Hot Topics in Solvency II

Czech Society of Actuaries

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This presentation conveys the opinion of the author and it does not necessarily reflect the view of his employer or a professional organization he is a member of.
Agenda

Slow down

What the future holds
What the hell is going on?
The Solvency II home

Pillar 1
Quantitative requirements
- Market consistent valuation: S2 Balance Sheet
- Own funds
- SCR, MCR
- Prudent Person

Pillar 2
Qualitative requirements
- Governance:
  - Risk M'ment
  - Actuarial
  - Int'l control
  - Int'l audit
  - ORSA
  - Supervisory Review Process

Pillar 3
Market discipline
- Supervisory reports
- Disclosure
- Transparency
A small technical problem

However, euro billions depend on the answer…

…and whether important markets remain solvent at introduction of S2

The problem is:
- Market consistency and Discounting

Two parts
- Hectic yields reflecting panic at markets
- Low interest rates
What is the problem with applying the “truly” risk free rate?

If there is no allowance for “illiquidity” in the liabilities...

...then a market shock may have dramatic effect

If there is allowance for “illiquidity” in the liabilities...

...then a market shock has a dampened effect
Modeling (long term guarantees)
One response: LTGA

Test the viability/usefulness of certain measures

Various CCPs

Various extrapolations

Various MAs

Various transitional measures

Test 2011 but also 2004 and 2009 situation
One response: LTGA

CCPs

No CCP – Scenario 0, 11-12

100 bps – Scenario 1, 4-10

50 bps – Scenario 2

250 bps – Scenario 3
One response: LTGA
Extrapolations

LLP 30yrs for EUR, 40 yr convergence – Scenario 0

LLP 20yrs for EUR, 40 yr convergence – Scenario 5

LLP 20yrs for EUR, 10 yr convergence – Scenario all rest

LLP for CZK: 15yrs; HUF, PLN: 10 yrs in all scenarios
For HUF, contrary to 15yrs in the description, the spreadsheet indicates 10yrs

Convergence is the same as for EUR
One response: LTGA
“Classic” Matching adjustment

No Matching Adjustment – Scenario 0

Classic Alternative version – Scenario 4

the matching adjustment for certain life insurance obligations with no policyholder options (or only a surrender option where the surrender value cannot exceed the value of assets) and ignoring the two limits in term of both the proportion of assets held in credit quality step 3 and the level of matching adjustment applicable to these assets

Classic Standard version – Scenario all rest

the matching adjustment for certain life insurance obligations with no policyholder options (or only a surrender option where the surrender value cannot exceed the value of assets) and where limits apply to both the proportion of assets held in credit quality step 3 and the level of matching adjustment applicable to these assets
One response: LTGA
“Extended” Matching adjustment

No Matching Adjustment – Scenario 0, 8, 9, 11

“Extended” Alternative version – Scenario 6
the alternative adjustment for life insurance obligations or annuity obligations arising from non-life contracts differing from the standardised version in four ways: no cash-flow matching is required instead the adjustment reflects the material risk of mismatch and forced sale of assets; eligible assets do not need to provide fixed cash-flows; credit quality limits do not apply for asset admissibility or level of the matching adjustment; and the fundamental spread includes only the credit spread corresponding to the probability of default

“Extended” Standard II version – Scenario 7
This version differs from “extended” standard I only in the calculation of the application ratio; which in this case applies a 99.9% confidence level rather than the 99.5% underlying the stresses used to determine the application ratio (AR: restricts the MA to allow for possible mismatch stemming from discontinuances or earlier than expected payments on eligible business)

“Extended” Standard I version – Scenario all rest
the extended matching adjustment for life insurance obligations or annuity obligations arising from non-life contracts including policyholder options
One response: LTGA
Transitional Measures

Transitional measure applied to all existing business – Scenario 8, 11

Transitional measure applied to paid in premiums only – Scenario 9

No transitional measure – Scenario all rest
One response: LTGA
Reference date

2004 – Scenario 11, 12

2008 – Scenario 10

2011 – Scenario all rest
### Overview of the scenarios

<table>
<thead>
<tr>
<th>Scenarios at the reference date YE11</th>
<th>Scenarios at historic reference dates</th>
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<tbody>
<tr>
<td><strong>I. Adapted relevant risk-free interest rate term structure (CCR)</strong></td>
<td></td>
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<tr>
<td>A. No CCP</td>
<td>x</td>
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<tr>
<td>B. CCP of 100 bps</td>
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<td>C. CCP of 50 bps</td>
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<tr>
<td>D. CCP of 250 bps</td>
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<td><strong>II. Extrapolation</strong></td>
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<td>A. LLP 30yrs for EUR, 40 yr convergence</td>
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<td>B. LLP 20yrs for EUR, 40 yr convergence</td>
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<tr>
<td>C. LLP 20yrs for EUR, 10 yr convergence</td>
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<td><strong>III. “Classic” Matching adjustment</strong></td>
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<tr>
<td>A. No Matching Adjustment</td>
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<tr>
<td>B. Classic Standard version</td>
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<tr>
<td>C. Classic Alternative version</td>
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<td><strong>IV. “Extended” Matching adjustment</strong></td>
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<td>A. No Matching Adjustment</td>
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<td>B. “Extended” Standard I version</td>
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<td>C. “Extended” Standard II version</td>
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<td>D. “Extended” Alternative version</td>
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<td><strong>V. Transitional measures</strong></td>
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<td>A. No transitional measure</td>
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<tr>
<td>B. Transitional measure applied to all existing business</td>
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<tr>
<td>C. Transitional measure applied to paid in premiums only</td>
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</tr>
<tr>
<td><strong>VI. Reference date</strong></td>
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<tr>
<td>A. 31 December 2011 (YE11)</td>
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<tr>
<td>B. 31 December 2009 (YE09)</td>
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<tr>
<td>C. 31 December 2008 (YE04)</td>
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**LTGA:** A response to the question of using a risk-free interest rate term structure (CCR) and its implications for different scenarios.
One response: LTGA
Overall results in Hungary

10 participants (3 life, 1 non-life, 6 composite firms)
They cover 51% of the market in terms of total assets

9 Benchmark participants (3 life, 1 non-life, 5 composite)
They cover 46% of the market in terms of total assets

Most of them covered scenarios 0, 1, 3, 5

0: No LTG measures

1: Base scenario
   CCP of 100bps
   LLP 20yrs for EUR, 10 yr convergence
   Classic Standard version
   “Extended” Standard I version
   No transitional measure
   2011

3: CCP of 250bps

5: LLP 20yrs for EUR, 40 yr convergence
Another response from EIOPA: Solvency 1.8

EIOPA initiative: four CPs on Guidelines

Based on recommendations by supervisors not on law

Four explicit areas

governance
FLAVOR (ORSA)
Supervisory reporting
IM pre-application

In fact the goal is to prepare for a full implementation
Another response from EIOPA: Solvency 1.8 Governance

Ultimate responsibility rests with the Board

Internal control and risk management systems

Efficient operation

Prudent Person Principle

Written policies
Responsibility of the Board

Must use full version by 1 Jan 2016

No formal Pillar 1 requirement still FLAVOR assumes there are figures like BE, RM, OF, SCR… looking forward

Internal and external (supervisory) report

Requirement for stress testing, scenario analysis and reverse stress testing
Another response from EIOPA: Solvency 1.8 Reporting

Expectation: by the time firms have to calculate all details will have been approved

Seems too detailed and burdensome

First annual returns: in May 2015 on 2014

First quarterly returns: in Nov 2015 on 2015q3

No supervisory sanction is required during the transitional period
Another response from EIOPA: Solvency 1.8

Open consultation until 19 June

National Competent Authorities: comply or explain

Final Guidelines by fall

In case of compliance: local supervisory recommendations

Introduction: 1 Jan 2014
The future?

IORP Pillar 1 has been put on hold

Trialogue may have consensus on S2?

Big firms want S2 but not at any cost

Compromise between regulators and industry?

Medium harmonization?
The future?

Gödel
Or Mission Impossible?

Escher
Or Mission Impossible II?

Bach
Or?

Gödel, Escher, Bach: An Eternal Golden Braid

Douglas Hofstadter
...and
Thank You!
Any Questions or Comments?

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