

KPIMG Actuaries

30:20 Rule: Observations for Reserving

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ADVISORY

80:20 Rule: Observations for Reserving Agenda

Insurance Liability Valuation Process

- Main components
- "Non core" components

Observed Common Practice

- Gross and Net Valuations
- Third Party Recoveries
- Small / Large / Catastrophes
- Discounting
- Claims Handling Expense
- Gross and Net Risk Margins

Impact

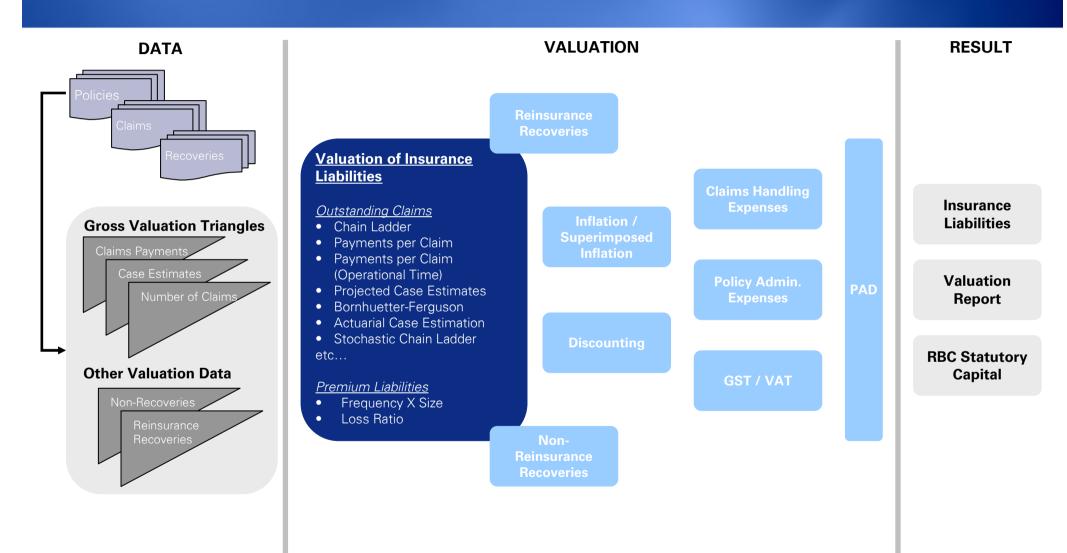
Examples



Insurance Liability Valuation Process

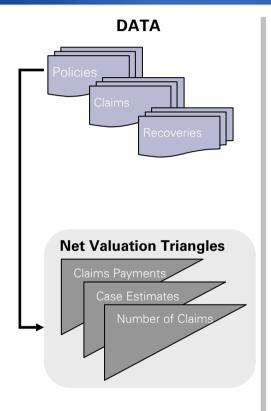


Insurance Liability Valuation Process





Insurance Liability Valuation Process



VALUATION

Valuation of Insurance Liabilities

Outstanding Claims

- Chain Ladder
- Payments per Claim
- Payments per Claim (Operational Time)
- Projected Case Estimates
 - Bornhuetter-Ferguson
- Actuarial Case Estimation
- Stochastic Chain Ladder etc...

Premium Liabilities

- Frequencies X Sizes
 - Loss Ratio



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Claims Handling

Policy Admin

GST / VAT

RESULT

Insurance Liabilities

Valuation Report

RBC Statutory Capital



Observations



Gross and Net Valuations

Reporting requirements

- Financial statements under accounting standards
- Statutory requirements disclosure of insurance liabilities and statutory capital requirement calculation
- Professional requirements

"Observed"

- Net only
- Net grossed up to Gross
- Separate Gross and Net

Less observed

- Gross valuation with net derived from gross
- Reasonableness tests of the implicit expected reinsurance recovery



80:20: Rule Observations for Reserving Other Recoveries

Definition of "Gross"

- Gross of reinsurance
- Net of Deductible / Excess
- Net of third party recoveries
- GST / VAT ??

Third party recovery

- Significant in Motor property damage and Commercial Property
- Different development pattern from the underlying claims
- Attract specific asset risk charge in the RBC statutory capital calculations
- Monitoring of recovery management
- Bad Debt?
- GST / VAT



Small / Large / Catastrophe Claims

"Observed"

- Small and Large claims combined experience
- Small claims valuation plus case estimates for large claims

Less observed

- Separate large claims projection or estimation
- Capped and Above Cap claims projection

Large claims

- Different incurred and reporting pattern
- Different reinsurance recoveries
- Could "muddle" the results of the actual versus expected analysis



80:20: Rule Observations for ReservingDiscounting

Discounting

- Allowance for investment income
- Discount rates are specified by insurance regulations
- Impact depends on the future payment duration and applicable yield curve
- Common reason for not applying discounting
 - Not significant, but....
 - No documented reasonings
 - No quantification of the impact of discounting
- Current yield curve environment
 - Arguably, not significant in Singapore
 - Significant in Malaysia, Australia and New Zealand



Premium Liability

"Observed"

- The ultimate projected loss ratio from the most recent accident periods
- Any "over" or "under" reserving in the outstanding claims liabilities flow directly into premium liability
- PAD is a multiple of OCL PAD

Less "observed"

- Claim frequency and average claim size approach
- Discounting of premium liability
- Explicit modelling of uncertainty (for example, catastrophe risks)



80:20 Rule Observations for ReservingGlobal Assumptions

- Expenses (claims handling and policy administration)
 - Benchmark
 - Separate gross and net expenses
 - Expressed as a percentage of net claims
- Future reinsurance costs
 - Few references to the actual reinsurance program
 - Reinsurance treaty period
 - Advanced reinsurance payments => double counting ?



Gross and Net Risk Margin

"Observed"

- One percentage applies to both gross and net
- Separate gross and net risk margins = > implicit reinsurance recovery risk margin
- Premium liability PAD is generally a multiple of the outstanding claims liability PAD

Less "observed"

- Monitoring of the risk margins
- Dollar risk margin approach
- Specific large claims risk margin



Impact



80:20 Rule Observations for Reserving Impact

A numerical example highlighting the importance of the "non-core" components will be presented.

For further details, please contact the presenters.



Discussion



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