Solvency II
Long Term Guarantees Assessment

Jim Murphy
Milliman Breakfast Briefing
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Background

- Treatment of Long Term Guarantees is a key issue to progressing Omnibus II

- Trilogue concerned that Solvency II could lead to ‘artificial volatility’ & procyclicality without Long Term Guarantee measures

- Could lead to range of unintended adverse social and economic impacts:
  - Shift from longer-term to shorter-term assets
  - Move away from offering long-term guaranteed products
  - Cost of overly-high capital requirements passed on to customers
  - Limit insurers’ traditional role as investors in the European economy
  - Reduce insurers’ traditional role as a stabiliser of systemic risk and market volatility
Impact Assessment

- Trilogue decided in July 2012 that LTG package should be subject to impact assessment
- Scope and content of LTGA developed over H2 2012
- Participation per country
  - 50% life insurance by technical provisions
  - 20% non-life by premiums
  - Representative undertakings
- In Ireland, ca. 6 (re)insurers participating

Timelines

- 28 Jan 2013: Impact assessment launched
- 31 March 2013: Deadline for undertakings to submit results to supervisors
- 14 June 2013: EIOPA to submit findings to EU Commission
- 12 July 2013: Commission report to co-legislators
The long-term guarantees ‘package’

- Extrapolation of risk free yield curve
- Matching adjustment (MA)
  - Classic
  - Extended
- Counter-cyclical premium (CCP)
- Transitional provisions
- Extension of recovery period

Scenarios tested

- Base scenario
  - Extrapolation similar to QIS5 but ultimate convergence is earlier
  - Assumes no CCP, no MA, no transitionals
  - Reference date is 31 December 2011
- 12 other scenarios covering:
  - Two alternative extrapolation methodologies
  - CCPs of 100bps, 50bps and 250bps
  - 2 versions of classic MA and 3 versions of extended MA
  - Transitional measures (existing business vs. paid in premiums)
  - Reference dates of 31 December 2009 and 31 December 2004
- Additional sensitivites required for some scenarios
Extrapolation

- Swap curve is starting point, adjustments then made for:
  - Credit risk
  - Market rates used up to Last Liquid Point (‘LLP’)
  - Convergence after LLP to Ultimate Forward Rate (‘UFR’)

- The impact on LTGs will be sensitive to the choice of parameters (base scenario assumptions shown in brackets):
  - Credit risk (35bps)
  - Choice of LLP (30 years)
  - UFR (4.2%)
  - Convergence period ‘CP’ (40 years)

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Euro swap rates at 31 December 2011

Swap curve is adjusted downwards for credit risk

- Spot Rates
- CR Adjusted
Extrapolation – base scenario

Last Liquid Point (‘LLP’) based on QIS5 LLP of 30 years

- Swap Curve (adj for CR)
- Base Scenario*

* LLP of 30 years, 40 year convergence period, UFR of 4.2%

Extrapolation – 3 scenarios investigated

Shortest LLP and CP combination results in highest yields currently

- LLP 30, CP 40
- LLP 20, CP 40
- LLP 20, CP 10

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Extrapolation of yield curve

- Aim is for stable longer term rates to avoid ‘artificial volatility’ in calculation of TPs
  - However, at odds with ALM and hedging on an economic basis
- Will apply to both domestic and cross border business

Matching Adjustment

<table>
<thead>
<tr>
<th></th>
<th>Classic</th>
<th>Extended</th>
</tr>
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<tbody>
<tr>
<td>Versions</td>
<td>- Classic Standard</td>
<td>- Extended Standard I</td>
</tr>
<tr>
<td></td>
<td>- Classic Alternative</td>
<td>- Extended Standard II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Extended Alternative</td>
</tr>
<tr>
<td>Product restrictions</td>
<td>- Excludes unit-linked</td>
<td>- Excludes unit-linked</td>
</tr>
<tr>
<td></td>
<td>- Cannot surrender for more than asset value</td>
<td>- Can include policyholder options</td>
</tr>
<tr>
<td></td>
<td>- No future premiums</td>
<td></td>
</tr>
<tr>
<td>Asset credit limits</td>
<td>- BBB limit of 33% for Standard version, none for Alternative</td>
<td>- BBB limit of 33% for Standard versions, none for Alternative</td>
</tr>
<tr>
<td>Sample products</td>
<td>- Immediate annuity</td>
<td>- With-profits products</td>
</tr>
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- Cross border business excluded from scope under previous proposals
  - LTGA technical specification silent on this issue
**Matching Adjustment – Calculation Step #1**

\[ \text{Matching Adjustment} = C - A \text{ (i.e. 1.25\%)} \]

- **A**: Asset yield adjusted for ’fundamental spread’ e.g. 3.25%
- **B**: Weighted average yield on assets e.g. 4%
- **C**: Equivalent single discount rate to RFR e.g. 2%

* * Swap curve at 31 December 2011 adjusted for credit risk

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**Matching Adjustment – Calculation #2**

<table>
<thead>
<tr>
<th></th>
<th>Classic</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental spread</td>
<td>Floor is 75% of long term average spread</td>
<td>Floor 80% of long term average spread for Standard versions, no floor for Alternative version</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excludes cost of downgrade element for Alternative version</td>
</tr>
<tr>
<td>Application ratio*</td>
<td>100%</td>
<td>&lt; 100% (formula prescribed)</td>
</tr>
</tbody>
</table>

* Proportion of calculated amount from previous slide that can be used
Countercyclical premium

- Applies to business not eligible for matching adjustment
- Envisaged that CCP will be temporarily introduced when markets are stressed
- Envisaged that EIOPA will play a leading role in deciding when CCP introduced and how much
- (Re)insurers will have to disclose use and financial impact
- Expected to apply to both domestic and cross border business

Risk free curve plus CCP
CCP/MA by line of business

- CCP
  - Basic risk free interest rate
  - OR
- MA classic
  - Basic risk free interest rate
  - OR
- MA extended
  - Basic risk free interest rate

Transitional measures

- Proposed blending from Solvency I interest rates over 7 years
  - Weighted average of Solvency I and Solvency II interest rates
  - Weighting for SI rate is 100% reducing to 0% over 7 years
  - Weighting for SII rate is 0% increasing to 100% over 7 years

- Equity stress set at 22% for all equities

- No extended matching adjustment where transitional measures applied

- Can only be applied to domestic business and not cross border business
In Conclusion

- Resolution of LTGA package is key to progressing Omnibus II

- Key open issues include:
  - How early will full extrapolation of the curve come into effect?
  - What credit limit restrictions will apply to the Classic MA?
  - If an Extended MA is introduced, how will the ‘Application Ratio’ be calculated, what restrictions will apply to credit limits and fundamental spread?
  - Under what conditions will CCP be introduced or removed?
  - What transitional provisions will apply?

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In Conclusion

- Package of measures is more important for some countries and some lines of business e.g.
  - Extrapolation and CCP important for German industry
  - Matching Adjustment important for UK annuity industry

- However some measures will impact all companies
  - Extrapolation
  - CCP
  - Extension of recovery period

- Concerns exist if some measures limited to domestic business