Risk Management’s important ORSA they say…

1st December 2011

Agenda

• What is the ORSA?
• Challenges
• What does the ORSA mean for me?
# Agenda

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- Challenges
- What does the ORSA mean for me?

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## ORSA is a central part of Solvency II

<table>
<thead>
<tr>
<th>Technical</th>
<th>Governance and business management</th>
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<tbody>
<tr>
<td>All Insurers</td>
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</tr>
<tr>
<td>- Balance sheet items</td>
<td></td>
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<tr>
<td>- Standard formula SCR</td>
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<tr>
<td>- MCR</td>
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<tr>
<td>Internal Model option</td>
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<tr>
<td>- Approval process</td>
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<tr>
<td>- Technical standards</td>
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<tr>
<td>Governance</td>
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<td>- Risk management</td>
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<td>- Internal controls</td>
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<td>- Internal audit</td>
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<td>- Actuarial function</td>
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<td>- Outsourcing</td>
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<table>
<thead>
<tr>
<th>Pillar 1</th>
<th>Pillar 2</th>
<th>Pillar 3</th>
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<tbody>
<tr>
<td>Supervisory and public disclosures</td>
<td></td>
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<tr>
<td>Supervisor review</td>
<td></td>
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<tr>
<td>&quot;Own Risk and Solvency Assessment&quot; (ORSA)</td>
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<tr>
<td>The ORSA fits into Pillar 2, but documentation will be a key disclosure to supervisors under Pillar 3</td>
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The ORSA fits into Pillar 2, but documentation will be a key disclosure to supervisors under Pillar 3.

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What is an ORSA?

The ORSA is a Pillar 2 requirement defined in Article 45 of the Framework Directive

- Risk management
- Own risk profile and tolerance limits
- Overall solvency needs
- Proportionate to nature, scale and complexity of risks
- Deviation from SCR calculation
- Continuous compliance
- Regular assessment and on significant change
- Recalibration of internal model
- Short and long term risks
- Business strategy
- Not a capital requirement
- Short and long term risks

Other key ORSA requirements

- Performed at least annually
- Documentation
  - ORSA policy
  - Record of each ORSA process
  - Internal ORSA report
- Disclosed privately to the regulator in the Report to Supervisors
- Summary of ORSA process in Solvency and Financial Condition Report
- Management will sign off the results; need to take active role in ORSA
What does the ORSA process look like?

Risk Management Framework

- Stress & Scenario Testing
- Risk Appetite
- Identify & Assess Risks
- Monitoring, Reporting & Managing Risk
- Risk Measurement
- Link to Business Strategy
- Risk Culture

How does the internal model fit into the ORSA?

- Internal model firms expected to use their internal model for their ORSA
- Pillar 1 and Pillar 2 internal models not expected to be significantly different
- ORSA process can be used to demonstrate internal model compliance
- ORSA is not necessary an internal model “through the back door” – need to remember concept of proportionality
How does the ORSA compare to an Enterprise Risk Management (ERM) framework?

ORSA
- Europe +
- ORSA policy, process and report
- Solvency II metrics
- Insurance +

ERM
- Risk appetite
- Risk identification
- Risk culture
- Stress and scenario testing
- Monitoring and reporting
- Worldwide
- Non-insurers

Solvency II metrics

Risk appetite

Risk identification

Risk culture

Stress and scenario testing

Monitoring and reporting

Worldwide

Non-insurers

Business strategy

Risk measurement

Risk measurement

Business strategy

Risk culture

Stress and scenario testing

Monitoring and reporting

Worldwide

Non-insurers

Existing and expected future guidance

Article 45 Framework Directive (July 2007)
CEIOPS Issues paper (May 2008)
EIOPA Informal L3 Consultation (December 2010)
EIOPA Formal L3 Consultation
Level 3 Guidance

CEIOPS 5 Principles (May 2008)

1. Responsibility of the undertaking
2. Encompass all material risks
3. Adequate measurement/assessment processes and embedded in decision making
4. Forward-looking
5. Appropriately evidenced/documented and independently assessed

Level 3 consultation paper (Nov 2011)

1. What rather than how
2. Supervisory review process
3. Documentation and reporting requirements
4. Group ORSA
5. ORSA process
6. Capital add-ons
Potential timeline to implementation

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>2011</td>
<td>Development of ORSA capabilities (interaction with development of Internal Model if relevant)</td>
</tr>
<tr>
<td></td>
<td>Perform initial dry run of ORSA</td>
</tr>
<tr>
<td>2012</td>
<td>Iterative refinement and enhancement of ORSA capabilities</td>
</tr>
<tr>
<td></td>
<td>Feedback from supervisors on ORSA as part of review of Internal Model application (if relevant)</td>
</tr>
<tr>
<td>2013</td>
<td>ORSA processes and outputs embedded into operation of company</td>
</tr>
<tr>
<td>1 Jan 2014</td>
<td>ORSA processes fully operational within the business</td>
</tr>
<tr>
<td></td>
<td>Next full reporting cycle to include ORSA reporting</td>
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</table>

Why should we bother with good risk management?

"Not to prevent people from taking risks but to allow people to understand and manage in the optimal way the risks that they take"

<table>
<thead>
<tr>
<th>Risk in opportunity</th>
<th>Opportunity in risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Safety</td>
<td>Innovation</td>
</tr>
<tr>
<td>Survival</td>
<td>Incentive</td>
</tr>
<tr>
<td>Loss</td>
<td>Profit</td>
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Need a balanced attitude to risk management
Risk management is not just about compliance
Agenda

• What is the ORSA?
• Challenges
• What does the ORSA mean for me?

Which area is the likely to be the most challenging in the ORSA?

1. Risk appetite and strategy 12%
2. Risk identification and assessment process 5%
3. Risk measurement, methodology and tools 23%
4. Risk reporting 6%
5. Stress testing 6%
6. Link to business strategy 14%
7. System of governance 13%
8. Joining up the process 19%

Source: Towers Watson survey taken at the Spotlight on Solvency II seminar in March 2011
Challenges

Five big ORSA challenges:

1. Your risk universe and anticipating the next “big thing”
2. Making risk appetite operational (embedding)
3. Creating a positive risk culture
4. Managing the flow of risk information
5. Modelling

1. Anticipating the next “big thing”

<table>
<thead>
<tr>
<th>Impact</th>
<th>Low</th>
<th>Very low</th>
<th>Very, very low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Sovereign debt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>Banking crisis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Insurance crisis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Depression</td>
<td>Hyperinflation</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>Currency crisis</td>
<td>Resource scarcity</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>End of flat money</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Climate change</td>
<td>Major war</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>Euro break-up</td>
<td>Political crisis</td>
<td>Infrastructure failure</td>
</tr>
<tr>
<td>Low</td>
<td>Protectionism</td>
<td>Killer pandemic</td>
<td></td>
</tr>
</tbody>
</table>

Source: Towers Watson publication “Extreme risks: the 2011 update” September 2011
1. Understanding your risk universe

- Get the right people in the room
- Understand the changing environment
- Facilitate discussion in a structured way (e.g. reverse stress testing)

Key business objectives

Identify scenarios that could lead to a failure to meet these objectives

Key part of strategic planning

- Board’s responsibility is to introduce the process and challenge the outcomes

2. Making risk appetite operational – what is risk appetite?

- The amount of total risk exposure that an organisation is willing to accept or retain

- Defined formally by the Board to provide guidance/principles to management
2. Making risk appetite operational

Success factors

- Iterative process
- Simultaneous top-down, bottom-up approach
- Focus on getting the right skills
- Buy in from all involved
- Good risk information processes
3. What characterises a good risk culture?

- "Vertical escalation of threats and fears"
- "Committed leadership"
- "Horizontal information sharing"
- "Active learning from mistakes"
- "Continuous and constructive challenging of the organisation’s actions and preconceptions"
- "Incentives that reward thinking about the whole organisation"
- "An effective governance structure"
- "Management objectives linked to risk management objectives"

Source: Towers Watson survey taken at the Spotlight on Solvency II seminar in March 2011

3. Risk culture

We have an effective way of measuring and managing risk culture in our organisation

1. Strongly agree: 7%
2. Agree: 22%
3. Neutral: 28%
4. Disagree: 36%
5. Strongly disagree: 7%

Source: Towers Watson survey taken at the Spotlight on Solvency II seminar in March 2011
3. Example interventions to improve risk culture

- **Leadership**
  - Board education
  - Development of risk appetite
  - Leadership communication

- **Rewards**
  - Compensation governance
  - Audit of compensation plans
  - Alignment of plan design with risk appetite and strategy

- **Performance Management**
  - Goal setting in alignment with strategy
  - Risk-based personal objectives

- **Communication**
  - Risk reporting
  - Company-wide risk awareness and engagement

- **Organisational Change**
  - Coordinating multiple change initiatives
  - Addressing rational and emotional dimensions of organisational change

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4. Managing the flow of risk information

- **Too much information**
- **Irrelevant**
- **Too late**
- **Confusing and inconsistent terminology**
- **Difficult to understand**
- **Information not reaching some people**
- **Not acted upon**

**Information misunderstood is a waste of everyone’s time**
5. Modelling

- Standard formula vs. internal model
- Complexity vs. accuracy
- Continuous modelling
- Forward-looking
- Stress and scenario testing
- Need for speed

Models aren’t everything!

5. The key to effective modelling is focusing on the intended outcomes (why are we modelling?)

Inputs → Modelling → Outputs → Outcomes

- Pillar 1 Assumptions ➔ Continuous monitoring ➔ Regulatory position ➔ Demonstrate compliance Non-regular ORSA required?
- Pillar 2 Assumptions ➔ Calculate Pillar 2 Reconcile to Pillar 1 ➔ “True” capital position ➔ Understanding of economic capital required
- Range of possible outcomes for key risks ➔ Stresses, scenarios, reverse stress tests ➔ Capital impact of stresses ➔ Understanding the full range of solvency outcomes
- Business strategy ➔ Balance sheet projections on different scenarios ➔ Forward looking risk and capital assessment ➔ Understand the range of future outcomes for the business strategy and future capital needs
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What does the ORSA mean for me?

The world is changing:
- Risk is being put on the agenda
- The CRO will become a VIP

As actuaries we need to be different:
- Get involved in risk management (ERM)
- Expand our skill set
- Wider business involvement
- Focus on communication and collaboration

Grasp the opportunity
What does the ORSA mean for me?

“It says here you can lead a horse to solvency too”

Questions or comments?

Expressions of individual views by members of the Actuarial Profession and its staff are encouraged.
The views expressed in this presentation are those of the presenter.