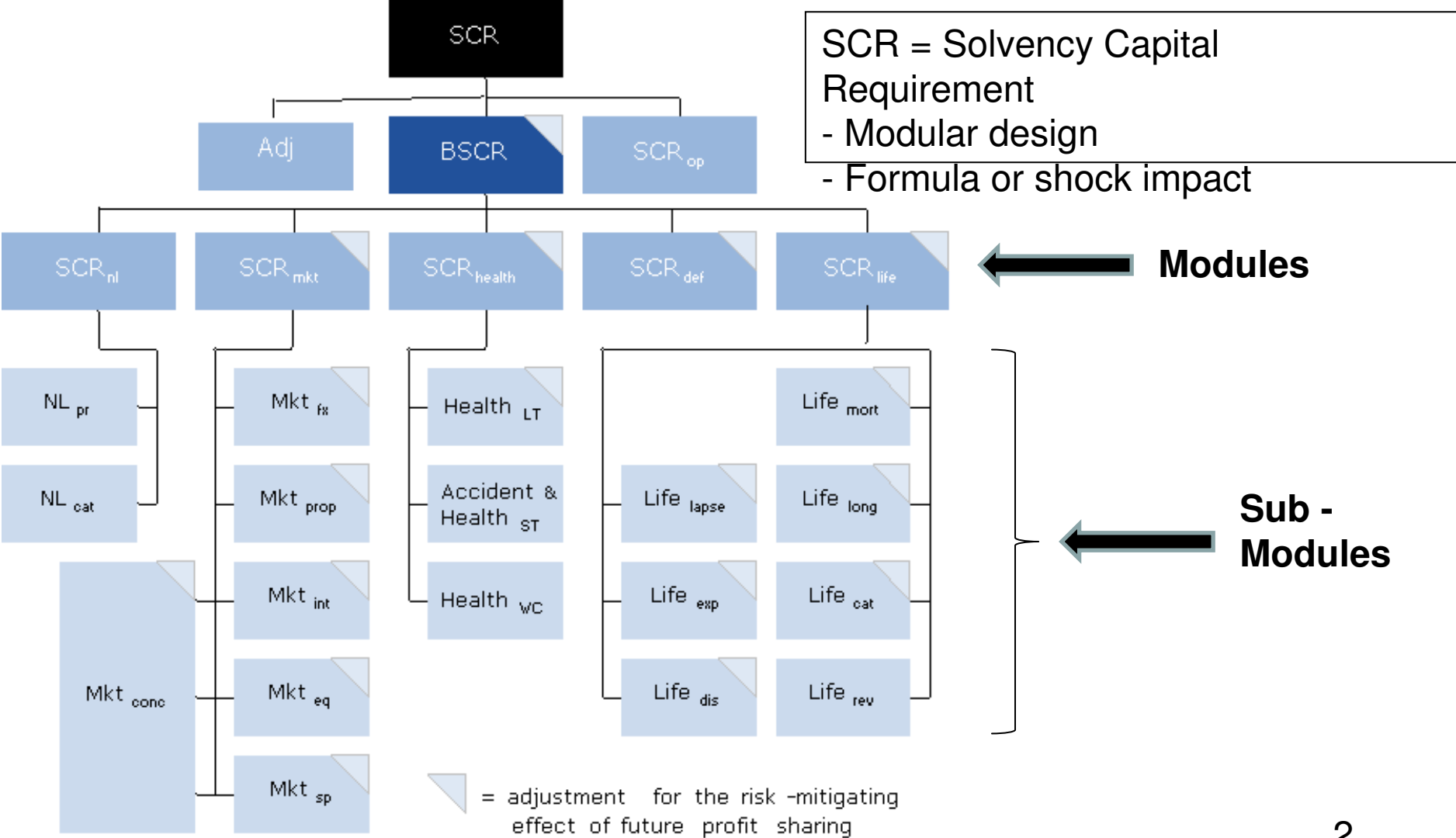


SCR Standard Formula - CEIOPS advice on Implementing Measures

Michael Culligan

Breakfast Briefing
3rd September 2009

Reminder of SCR structure (QIS4)



CEIOPS Consultation Papers



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- First wave of CPs (26th March)
 - CP 28 – SCR Standard Formula – Counterparty Default Risk
 - CP 31 – SCR Standard Formula – Allowance of Financial Mitigation
- Second round of consultation (2nd July)
 - CP 47 – SCR Standard Formula – Market Risk
 - CP 48 – SCR Standard Formula – Non-Life Underwriting Risk
 - CP 49 – SCR Standard Formula – Life Underwriting Risk
 - CP 50 – SCR Standard Formula – Health Underwriting Risk
 - CP 51 – SCR Standard Formula – Counterparty Default Risk
 - CP 52 – SCR Standard Formula – Reinsurance Mitigation
 - CP 53 – SCR Standard Formula – Operational Risk
 - CP 54 – SCR Standard Formula – Loss Absorbing Capacity of TPs & DTAs
 - CP 55 – MCR Calculation

SCR – Key CPs

Focus today on the following CPs ...

- CP 47 – SCR Standard Formula – **Market Risk**
- CP 49 – SCR Standard Formula – **Life Underwriting Risk**
- CP 51 – SCR Standard Formula – **Counterparty Default Risk**
- CP 53 – SCR Standard Formula – **Operational Risk**

... Plus, quick tour of the other SCR CPs

CP 47 – SCR – Market Risk



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- Advice on design and structure of SCR market risk module, but
 - Equity risk not addressed
 - Calibration not addressed (except for concentration risk)
- Key features unchanged from QIS4
 - But proposed refinements to interest rate risk, currency risk, property risk and concentration risk
 - Interest rate risk will now include allowance for volatility
 - New and complicated approach proposed for concentration risk
- Unit-linked assets
 - Excluded from concentration risk but included in all other sub-modules
 - Look-through to underlying assets required
- Practical difficulties
 - Amount of data required on every asset (counterparty, currency etc.)
 - Look-through requirements for unit-linked business

CP 49 – SCR – Life U/W Risk



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- Design, structure and calibration of SCR life u/w risk module
 - Design and structure essentially unchanged from QIS4
- However, increase in calibration for most sub-modules vs. QIS4
 - Mortality: 10% increase → 15% increase
 - Longevity: No change (25% decrease)
 - Morbidity: 35% increase → 50% increase in inception rates
(plus some other changes)
 - Catastrophe: 1.5 per mille → 2.5 per mille (mortality only)
 - Lapse: Mass 30% → Mass 70% for some business
 - Expenses: No change (10% increase plus 1% extra inflation)
- Overall, likely to yield higher capital requirement than QIS4
- Striking how simplistic some of the approaches are when compared to very detailed/complicated calculations in other modules

CP 51 – SCR – C/party Default Risk



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- Calculation of the capital requirement for counterparty default risk
 - Covers reinsurance and derivative instruments, also other debtors not covered under market risk module
 - Needs to be read in conjunction with earlier CP on this subject (CP 28) which defines the structure of the calculations
- Complex calculation
 - Type 1 / Type 2 exposures
 - Probability of default
 - Loss-given-default
 - Simplifications allowed if full calculation is “disproportionate”
- Calibration
 - Recovery rates: 40% for reinsurance, 10% for derivatives (was 50% for both in QIS4)
 - Type 1 prob. of default depends on credit rating or, if c/party subject to Solvency II, then on SCR coverage ratio; otherwise 10%

CP 53 – SCR – Operational Risk

- Structure
 - One of three main elements of SCR
 - Sits above other modules
 - Supposed to allow for op risks not already picked up in modules
- Significant increase proposed relative to QIS4
 - Justified on grounds that internal models produced higher figures in QIS4
 - Incentive for companies to build partial internal models for op risk?
- Changes relative to QIS4
 - New element for “externally managed/deposited” funds: 0.5% of largest c/party exposure
 - All factors in formula have at least doubled
 - e.g. Life TPs was 0.3%, now 0.9%/1.0%; Life Premiums was 3.0%, now 7.6%
 - Cap as % of Basic SCR was 30%, now 60%
 - But 0.5% of external funds (and U/L expenses) not covered by cap

- **CP 48 – Non-Life Underwriting Risk**
 - Comprises Premium & Reserve Risk and CAT Risk
 - Quite similar to QIS4 approach but some changes
- **CP 50 – Health Underwriting Risk**
 - Provides a proposed basis for categorising “health” business between life and non-life e.g. CI is life, PMI is non-life etc.
 - Once categorised, apply relevant life/non-life approach (some modifications)
- **CP 52 – Reinsurance Mitigation**
 - High-level guidance on criteria for judging effective risk transfer in reinsurance or securitisation arrangements
- **CP 54 – Loss Absorbing Capacity of TPs & DTAs**
 - Mostly concerned with getting feedback on possible alternative approaches
 - Mostly relevant to companies writing business with discretionary benefits



- Calculation of MCR (Minimum Capital Requirement)
 - Should be clear and simple calculation capable of being audited
- Quarterly calculation
 - “Linear” calculation i.e. simple factor-based calculation based on readily-available volume measures (premiums, technical provisions, capital at risk, expenses)
 - Calibration of factors not addressed in this CP
 - Life calculation very similar in concept to existing Solvency I calc.
- With “corridor” relative to SCR
 - Cap of 45% of SCR; floor of 25% of SCR
- And overall minimum monetary floor
 - €3.2m for life companies
- Practical issues
 - Quarterly recalculation of SCR required in order to check corridor

Summary

- Overall, structure and design of SCR is relatively similar to QIS4
- But, calibrations have hardened across the board
 - Life underwriting risk
 - Operational risk
- In addition, some components have become more complex
 - Market concentration risk sub-module
 - Counterparty default risk
- Will be tested in QIS5 (Summer 2010)
 - Happy to wait until then?
 - Consider re-working QIS4 on the basis of proposed re-calibration?