, frequency, internal communication, supervisory reporting
- May include harder to handle risks such as climate change and liquidity risk

“Actuarial” perspectives

- Much of an ORSA can be viewed as an example of Financial Condition Testing (FCT). FCT may also be mandated by professional standards
  - E.g. In Canada, Appointed Actuary required by Canadian actuarial standards to prepare annually for the Board a Dynamic Capital Adequacy Testing (DCAT) report
  - Although there is potential overlap with ORSA (which each insurer is also required to provide to regulator), regulator continues to value both reports and both perspectives
- Actuarial function may be formally required to contribute to ORSA, even if ORSA coordinated by risk management function
  - Exact involvement benefits from clear specification, to avoid duplication, but as ORSA is an own assessment, different companies may allocate roles differently

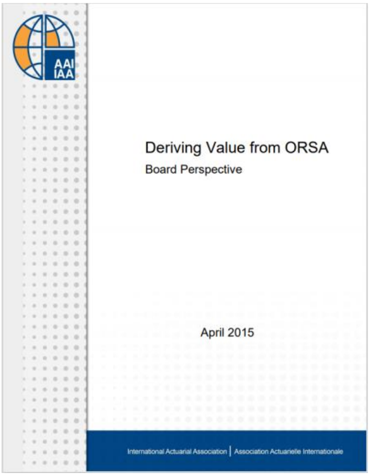
Value – Adding from the ORSA process

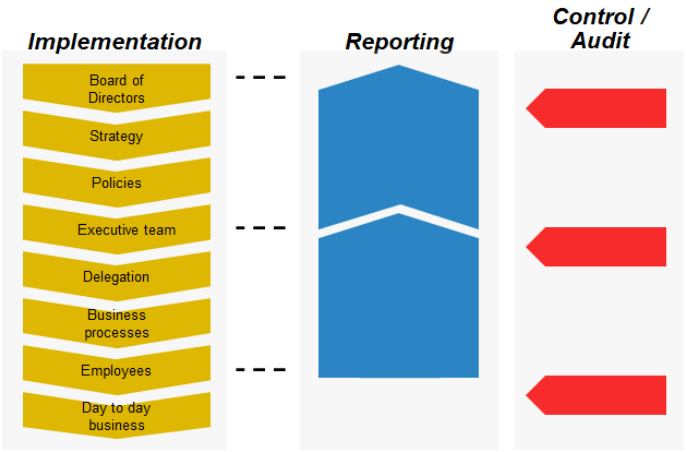
Profiting from the ORSA process

- Challenging to maximise the perceived value-added from actuarial involvement
- Still probably a tendency in many firms to view ORSA as a regulatory overhead
- Some suggestions:
  - Focus on the actuarial ‘customer’ (typically the Board?)
  - Place due emphasis on upside vs. downside
  - Leverage existing processes or, better still, inform and improve these processes

Focus on the actual 'customer'

- There is value in documentation and analysis of current and future positions under different scenarios
  - Deepens Board understanding and assists Board members and senior management with supervisory interaction
  - Helps build/maintain risk awareness throughout the company
  - Structures the identification and prioritisation of risks
  - Offers chance to think outside box, do what-ifs, and assess what management is doing and thinking
  - Opportunity to highlight limitations and caveats
- And a need to 'sell' this value





Source (a) IAA (2015). Deriving Value from ORSA: Board Perspective, (b) Bernardino, G. (2011)

Place due emphasis on upside vs. downside

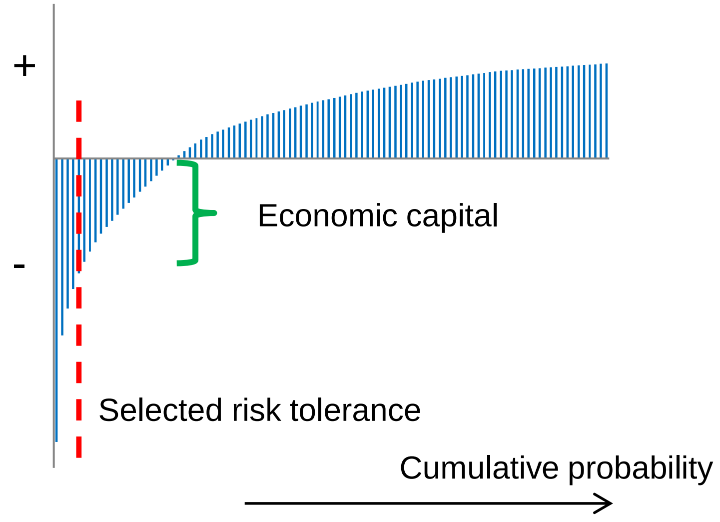
- Actuaries and risk managers talk a lot about "3 lines of defence". Important for roles to be defined and demarcated
  - Risk management has typically become more Line 2 over my working life
- But the best risk managers still need to contribute to debates about where best to target business resources (staff, capital, intellectual property, customer relationships …)
  - Straying into return versus risk, upside versus downside

RISK MANAGEMENT	
Line 1? Decision takers?	**Line 2?** Risk Challengers?

Leverage and improve existing processes

- Projections underpin most regulatory capital calculations as well as ORSA calculations, internal models, proxy models, …
  - What synergies are available?
  - What insights can be interpreted through different lenses?
  - Are there process steps that are duplicated and if so how can they best be eliminated?
  - Can approaches used for ORSA inform and enhance other processes?

E.g. Might define economic capital for ORSA purposes by simulating present values of future profits in some way



Summary

- Own Risk and Solvency Assessment (ORSA)
  - An ideal ORSA connects full risk picture with governance and internal control system
- IAA and other support material
  - E.g. IAA Risk Book Chapter on ORSA
  - And other IAA material, AAE texts (for Solvency II), material produced by other (actuarial) professional bodies and relevant regulatory guidance
- Profiting from the ORSA process
  - Deepen understanding, know and serve your (actuarial) customer, place due emphasis on risk vs reward, leverage and enhance what is done elsewhere

IAA AAI AFIR-ERM
Finance, Investment & ERM

AFIR-ERM Webinar: Risk Book Series - The ORSA

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Prudential Authority
South Africa

22 October 2020

Agenda

- South Africa: Insurance Landscape
- ORSA Observations & Findings
- Control Functions & ORSA

South Africa: Insurance Regulatory Landscape

South Africa: Insurance Landscape

2019	Life Insurers	Non-life Insurers
Number of insurers	73	73
Assets	US$228.3 billion	US$16.9 billion
Liabilities	US$200.5 billion	US$8.7 billion
Gross Premium	US$36.6 billion	US$11.5 billion
Gross Claims	US$31.0 billion	US$6.0 billion

ORSA – Regulatory Landscape

- **Prudential Authority** – prudential regulatory authority in South Africa
- **Insurance Act, 2017** – promulgated with effect from 1 July 2018
- **ORSA** is a key element of risk-based supervision and a regulatory requirement
- Prudential Standard GOI 3.1 – subordinate legislation – outlines the detailed requirements
- Useful to the insurer:
  - Risk management & planning tool
- Useful to the PA:
  - Forward-looking approach to risk-based supervision
- ORSA submission frequency – generally compliant:
  - Annually
  - Material change in risk profile (Out-of-cycle)
  - As directed by the PA
- **Board** ultimately responsible for ORSA process and compliance
- **Heads of Control Functions** perform key roles in the process

ORSA Observations & Findings

ORSA – Process

- **Central role** – capital management and planning
  - Optimisation of the insurer's capital base over the long-term
- Manage long-term strategy and sustainability
  - Business strategy sustainability across a range of risk scenarios

BUT

- **ORSA** is of little value unless its learnings and outputs are embedded into strategic decision-making
- Do insurers find it useful?
  - Generally positive feedback
  - Conversation starter
  - The Board benefits from it

ORSA – Objectives

Assessing the resilience of an insurer's solvency across a range of possible scenarios

- Scenarios are not prescribed
- ORSAs generally compliant with this objective
- Solvency is projected under:
  - base case scenario
  - selected scenarios / stresses

ORSA – Objectives

Assessing the overall solvency needs of the insurer taking into account the specific risk profile, approved risk appetite and business strategy of the insurer

- Projections focus on solvency
- Risk Appetites are generally expressed as a function of solvency
- Base-case considers the current business mix & volumes
- Unlikely to find deviations from the current business mix, as insurers must be licensed to conduct specific classes of business

ORSA – Objectives

Assessing compliance, on a continuous basis, with financial soundness requirements

- As projections focus on solvency, projected compliance status simple to verify
- Rare to find instances of projected non-compliance:
  - Financially unsound
  - Insolvent

ORSA – Objectives

Assessing the significance with which the risk profile of the insurer deviates from the implied risk profile underlying the financial soundness requirements

- Generally poorly addressed
- Most insurers deem the standard formula to be an appropriate and accurate reflection of their risk profile
- Standard formula equivalence desirable but not realistic
- Prudential Authority highlighted this as an area of improvement for insurers

ORSA – Key elements

- Current and likely future solvency position
- Economic versus regulatory bases results
- Reasonably foreseeable and relevant material risks
- Risk management processes
- Risk profile (including risk appetite)

ORSA – Key elements

Must include details of any review of the ORSA since the previous ORSA, including any recommendations for change and how these recommendations have been, or are being, addressed

- Immature process – expect frequent changes – not observed
- Insurers prefer their templates
- Some insurers highlight targeted improvements

Must include a breakdown of capital usage over the planning horizon, as relevant, by material business activity; insurance group members (as applicable); geographic spread of exposure; and risk types

- Generally not included

ORSA – Additional findings

- In-house vs outsourced
- Common scenarios tested:
  - Reinsurer failure / default
  - Poor economic environment / recession
  - Cyber attack
  - Large hailstorm / flood
- Emerging risks – cyber risk the most prominent
- Projection period usually 3 years
- Group ORSAs – where part of an insurance group: overlaps / omissions
- Reverse Stress Testing – generally not performed / poorly performed
- Management actions for scenario testing – generally poor
- Integration with other business processes
  - Difficult to assess on ORSA report submission only

Control Functions & ORSA

Control Functions & ORSA

Actuarial Control Function	Risk Management Control Function
• Appropriateness of the standard formula	• Establishing a forward-looking assessment of the risk profile and financial position of the insurer, including conducting regular stress testing and scenario analyses against the risk appetite and risk limits of the insurer
• Economic capital requirements	
• Forward-looking projections of the economic and regulatory financial soundness positions	
• Appropriate stress, sensitivity and scenario tests, and the assumed management actions	• Assessing the appropriateness of the ORSA processes, controls and policies

- Actuarial Function evaluates and provides opinion on stress and scenario tests
- Risk Management Function effects these tests

Thank you

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