Risk Management
Trends for Insurance Companies

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Global Association of Risk Professionals

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Basics of Insurance – Simplified P&L

Simplified P&L Example

- Earned Premiums
- Losses Incurred
- Expenses

+ Investment Income

Net Underwriting Gain/Loss

Net Income
Insurance Basics – Simplified Balance Sheet

Sample Balance Sheet
Normal Conditions

Assets

Liabilities

Surplus

Assets

Cash
Investments

Liabilities

Debt
Future Losses
Unearned Premium

Regulator Focus

Meet Policyholder Obligations
Solvency: Assets > Liabilities

Solvency: Assets > Liabilities
## Own Risk and Solvency Assessment (ORSA)

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<th>DEFINITIONS</th>
<th>PRINCIPLES</th>
<th>RISK MINDSET</th>
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<tr>
<td>• ... a comprehensive assessment of all the risks a business is exposed to</td>
<td>• ... owned by Senior Management and Board</td>
<td>• What are your plans? Forward looking view of the business</td>
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<td>• ... a process which links together all the pillars of Solvency II</td>
<td>• ... assesses all material risks and defines risk appetite for a company</td>
<td>• What are your business risks? Appetite and limits</td>
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<td>• ... a report which details and evidences the ORSA assessment</td>
<td>• ... based on adequate measurement and assessment processes</td>
<td>• What is material? Impact on current capital</td>
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<td>• ... a regulatory requirement</td>
<td>• ... forward-looking (accounts for business plans and projections)</td>
<td>• What are you doing about it? Responsibility, control and mitigation</td>
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<td>• ... A process of governance and internal control systems</td>
<td>• ... ORSA processes and outcomes must be evidenced and documented appropriately</td>
<td>• Why are you taking that approach? Evidence and documentation</td>
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<td>• ... Is an integrated ERM system used widely and embedded in an organisation</td>
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<td>• What might be the range of outcomes? Stress tests</td>
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<td>• How can you cope with such outcomes? Capital sources</td>
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ORSA is an Integrated Approach to Enable the Board to Adequately Assess Risks and Capital/Solvency
### ORSA is Here to Stay: 2014 and 2015 Defining Years

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<td>Solvency II ORSA</td>
<td>EIOPA Guidance</td>
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<td>China</td>
<td>CIRC Risk-Based Solvency Framework</td>
<td>ERM Guidelines</td>
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<td>First Risk Report Submission</td>
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<td>No guidance yet</td>
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## Description of the Insurer’s Risk Management Framework

- Risk Culture and Governance – Governance Structure, Roles, Accountabilities
- Risk Identification and Prioritization – How the insurer identifies, categorizes, and manages material risks as it executes its business strategy
- Risk Appetite, Tolerances and Limits
- Risk Management and Controls – Ongoing ERM activity operating at many levels in the org
- Reporting and Communication
- Demonstrate that the Risk Framework is Continuous

## Insurer’s Assessment of Risk Exposure

- Assessment of key risks by category (ex. credit, market, liquidity, underwriting, ops risk)
- Should consider likelihood and impact that relevant risks have on the firm’s balance sheet, income statement, cash flows

## Group Assessment of Risk Capital and Prospective Solvency Assessment

- Provide an overall determination of risk capital needs for the insurer, based upon the nature, scale and complexity of risk within the group and its risk appetite, and compare that risk capital to available capital to assess capital adequacy
- Prospective Solvency and Financial Condition Through Stress (ex. 1/200 yr event)
Common Elements of ERM Frameworks

Board Involvement
Risk Appetite
Clear Strategy and Objectives
Continuous Process of Risk Identification, Assessment, Management and Communication
Ownership and Accountability Throughout the Organization (Three Lines of Defense Model)
Documentation
Prove the System is Working Effectively (Audits, Use Tests)
Risk Culture
Organizations May Already Have Solid Risk Management Processes…They Just Need to Better Organize What’s in Place

Sample Before State: Separate Functions and Processes that Manage Risk within Their Own Area…

- Risk Committees
- Capital Management
- Modeling and Analytics
- Pricing Strategy
- Product Management

Audit Function

- Compliance Program
- Business Forecasting
- Commercial Strategy
- Business Continuity

Desired State: Coordination by Risk Across the Enterprise

Example: Interest Rate Risk

- Capital Management
- Modeling and Analytics
- Business Forecasting
- Commercial Strategy
- Pricing Strategy
- Product Management

Understand the Net Impact to the Enterprise
Risk Appetite

Needs Linkage to Strategy

The Perfect Metric May Not Exist

Keep it Simple - Start with Basic Principles that Everyone Can Understand

Enhance Risk Appetite with Metrics as the ERM Program Matures

Use the Risk Identification and Assessment Process to Help Drive Questions on Risk Appetite

Having a Risk Taxonomy Helps to Guide Thinking (Initially… but Use Multiple Lenses as the ERM Program Matures)

Get Started… and Refine as Needed
Goal: Develop a Continuous System that Assures Management that if Risks Emerge...they are Addressed

Ideal State: “Distributed Risk Management”
- All the Organizations Material Risks are Identified
- Risks are Linked to a Specific Owner and Management Process
- Risk Culture: All Employees are Involved and Play a Part in ERM
- Bottoms-Up: to Cover the Basics (ex. Compliance)
- Top-Down: to Link Risks to Strategy
- Rank Order and Prioritize
- Identify Gaps and Fix Processes
- Quantify Risks and Link to Capital Needs

Granularity Important: If Too Detailed, Difficult to Manage; Too High-Level, Ineffective

Be Clear on What is Meant by “Risk Assessment”

Feedback Loop to Test Risk Appetite, Limits and Tolerances
Stress Testing

Sample Log Normal Loss Profile

Considerations

How Bad Can Losses Get?
What is the Appetite for Losses?
How Much Capital in Needed to Withstand Tail Events?
How to Price Products to Account for the Loss Profile?
What Model Assumptions Cause the Worst Losses?
How Do We Know the Model is Right?
Global Regulatory Trends

- Capital Adequacy/Solvency Tests Using the Organizations Own Models
- Prospective Views of Capital Needs Across Many Scenarios
- Robust and Transparent Stress Testing Processes
- Understanding of How Changes in Risk Profile Impact Capital Needs
- Stress Testing Integrated in Business Planning Processes
Basics of Economic Capital (EC)

Potential Loss Distribution View of EC

Capital Must Be Held to Account for Unexpected Losses to Ensure Solvency of the Organization

Balance Sheet View of EC

Economic Capital is the Amount of Capital Needed Today... to Ensure Solvency Under Stress to a Predetermined Confidence Level (ex. 1 in 200 Year Event)
Benefits of Economic Capital

Reflects the Amount of Capital Needed to Maintain Solvency Under Stress Using the Firms Own Internal Models

Key Component to Calculate Risk-Adjusted Returns

Aids Capital Allocation Across Products and Business Units

Detect Shifts in Risk Profile

Enables Better Risk/Reward Tradeoffs in Decision Making

Identifies Risk Concentrations and Diversification Opportunities
Bringing All The Concepts Back Together

**ORSA - Gaining Momentum as a Global Standard for Forward Looking Risk and Capital Management Within the Insurance Industry**

One Comprehensive Document that Explains the Following:

- ERM Framework and Governance System
- Strategy and Risk Appetite
- Most Material Risks and How They Are Managed
- Quantification of Risks and Linkage to Solvency
- Stress Testing Procedure, Results and Contingency Plans

Commonality Across Various Regulatory Initiatives Around the Globe

Strive for a Continuous Process of Risk Identification and Assessment

Distributed Risk Management: Organize Risks, Assign Risks to a Specific Owner and Process, Assurance through Audit

Deeper Quantification of Risks; More Robust Stress Testing

Advancement and Use of Economic Capital
Questions and Contact Info

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