

Catlin Group Limited

Solvency II

A company perspective

Contents

- Technical Provisions
- Internal Model Approval Process

Fundamental Change in Basis

	GAAP	Solvency II
Allow margin for prudence in claims reserve	maybe	no
Discounted	no (some exceptions)	yes
Risk margin	no	yes
“Binary” events	maybe	yes
Liabilities included	incepted / earned business	“legally bound” business
Calculation basis	“as paid”	“cash”
Methods used	usually deterministic	cash flow basis; possibly stochastic

Practical issues

Margin For Prudence and Optimism

- Reserving on best estimate basis but there are still issues...
 - ★ Justification
 - ★ Appropriateness of techniques
 - ★ Expert Judgement
 - ★ Validation
 - ★ Documentation

Practical issues

Cash flows

- Different components have different development patterns. Many dimensions to consider:
 - ★ Gross / Net of reinsurance.
 - ★ Catastrophe / Large Loss / Attritional Claims
 - ★ Bad Debt, premiums, commission etc
- Earned cashflow and unearned cashflow patterns
- Quarterly valuations: writing, incepting, earning, reporting, payment, and cash patterns will vary throughout the year.
- Seasonality.
- Inception of contracts could be weighted towards a renewal season.

Practical issues

Segmentation

- Value by homogeneous risk group.
- Allocation to Solvency II classes for reporting.
 - ★ Method of allocation: premiums, outstanding claims etc.
- Allocation to significant currencies for reporting.
 - ★ require many currency buckets: USD, GBP, EUR, CAD, JPY, AUD, Other.
 - ★ Thresholds?
 - ★ Data not always available
- Consistency with Internal Model.
- Attritional/Large/Cat allocation.
- Consistency with rating agency models.
- Unbundling contracts (e.g., property and liability element of a motor policy).

Practical issues

Reinsurance recoveries

- Correspondence with premium provisions (e.g., LOD cover not yet purchased and RAD cover already purchased)
- Payment patterns
 - ★ Lag gross patterns?
 - ★ What data is available
 - ★ Attritional/large loss/catastrophe
- Allowance for reinsurance recoveries on high level programmes (may have been ignored previously)
- Bad debt – consistency with Balance Sheet
- Consistency with Internal Model
- Consistency with Business plan

Practical issues

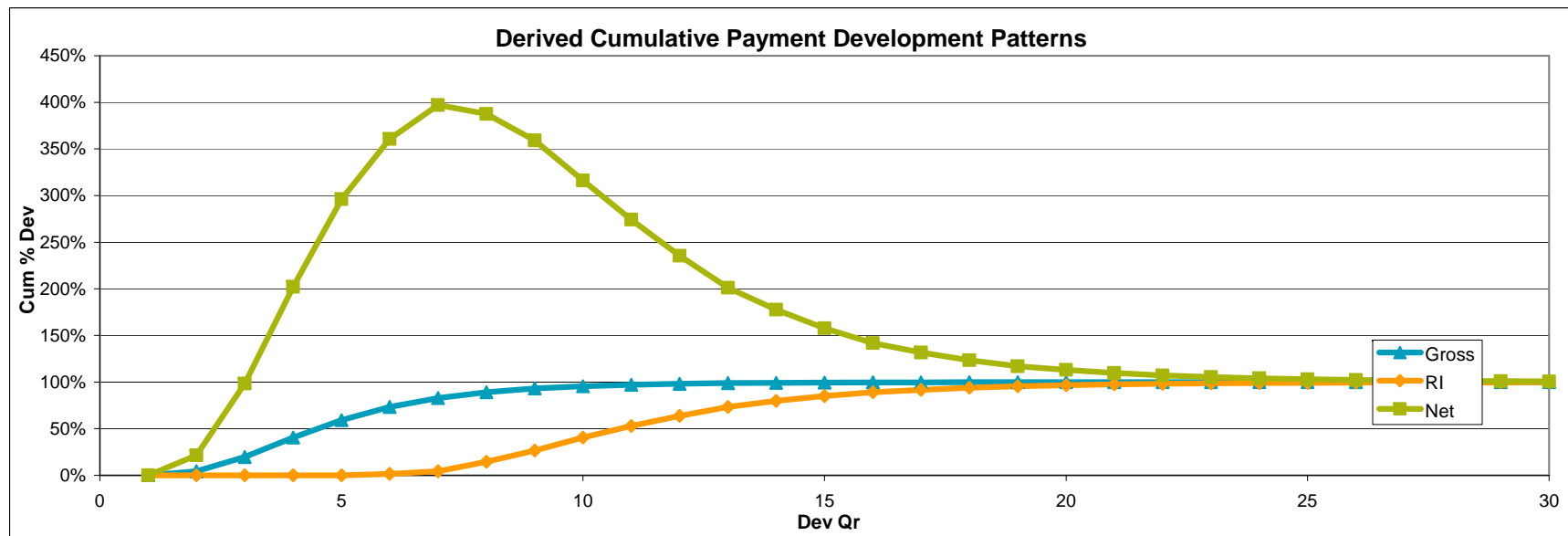
Binary Events

- “Latent” or high frequency events not otherwise included in best estimate of reserves.
 - ★ Truncated distribution.
 - ★ Percentage load.
 - ★ Scenario approach.
 - ★ Justify that they are already included in the best estimate.
- How to justify?
- Consistency with Emerging Risks.

Timing of payments

Simple approaches might not be appropriate

High reinsurance + large lag = less reason for simple approach



Practical issues

Legally Bound Business

- Bound but not incepted
 - ★ Development patterns
 - ★ How this is identified
 - ★ Losses and forecast premium rate movements
 - ★ Reinsurance correspondence
- Binders & cancellation terms
 - All policies expected to be written
 - Pipeline policies
- Consistency with Internal Model, Catastrophe Model and Business planning

Practical issues

Discounting and Inflation

Discounting

- Likely to be published quarterly by EIOPA
- By currency
- Consistency with the internal model
- Use Test!

Inflation

- Is the implicit inflation assumption valid?
- Otherwise, how do you allow explicitly for inflation?
- What inflation is included in the case estimates?
- Consistency with Internal Model

Practical issues

Expenses

- More than just ULAE
- All cashflows arising from expenses that will be incurred servicing existing policies during their lifetime
 - ★ Acquisition expenses
 - ★ Salaries
 - ★ Property costs
 - ★ Other admin expenses
 - ★ IT costs
 - ★ Investment management expenses
 - ★ Claims management expenses
 - ★ Reinsurance management expenses
- Development patterns
- Method of allocation
- Inflation

Practical issues

Risk margin

- Avoiding circularity
- Justification of approximations/proxies
- Calculation on a quarterly basis
- Source of SCR: QIS5 or Internal Model
- Consistency with Internal Model

Practical issues

Consistency with Internal Model

- A recurring theme!
- Need to address whether the technical provisions are consistent with the starting balance sheet
- Timing issues
 - ★ For quarterly updates
- Needs to be documented and validated
- Also links to planning with catastrophe exposure, reinsurance purchase etc.

Wider considerations

■ Data

- ★ Need to ensure it is complete, appropriate and accurate
- ★ May need to improve data to achieve some of the above changes

■ Documentation

- ★ Thoroughly document all steps in the technical provisions valuation process
- ★ Test standard is whether another suitably skilled individual could reproduce the results

■ Validation

- ★ Validate that valuation methods, assumptions and results of the technical provision calculation are appropriate and relevant
- ★ Back-testing should also be carried out

■ Wider governance implications

- ★ The actuarial function must oversee the technical provisions process.

Internal Model Approval Process

- Dealing with different regulators;
 - ★ Bermuda; Swiss; Lloyd's; FSA
 - ★ All require different evidence
 - ★ Staffing issues at regulators
 - ★ independent review by external consultants
- Model Walkthroughs
- Validation – key area
 - ★ Validation onerous
 - ★ Pass/fail criteria
 - ★ Appropriateness of assumptions, distribution and justification
 - ★ Expert judgement
 - ★ Back-testing