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Actuarial Discipline: Threat or Opportunity?

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Actuarial Discipline

- The importance of a quantitative analysis of risks and probabilities is not yet recognised in European insurance regulation
- There is a growing awareness that there is a need for actuarial discipline
- The official recognition of the actuarial function will create a huge demand for people with actuarial skills
- There is a risk that actuarial discipline will – as has happened in accounting – become an academic exercise that does not sufficiently take account of what happens in the real world

Threat: Paradise lost

- Actuaries use the opportunity of Solvency II to further complicate things
- Actuaries do not improve their communication skills and fail to inform their clients about the potential of Solvency II
- Actuaries start to believe in their models and are run by their models
- Actuaries fail to take on more responsibility because they believe that judgement is not something they should get involved in
- Actuaries do no longer produce jokes because they take themselves too seriously

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Solvency II: a paradise for actuaries?

- Three pillar approach of Basel II
- Official recognition of the actuarial function as part of the new governance requirements in pillar 2
- Risk based solvency regime with two capital requirements: SCR and MCR
- Market consistent valuation of assets and liabilities
- Possibility to calculate the SCR using an internal model
- Recognition of the VaR approach already present under Basel II
- Group solvency calculation

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Role of actuaries in the design of Solvency II

- Framework for consultation with active involvement of stakeholders including the Groupe Consultatif
- Calls for advice addressed to CEIOPS with consultation of stakeholders including the Groupe Consultatif
- Pillar 1 Working Group in CEIOPS (now EIOPA) with active participation of actuaries
- Framework Directive to be further implemented by EC and by EIOPA (technical v. political)
- Principle based approach and proportionality

Where are we now in the process?

- Framework Directive adopted in 2009
- Level 2 implementing measures developed during the course of 2009-2011
- Level 3 guidance developed by EIOPA during the course of 2010-2011
- Omnibus II proposed in January 2011
- Council agrees on OII in September 2011 with limited changes in the Framework Directive
- EP adopts different approach in March 2012 with great reluctance to accept an approach that leaves too much freedom to level 2

Long term guarantees

- Issue of extreme volatility caused by new market conditions came out of analysis of QIS 5 results
- EC starts working group in February 2011 which develops a number of solutions which take account of the differences between the economic situation in Member States and between the various types of (life) products
- Most of the solutions proposed relate to level 2 measures as the Directive is principle based
- Growing recognition that different solutions are needed because life business is different from MS to MS

Long term guarantee package

- Matching adjustment for illiquid liabilities
- Extended matching adjustment for illiquid part of liabilities that are not entirely illiquid
- Extrapolation of the curve for the calculation of the risk free rate
- Counter-cyclical premium to be decided by EIOPA
- Transitional regime (mainly for life business)
- Difficulty for the actuarial profession to agree on whether the adjustments are justified under the concept of market consistency

Some issues

- Is there still a risk free rate?
- Are there still risk free assets?
- What is market consistent valuation when applied to long term liabilities?
- How should one deal with situations of extreme market volatility?
- Should there be a special treatment for the calibration of long term investments?
- Should insurance liabilities be valued without taking account of the value of the matching assets?

Actuarial Function

- Key function in the new governance system under Solvency II
- Does not have to be carried out by an actuary but by a person with actuarial skills
- No requirement to have an in-house actuary
- Person exercising the function must be fit and proper

Article 48(2) Framework Directive

- Actuarial Function shall be carried out by persons:
  - who have knowledge of actuarial and financial mathematics, commensurate with the nature, scale and complexity of the risks inherent in the business
  - who are able to demonstrate their relevant experience with applicable professional and other standards

Tasks of actuarial function (1)

- Coordinate / oversee the calculation of TP
- Assess the sufficiency and quality of the data used in the calculation of TP
- Compare best estimates against experience
- Inform the management about the reliability and adequacy of the calculation of TP

Tasks of actuarial function (2)

- Express an opinion on the overall underwriting policy
- Express an opinion on the adequacy of reinsurance arrangements
- Contribute to the effective implementation of the risk management system, in particular with respect to the risk modelling

Actuarial Standards

- EIOPA will develop actuarial standards as part of the guidance concerning the actuarial function

- Independent body to develop actuarial standards taking into account the work carried out by the actuarial profession in the EU and worldwide

Impact on the actuarial profession

- Solvency II puts the actuarial profession on the map
- Continuous increase in the demand for persons with actuarial skills
- Need for guidance and institutionalisation of the profession in all MS
- Actuaries will have to develop suitable techniques and skills to communicate with management, with the co-legislators, with the supervisors and with other stakeholders

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Solvency II design issues

- Is the proposed confidence level (99,5%VaR over a one year time horizon) too high?
- Should there be a different confidence level for life and non-life?
- Is VaR the right measure? Does it produce procyclicality?
- Should the calibration of risks only be based on mathematical calculations or should it also look at the business reality?

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Messages from John Kay

- Extreme observations come from off-model events, not from improbable events within models
- Need to explore the limits of probabilistic reasoning
- Attach more importance to stewardship
- Is the efficient market hypothesis still justified?
- Do we have a “homo economicus”?
- Actuaries should exercise more judgment and frame this in convincing narratives rather than to rely on spuriously accurate mathematical projections based on past experience

Solvency II: when?

- Official start date for Solvency II is 1 January 2014
- Technical assessment by EIOPA of LTG package (not the same as a QIS 6)
- Results should be communicated to Trilogue parties and to public in July
- Restart of negotiations in Autumn with final decision on start date and transitions

EIOPA Action

- Interim guidelines prepared by EIOPA to ensure that industry and supervisors prepare for the start of Solvency II
- Interim guidelines are not legally binding
- Interim guidelines are not an advance application of Solvency II
- Interim guidelines to be adopted by EIOPA in September for application 1 Jan 2014

Opportunity: Paradise reinstaured

- Actuaries become strong defenders of the KISS principle
- Actuaries have come to the conclusion that their role is much enhanced if people actually understand what they are talking about
- Actuaries take a critical look at their models and question them regularly based upon experience from the real world
- Actuaries are not afraid to take on responsibility and to advise management
- Actuaries produce jokes about other professions and make money out of it

Concluding Remarks

- Delay on Solvency II mainly caused by financial crisis
- Need to finalise discussions and to start the regime as soon as possible
- Use extra time to “improve” treatment of long term guarantees
- Actuaries must help regulators to better understand the limits of what is possible under Solvency II
- More attention should be paid to the qualitative aspects of solvency
- A perfect solution is not of this world

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