

Technical provisions - CEIOPS advice on Implementing Measures

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Breakfast Briefing
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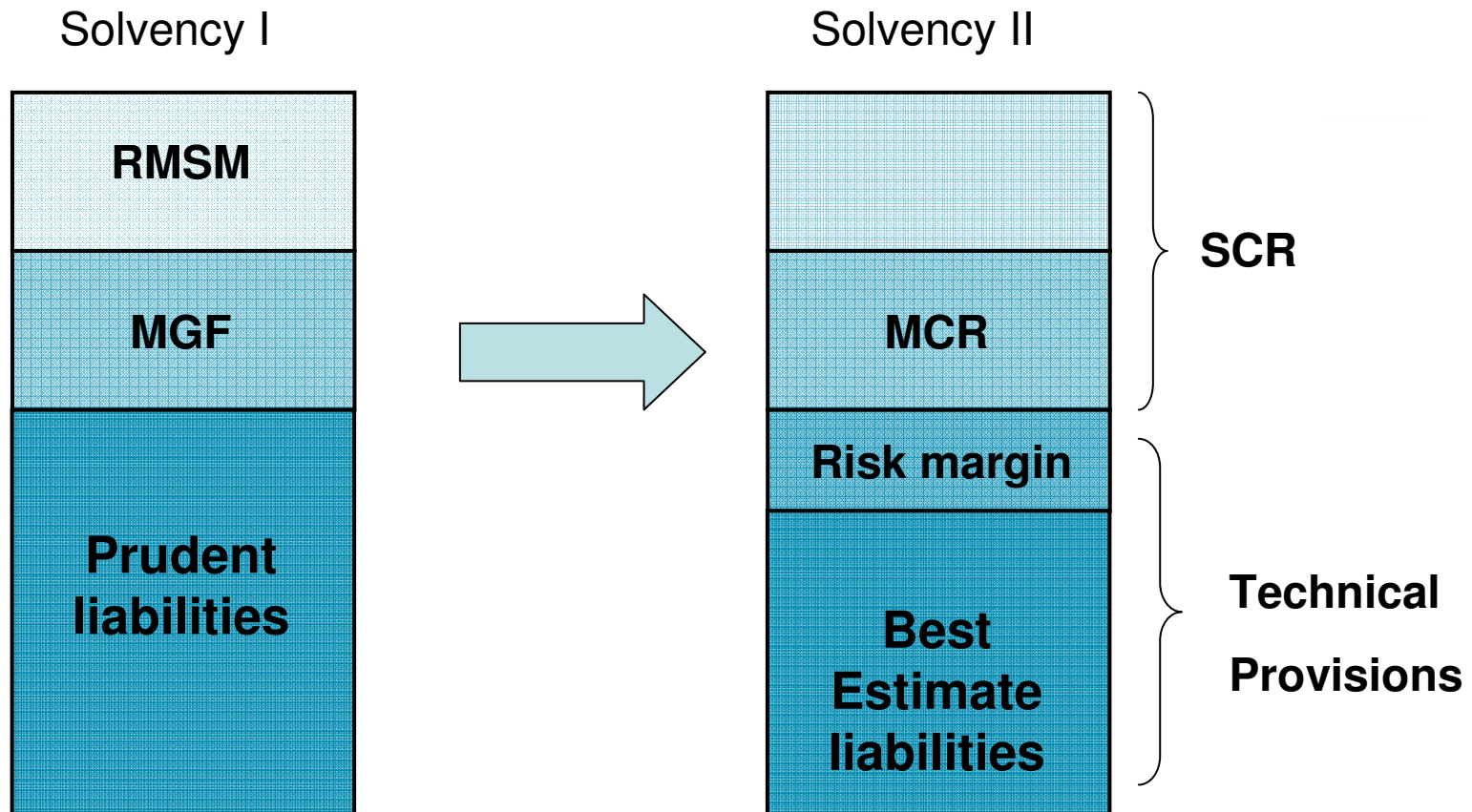
Consultation papers



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- First round of consultation
 - CP 26 – Assumptions
 - CP 27 – Segmentation
 - CP 30 – Treatment of future premiums
 - CP 32 – Future management actions
- Second round of consultation
 - CP 39 – Best estimate
 - CP 40 – Risk free rate
 - CP 41 – Calculated as a whole
 - CP 42 – Calculation of risk margin
 - CP 43 – Standards for data quality
 - CP 44 – Counterparty default adjustment
 - CP 45 – Simplifications

Technical Provisions – introduction



Best estimate – CP 39

- Best estimate corresponds to the “probability weighted average of future cash flows” discounted using a risk free term structure i.e. (expected present value of future cash flows)
- Valuation should be overseen by an expert with sufficient knowledge of actuarial and financial mathematics as well as insurance risk
- When calculating TPs, companies need to take account of:
 - All expenses incurred in servicing the obligations
 - Inflation, including expense and claim inflation
 - All payments to policyholders and beneficiaries
 - The value of any financial guarantees and options and likely policyholder behaviour

Best estimate (2)

- General principles:
 - Include all in-force policies and all cashflows until expiry
 - Calculated gross of reinsurance & SPVs
 - Realistic
 - Policy-by-policy but model points allowed in certain situations
 - No surrender value floor → negative reserves possible
 - Risk free discount rates

Best estimate (3)

- Options and Guarantees
 - Must identify all options and financial guarantees
 - Market consistent valuation
 - Stochastic approach preferred
 - Reflect both intrinsic value and time value
 - Should not assume policyholder behaviour independent of financial market (dynamic policyholder behaviour)
- Volatility – implied versus historical?

Best estimate (4)

- Policyholder Behaviour:
 - Assumptions should be based on statistical data
 - Historic behaviour where options were out of the money may be unreliable
 - Future take up rates should allow for possibility of policyholder rationality improving
- With Profits:
 - Future discretionary bonuses should be valued on a realistic basis
 - Guarantee bonus and discretionary bonus identified separately
 - Future management actions should be in accordance with CP32
 - Future asset returns should be consistent with the risk free yield curve

Best estimate (5)

- Reinsurance:
 - Separate reinsurance asset on the balance sheet
 - Asset should be valued according to the same principles as the best estimate technical provisions
 - Counter party risk should be factored in



Counterparty default adjustment (CP44)

- Recoverables reduced to reflect expected counterparty defaults
- Adjustment based on an assessment of:
 - Probability of default (PD), and
 - Loss Given Default (LGD)

Counterparty default – CP44

- Adjustment should be calculated separately for each line of business and counterparty but can group if undue burden
- Based upon current, reliable and credible information
 - Credit spreads, ratings, financial reporting
- If no reliable estimate of recovery rate then not higher than 40% (50% in QIS4)
- If collateral or letters of credit then need to consider credit risk of those instruments
- For example: Recoverable = €1m; PD = 1%; LGD = 60%
 - Adjustment = €1m x 1% x 60% = €6,000

Risk free rate – CP 40

- Technical provisions calculated using a risk free discount rate
- Defined for each currency and valuation date
- Following a uniform methodology and based on relevant market data (so same for all undertakings)
- Determined on basis of market data for each currency
- Risk free rates should be provided at least quarterly

Risk free rate (2)

- Criteria:
 - No credit risk;
 - Realism;
 - Reliability;
 - High Liquidity;
 - No technical bias (no supply-demand issues).
- Government bonds rates of AAA rated governments should be considered as the benchmark (Euro area yield curve).
- Extrapolation technique beyond last available point of sufficient liquidity?

Risk margin – CP 42

- The RM ensures that the value of the TPs is equal to the amount that an undertaking would require to take over and meet the obligations.
- Calculated using a ‘cost of capital’ approach
- Compensate a reference company for holding capital
 - Assumes a transfer of liabilities to another (re)insurance company known as the “Reference Undertaking”
 - 10 assumptions to be fulfilled by Reference Undertaking
- The Solvency Capital Requirement (SCR) of the Reference Undertaking will allow for
 - Underwriting risk
 - Counterparty risk – reinsurance and SPVs
 - Operational risk and
 - Unavoidable market risk

Risk margin (2)

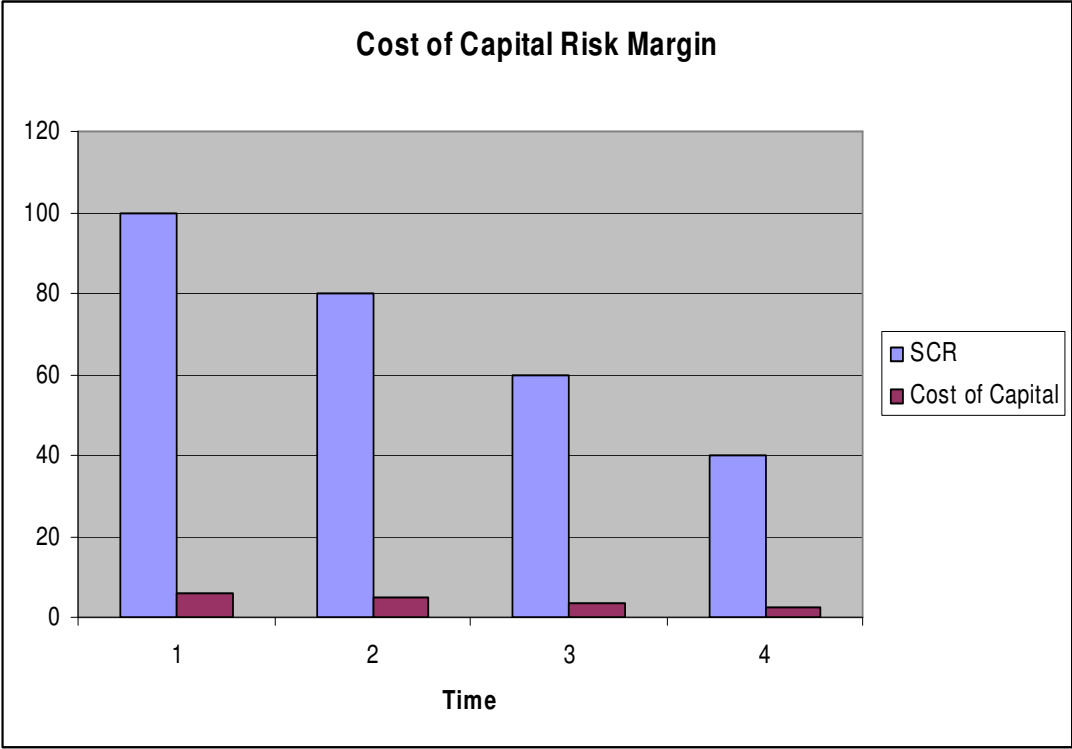
- Risk Margin Calculation (as in QIS4)
 - Future SCR's projected by line of business (LOB)
 - Cost of holding future SCR's calculated and discounted at risk-free rate
 - RM = Sum of discounted cost of SCR's by LOB
- Difficult to project future SCR – most companies used proxies
 - No diversification assumed when projecting SCRs in QIS4
 - Duration approach – calculate duration of liabilities and multiply by SCR and cost-of-capital rate
- Cost-of-Capital Rate
 - Rate of at least 6% to be used (was 6% in QIS4)
 - Rate is to be reviewed periodically

Risk Margin (3)



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- Project future SCRs
- Apply 6% cost of capital
- Discount to present day

Other highlights...



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- CP 41 – Calculated as a whole
 - If cash flows can be reliably replicated
 - Excludes cash flows dependent on biometric development or policyholder behaviour
 - Likely only available for unit-linked business
- CP 43 – Standards for data quality
 - Should monitor the quality of data
 - Have adequate processes and procedures
 - The actuarial function should decide how much faith to place on historical data and prospective assumptions.
- CP 45 – Simplifications
 - Can use simplified methods but proportionality is key
 - Work required to justify simplifications
 - CEIOPS may develop thresholds to determine whether simplified methods are allowed

Summary

- Significant change from current approach
 - Technical provisions = Best Estimate + Risk Margin
 - Realistic rather than prudent assumptions
 - No surrender value floor
 - AAA government risk free rates
 - Complex calculation of risk margin
 - Counterparty default allowance on reinsurance & SPVs