Components of required capital

<table>
<thead>
<tr>
<th>Operational risk</th>
<th>Aggregation benefit</th>
<th>Supervisory Adjustment</th>
<th>Prescribed capital amount</th>
<th>Total required capital amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset concentration risk</td>
<td></td>
<td></td>
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<tr>
<td>Asset risk</td>
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<tr>
<td>Insurance Concentration risk</td>
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<tr>
<td>Insurance risk</td>
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</tbody>
</table>
Asset risk capital charge

- Current factor based approach (investment risk charge)
- Current charge makes no allowance for:
  - duration mismatch between assets and liabilities
  - inflation and currency mismatch risks
  - increasing credit risk as term of assets increase
  - diversification benefits of holding a mixture of assets from different asset classes.
- Existing investment risk charge GPS 114 will be replaced by the ‘asset risk capital charge’.

Asset risk capital charge

- The new charge will be more risk sensitive than the old one
- The asset risk capital charge is based on series of stress tests to the balance sheet
- Some similarities to the existing life insurance approach
- The same charge will apply to both life and general insurers
Asset risk modules

- Real interest rates
- Expected CPI inflation
- Currency
- Volatility
- Equity
- Property
- Credit spreads
- Default

Interest and inflation stresses

<table>
<thead>
<tr>
<th>Maturity (years)</th>
<th>1</th>
<th>2, 3</th>
<th>4, 5</th>
<th>6, 7</th>
<th>8+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up</td>
<td>80%</td>
<td>70%</td>
<td>65%</td>
<td>60%</td>
<td>55%</td>
</tr>
<tr>
<td>down</td>
<td>-70%</td>
<td>-60%</td>
<td>-55%</td>
<td>-50%</td>
<td>-45%</td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up</td>
<td>95%</td>
<td>75%</td>
<td>65%</td>
<td>60%</td>
<td>55%</td>
</tr>
<tr>
<td>down</td>
<td>-85%</td>
<td>-65%</td>
<td>-55%</td>
<td>-50%</td>
<td>-45%</td>
</tr>
</tbody>
</table>
Other stresses

- Foreign currencies rise or fall by 25% against the AUD
- Equities - dividend yield increases by 2.5%
- Property - rental yield increases by 2.75%
- Credit spreads increase by 0.6% (AAA) or 1.5% (A rating)
- Default - same as GPS 114 for reinsurance recoveries, other recoveries, unpaid premiums, unclosed business.

Aggregation of asset risk charges

- Stresses in all 8 modules are most unlikely to occur simultaneously
- A correlation matrix will be used
- Reduces the capital charge by up to 50% compared with simple addition
- Higher correlations between currency, equity, volatility
- Lower correlations between currency, interest rates, inflation.
Other asset risk issues

- Materiality - simplify calculations

- Inflation risk - already captured to an extent in the insurance risk margins
  - need to ensure no double-counting

Asset concentration risk capital charge

- Charge for large exposures to individual assets or to a single counterparty or group of related counterparties

- 100% risk charge for the portion of any large exposures which exceed prescribed thresholds

- Current limit of 50% of capital base for rating grade 4 and for property, 25% of capital base for rating grade 5

- Lack of limits on exposures to grade 1, 2 or 3 counterparties is considered inappropriate.
Asset concentration risk capital charge

Proposals
- Maintain 100% capital charge for excess of assets over limits
- Base limit of 25% of capital base
- No limit for govt exposures with grade 1 or 2
- 50% of capital base for exposures to APRA regulated parties
- 100% of capital base for exposures to related entities which are also APRA regulated
- Dollar minimum thresholds for exposures to strong counterparties (eg. Banks)
- No change to limits for reinsurance exposures.

Insurance risk capital charge

No change in overall approach, some changes to factors

Direct Business
- Travel 9%→11% for OSC  (13.5%→16.5% for PL)
- Mortgage 11%→15% for OSC (16.5%→22.5% for PL)
- Actuary to choose charge most appropriate for ‘other classes’

Reinsurance business
- Align class groupings to match direct
- Remove distinction between facultative & treaty
- Collapse number of risk charge groups from 12 to 6
Insurance concentration risk capital charge

- Assuming limit of cover exceeds PML, current capital charge = MER plus cost of one reinstatement
- Aim to maintain adequate capital to withstand one large event
- BUT:
  - Ambiguity around definition of a large event
  - Does not address capital impact of unexpectedly large retained losses
  - More clarity needed for non property insurers
- Proposals not yet finalised - Technical paper expected in July / August

Insurance concentration risk capital charge

- Likely content of proposals - Definition of a large event:
  - retain PML concept and requirement for one reinstatement of cover
  - clarify PML based on single region/ single peril
  - same limit of cover for two insurers similarly exposed to a location specific peril, regardless of other exposures
  - remove reference to discretionary requirement for whole of portfolio approach
Insurance concentration risk capital charge

• Likely content of proposals - Allowing for multiple events:
  – Unexpected levels of retained losses from multiple events can impact capital adequacy if retentions are high.
  – APRA considering addressing this risk through either:
    a) supervisory process (capital management plans, reinsurance strategy, stress testing) OR
    b) a modification of the rules based formula to deal with the impact of net retained losses from more than one event
  – Some preference for (b) but details yet to be finalised

Concept for modification to rules based formula:
- Retain PML, MER, one reinstatement requirement
- Capital charge based on a proportion of losses arising from multiple events within one treaty year, with the proportion reducing as the likelihood of events become more remote.
- Eg: a\times MER_1 + b\times MER_2 + c\times MER_3 + d\times MER_4 + cost of one reinstatement, where a,b,c,d <1
- Would take account of cover which limits retained losses
- Detail needs to be worked through
**Insurance concentration risk capital charge**

- **Likely content of proposals - Non property classes:**
  - property insurers need to consider risks from non property classes
  - outline expectations for identification of maximum event
  - clarify methodology for netting reinsurance assets for insurers with stop loss cover
  - For classes such as trade credit, LMI - allow deduction of a portion of premium liability provision

**Operational risk**

**Proposed Charge**

\[
ORCC = 3\% \times \max \{GP + |\Delta|, (PL+OSCL) + |\Delta|\}
\]

where:
- GP = Total annual earned premiums (gross of reinsurance)
- PL = Gross Premium Liability (central estimate)
- OSCL= Gross outstanding claims liability (central estimate)
- |\Delta| = Absolute value of the annual change in the relevant quantity (from year t-1 to t) for changes which exceed ±10%.
### Other items

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk margins</td>
<td>- maintain 75% PoS approach</td>
</tr>
<tr>
<td></td>
<td>- require risk margins on recovery assets</td>
</tr>
<tr>
<td>Diversification</td>
<td>- collect information on diversification benefit in risk margins</td>
</tr>
<tr>
<td></td>
<td>- may limit overall level allowed</td>
</tr>
<tr>
<td>Discount rates</td>
<td>- maintain requirement to use yields from Commonwealth Government Bonds</td>
</tr>
<tr>
<td>Capital base</td>
<td>- no double counting of regulatory capital</td>
</tr>
<tr>
<td></td>
<td>- may limit quantum of Tier 2 capital allowed</td>
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</tbody>
</table>

### Questions?