General insurance reserves for accounting and solvency: incorporating provision for risk

Risk margin working party 2006

Why?
- No consensus yet on how to “do risk margins”
- IAA advising IAIS and IASB – international effort
- Working party needed to produce non-life examples
- Interim report to GIRO (very interim!)

Working party members

- Jonathan Broughton
- Bob Buchanan (Australia)
- Tony Coleman (Australia)
- Peter Hinton
- Andrew Hitchcox
- Allan Kaufman (FCAS)
- Julian Leigh
- Erica Nicholson
- Justin Skinner
- Martin White
Overview

- Framework
- Reference Company concept
- Some numbers
- The challenge of calibration
- The players and their positions

IAIS (International Association of Insurance Supervisors)

- Aims for convergence of regulatory regimes
  - Regulators will set solvency standards
  - Technical reserves to follow IASB/IFRS
- IAIS “Cornerstone 1” emphasises the need for an insurer to meet its liabilities under all reasonably foreseeable circumstances, in the short and long term—capital plus technical reserves
- IASB’s fair value thinking for technical reserves compares well with regulators’ “willing reinsurer” transfer test

IAIS – Solvency- Rise and fall of xyz insurance co

- Company launched with fanfare, capital subscribed
- All goes well for some years
- Couple of bad years, capital falls below acceptable level for brokers to recommend
- Shareholders disenchanted, aware of risks in tail
- Company goes into solvent run–off
- Given that run-off is always possible, what expected policyholder deficit would be acceptable to policyholders at that point? 5%? 10%? 25%? >25%?
IAIS – Technical Reserves

- Solvency considerations define sum of capital and technical reserves
- But, IAIS (and the industry) want technical liabilities for solvency = technical reserves for general purpose financial reporting
- Hence, a fair value liabilities model such as cost of capital

Reference Company

- A market price – Not a prudential reserve
- “Own Portfolio” or “Assuming Co Portfolio”
- Leads to
  - Additivity
  - Consistency
  - Transparency
  - “Simplicity” (relatively, anyway)

Fair value impact
(starting with undiscounted no margins)

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<th>Model</th>
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<th>Long Tail</th>
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<tr>
<td>Tillinghast</td>
<td>-1%</td>
<td>-6%</td>
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<tr>
<td>PwC</td>
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<td>+20%</td>
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<tr>
<td>Straw-man</td>
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<td>-11%</td>
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<tr>
<td>CEA</td>
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<tr>
<td>SST</td>
<td>-6%</td>
<td>-16%</td>
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The Challenge of Calibration-1

- Reality check - Are reserves really 5% to 15% above ‘market value’?
- Watch the calibration
  - Cost of capital
  - Required capital

Calibration -2

- Capital = ECR, SCR (a work in progress),
  - Is that an A-rated company or BBB rated company
  - SCR reduced if reserve transfer assumed
- Cost of Capital=15%, 12%, 10%? 10%, more, less?
  - Tillinghast retail approach
  - Reinsurance & Net – An open question

The Players

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<td>GNAIE</td>
<td>CAS &amp; ASB</td>
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The Players Agree (Mostly)

- Actuaries know how to do expected value estimates!!
- Cost of capital is an acceptable approach
- Discounting is appropriate
- Calibrating a cost of capital model is described as simple, but no one has done a ‘real’ calibration (apologies to POP).

Next Steps

- Questions today
- Further GIRO feedback
- IAA and other feedback
- Further work by the working party