Society of Actuaries in Ireland

Introduction to Solvency II

22nd October 2009

Alexander Hotel

Agenda

- Why has Solvency II been created?
- Structure of Solvency II
- The Solvency II Balance Sheet
- Pillar II & III Aspects
- Major Issues
- Timeline to Implementation
- SAI Solvency II Committee & Further events

Why has Solvency II been created?

- Solvency I only a minor tweak of existing requirements
- Create a principle-based system
- Risk-sensitive capital requirements
- Alignment with best risk management practices
- Consistent application across EU

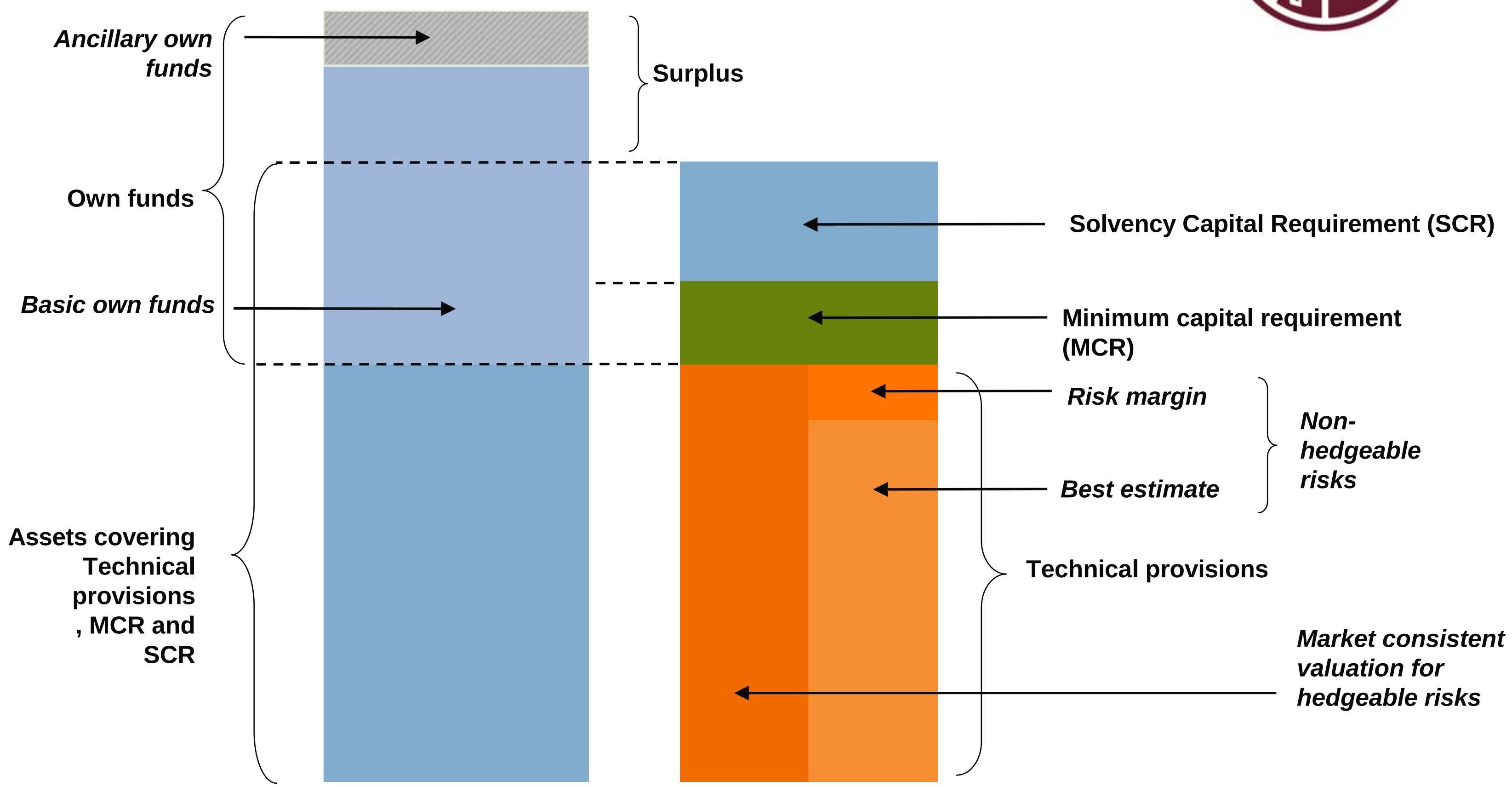
Solvency II Structure

- Conceptually based on Basel II structure for banking sector
- The "Three Pillars"
  - Pillar I: Quantitative measures, technical provisions and capital requirements
  - Pillar II: Qualitative measures, governance, risk management, supervisory interaction
  - Pillar III: Supervisory reporting and public disclosure

Solvency II Structure

- Solvency II developed under the “Lamfalussy Process”
- Level 1: The Directive
  - Joint decision of the Council of Ministers and the European Parliament
- Level 2: Implementing Measures
  - Responsibility of the Commission, based on the advice of CEIOPS (but influence of Finance Ministries)
- Level 3: Supervisory Guidance
  - Responsibility of CEIOPS
- Level 4: Enforcement
  - Responsibility of Commission; ensure all member states have implemented fully / correctly

The Solvency II Balance Sheet



The Solvency II Balance Sheet

- Technical Provisions (TP)
  - Best estimate: probability-weighted average of future cash flows, discounted using risk-free term structure
  - Risk margin: margin required by a third-party to take over the obligation (Cost of Capital)
  - TP can be valued directly if a market instrument exists that replicates the cash flows under the policy
- Solvency Capital Requirement (SCR)
  - Capital required to meet quantifiable risks on existing portfolio plus one year's expected new business
  - Calibrated at VaR 99.5% over one year
  - Standard Formula Principle: apply a set of instantaneous shocks, calculate net impact on balance sheet at valuation date, apply appropriate correlations to the shocks to give total capital
  - May derive SCR from this standard formula approach, or use result of internal model (or combination – partial internal model) – subject to supervisory approval

The Solvency II Balance Sheet

- Solvency Capital Requirement risk categories
  - Non-life underwriting risk
    - Premium & reserve risk
    - Catastrophe risk
  - Life underwriting risk
    - Mortality
    - Longevity
    - Morbidity
    - Expenses
    - Lapse
    - Catastrophe
  - Health underwriting risk
    - Premium & reserve risk
    - Expense risk
    - Catastrophe risk

The Solvency II Balance Sheet

- Solvency Capital Requirement risk categories
  - Market risk
    - Interest rate risk
    - Equity risk
    - Property risk
    - Credit spread risk
    - Currency risk
    - Concentration risk
  - Credit risk
  - Operational risk
    - Except for unit-linked business, Op risk capital charge can't exceed 30% of the sum of the rest of the SCR

The Solvency II Balance Sheet

- Minimum Capital Requirement (MCR)
  - Lower than SCR – "point of no return"
  - Calibrated to 85% VaR over one year from valuation date
  - Subject to a corridor of 25-45% of the SCR
  - Calculated as a linear function of some or all of:
    - Technical Provisions
    - Written Premiums
    - Capital-at-risk
    - Deferred Tax
    - Administrative Expenses
  - Subject to a monetary minimum floor
  - All very reminiscent of Solvency I !

The Solvency II Balance Sheet

- Own Funds (Eligible Capital)
  - First classification: Basic or Ancillary
  - Basic Own Funds: Surplus of assets over liabilities, or subordinated liabilities
  - Ancillary Own Funds: Other loss-absorbing items, including unpaid share capital, letters of credit, guarantees
  - Ancillary must receive prior supervisory approval
  - Second classification: Tiers of Capital, judged according to criteria:
    - Permanent availability
    - Subordination
    - Absence of incentives to redeem
    - Absence of mandatory servicing costs
    - Absence of encumbrances

The Solvency II Balance Sheet

- Own Funds (Eligible Capital)
  - Tier One: Basic own funds, if all the boxes are ticked
  - Tier Two: Basic own funds, even if permanent availability is not met, or Ancillary Own Funds, if all the criteria are met
  - Tier Three: Anything else
- Quantitative limits apply to the extent to which Tier Two and Three items can be recognised to meet SCR / MCR
- Tier One must constitute more than one third of Eligible Capital, Tier Three must be less than one third

The Solvency II Balance Sheet

- Assets
  - The “Prudent Person Principle” applies:
    - Must be able to identify, measure, monitor, manage, control and report the risks involved in the investments
    - Must ensure the security, quality, liquidity and profitability of the portfolio as a whole
    - Must be appropriate to the nature and duration of the liabilities
    - Derivatives allowed if they reduce risks or facilitate efficient portfolio management
    - Assets should be properly diversified
  - No prescribed quantitative limits
  - No localisation requirements
  - No compulsory collateral for reinsurance

Pillar II Aspects

- Governance
  - Must have an effective system of governance which provides for sound and prudent management
  - Proportionate to the nature, scale and complexity of the operations
  - Specific functions/systems must be in place (operating to prescribed standards):
    - Risk Management
    - Internal Control
    - Internal Audit
    - Actuarial Function
    - Outsourcing
  - Must have an effective risk management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks

Pillar II Aspects

- Own Risk and Solvency Assessment (ORSA)
- Must consider
  - overall solvency needs allowing for the specific risk profile, approved risk tolerance limits and the business strategy
  - compliance, on a continuous basis, with the capital requirements, and with the requirements regarding technical provisions
  - the significance with which the risk profile of the undertaking concerned deviates from the assumptions underlying the Solvency Capital Requirement
- Must have in place (proportionate) processes which enable the company to properly identify and assess the risks
- Must be an integral part of the business strategy

Pillar II Aspects

- Requirements for supervisors
  - Review strategies, processes and reporting procedures (with regard to the proportionality principle)
  - Includes:
    - Assessment of the qualitative requirements relating to the system of governance
    - Assessment of the risks which the company faces or may face
    - Assessment of the ability of those undertakings to assess those risks

Pillar II Aspects

- Requirements for supervisors
  - review and evaluate compliance with requirements for:
    - the system of governance, including the own risk and solvency assessment
    - the technical provisions
    - the capital requirements
    - the investment rules
    - the quality and quantity of own funds
    - full and partial internal models (if applicable)
    - methods used to identify possible events or future changes in economic conditions that could have adverse effects

Pillar III Aspects

- Report on solvency and financial condition (at least annual)
- Most of the content will be public, though can apply for supervisory approval to keep aspects confidential
- Must include descriptions of:
  - the business and the performance of the company
  - the system of governance and an assessment of its adequacy for the risk profile
  - (for each category of risk) the risk exposure, concentration, mitigation and sensitivity
  - for assets, technical provisions, and other liabilities, the bases and methods used for their valuation, together with an explanation of any major differences in the bases and methods used for their valuation in financial statements

Pillar III Aspects

- Report on solvency and financial condition:
- Must include descriptions of the capital management (not normally public), including at least:
  - the structure and amount of own funds, and their quality;
  - the amounts of the Minimum Capital Requirement and of the Solvency Capital Requirement;
  - the option used for the calculation of the Solvency Capital Requirement;
  - the main differences between the underlying assumptions of the standard formula and those of any internal model used;
  - the amount of any non-compliance with the MCR or SCR, even if subsequently resolved, with an explanation of its origin and consequences as well as any remedial measures taken.

Major Issues

- Will Solvency II lead to less or more capital?
  - We don't know!
  - QIS4 suggested reductions at the macro level (but not for all)
  - Upward pressure on calibrations
  - Allowance for illiquidity in the risk-free rate
  - What if your gilts are not AAA?
- Will Solvency II deliver a level playing field?
  - "Maximum harmonisation" directive; implementation by EU Regulation?
  - Scope for interpretation, EU-wide technical standards
  - Impact on global regulatory standards
- Will internal models facilitate lower capital levels?
  - High hurdles for model approval
  - Greater regulatory conservatism

Major Issues

- What will be the effect of increased Group supervision?
  - Watered down from earlier proposals ("Group Support" concept removed)
  - But Group supervisor has additional powers
  - e.g. Approval of Group internal models
  - Influence the location decision of Head Offices?
  - Alter Group structures (subsidiaries vs. branches)?
- Will Pillar II (in particular) promote better risk management?
  - Capital add-ons possible
- When should a Solvency II implementation project commence?
  - Yesterday!
  - Huge preparation effort required (even more so if contemplating internal models)

Timeline to Implementation

Current State of Play

- Level 1: Solvency II Directive finalised April 2009
  - 312 Articles plus 7 Annexes
  - Consolidates all previous Insurance & Reinsurance Directives, as well as the new Solvency II material
- Level 2: CEIOPS publishing Consultation Papers setting out their advice to the Commission
  - 1st wave, March 2009: 12 papers
  - 2nd wave, June 2009: 25 papers
  - 3rd wave due in November 2009: All outstanding issues, including key question of calibrations
- Local requirements:
  - In August, FR required companies to designate specified board member and senior executive as responsible for Solvency II project
  - Also questionnaire on internal model intentions

Timeline to Implementation

Future Milestones

- January 2010: CEIOPS finalises advice on Level 2 Measures
- March 2010: Draft specifications for QIS 5
- June 2010: Final QIS5 Spec
- H2 2010: Commission begins to publish proposals for Level 2 Measures
- August – November 2010: QIS5 carried out by companies (effectively compulsory)
- April 2011: QIS5 report to be published
- June – October 2011: Level 2 Measures finalised
- December 2011: Level 3 Supervisory Guidance finalised

31st October 2012:

Solvency II enters into force

SAI Solvency II Committee

- Dervla Tomlin (Chair)
- John Armstrong
- Michael Culligan
- Mike Frazer
- Declan Lavelle
- John McCrossan
- Brian Morrissey
- Jim Murphy
- Arran Nolan
- Dick Tulloch

Upcoming SAI Solvency II Events

- Solvency II: Technical Provisions
  (November 5th, 4.30 pm)
- Solvency II: Solvency Capital Requirement
  (November 18th, 4.30 pm)
- Solvency II: Governance and Actuarial Function
  (November 23rd, 4.30 pm)