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## GI Case Study- Reserving Philosophy



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# The Ideal Situation



Loss reserve data should contain a long, stable history of homogeneous claim experience, where no significant operations changes materially affect either the mix of business or the handling of claims, and there should be a sufficient number of claims to produce credible loss patterns.

# The Reality



Virtually all elements of “The Ideal” are periodically violated:

- 1. The Mix Changes
- 2. Claim Handling Changes
- 3. Case Reserves are Strengthened/Weakened
- 4. Other Factors :
  - Changes in Deductibles & Limits
  - Changes in Reinsurance
  - Changes in Law
  - New Sources of Loss
  - Changes in the Economy

To combat the challenges of the ever changing world (for a reserving Actuary) -having a Reserving Philosophy becomes critical

# Reserving Philosophy



- Go hand in hand with the overall Company Philosophy
- Key principles and minimum standards:
  - Consistent, and in line with Statutory and Professional guidelines
  - Adequacy of Reserves- to meet all claim payments at all times
  - Have a robust reserving procedure
  - Appropriately documented reserving process
  - Reserving data submissions to all stakeholders are timely & appropriate

# Reserving Philosophy



- Different types of Reserves -IBNR,IBNER, UPR, PDR and Case Reserves
  - Ensuring the use of appropriate methods and assumptions
  - Ensuring the accuracy, completeness and appropriateness of data for use
  - Undertaking an analysis of actual versus expected experience as well as other appropriate validations
  - Producing a report at least annually to the board documenting all tasks undertaken, *identifying deficiencies and making recommendations to remedy these deficiencies*
  - Reserving validation and emerging experience analyses

# Reserving Philosophy's Importance



- Most appropriate indicated reserve depends on - relative likelihood of estimates in range - financial reporting context
- Adjustment of reserves with time and availability of new information
- Discussion of key issues, uncertainties and market conditions - with key stake holders - Claims, UW, RI, Accounts
- Conflict of Interest - critical to spell out the assumptions to all stakeholders
- Consistency and links between reserving, pricing, capital modelling and financial reporting



# Reserving Philosophy - Considerations



- Data Organisation
- Homogeneity
- Credibility
- Changing Conditions
  - Aging of Claims
  - ALAE
  - Limit & Deductibles
  - Changing Indicators

If professional colleagues are to rely on actuarial advice, they will expect meaningful interpretation of the indicators, risks and uncertainties in changing estimates.

# Case Study - Background



- Company writes Long tail TP and you as AA need to set the March end reserves.
- Substantial estimation error in TP IBNR reserves
- Concurs with your experience elsewhere
- Undiscounted reserves slightly less than the central estimate
- But potential to be enough depending on how the experience emerges
- Solvency will fall below minimum threshold if reserves set above undiscounted Central estimate
- But solvency can be maintained through profitability of other products and investment income with 70% confidence within a year or two
- Comfortably solvent if the assets and reserves are at market value and investment income on such technical reserves is taken into account
- Board is expecting a dividend

# Issues



- TP IBNR is under estimated.
- Concurs with your experience- your belief (reasonable)
- Not very sure - though less than the central estimate, it may prove insufficient depending on emerging experience.
- If reserves are increased - above the central estimate- then the solvency will fall below minimum threshold.
  - Should the reserves be increased?
- 70% confidence that Profit and Investment income from other products will be enough to meet any capital needs over the next 1-2 years
  - Regulatory perspective
  - Share holder expectations
- Share holder expects a dividend.
- Market values of assets and Liabilities
  - Regulatory approval
  - Certainty of the investment income

# What are your choices?



- Set adequate reserves
- Discuss and Report in writing to the management and Board
  - valuation results and sensitivity analysis
  - Implications on solvency and future business plan
  - Comparison with peers (similar size, age and business mix)
- Corrective action plan of Board
  - Acceptance of shareholders to infuse more capital
  - Liquidate some assets (if favourable market conditions)
  - Control new business / more selective underwriting
  - Control expenses / dividend holiday
  - Increased use of reinsurance
- Inform regulator
- Engage external consultant for a second opinion on the reserves
  - Uncertainty of the outcome; may be overstated to be prudent or understated to release reserves.

# What are your choices?



- Increase the reserves
  - To what extent
  - All at once or in a phased manner
- Certainty of the estimate
  - Sensitivity analysis around the tail and development factors
  - Possibility of the development
- Peer review of the reserve.
  - Any remarks available
- Compare with peers, of similar size , age and profile structure
  - Assess or quantify any differences
- Assets and Reserves on market value
  - Regulations do not allow

# What are your choices?



- Use available capital in the form of profits inclusive of investment from other products
  - Allowed as per regulation.
  - Certainty of the source and quantum of profit
  - Certainty of the investment income- sensitivity around
- Engage external consultant for a second opinion on the reserves
  - Criteria to select the consultant; group services?
  - Uncertainty of the outcome; may be overstated to be prudent or understated to release reserves.
  - Uncertainty of the future course of action

## What do professional standards say - APS21



- 2 Nature of responsibility
  - 2.2 ...ensure business is conducted on sound financial lines and monitor any action / practice, which is unfair and likely to be prejudicial to the interests of the **policyholders**.
  - 2.3 If uncertain as to the proper course of action to adopt ... seek the help and the advice from the IAI.
- 3 Considerations affecting the position of AA
  - 3.3... satisfy yourself that AA regulations are complied with...
  - 3.7 follow the regulations of the Authority ; shall be guided by **Guidance Note/Actuarial Practice Standards**
- 4 Extent of the AA's responsibility
  - 4.1 responsibilities to a client must be consistent with responsibility to the profession.
  - 4.1 advise the company as soon as you feel that the company has initiated any action - or a situation has arisen outside the control of the company - that materially threatens its **solvency**



# What do professional standards say



- 4.1...If the company does not remedy the situation...advise the IRDA - but not before informing the company first.
- **6 Premium rates and policy conditions for new products and existing products on sale**
- 6.1 inform the board...Ability to continue to write business in the context of capital required
- 6.2.5 implications of **legislative** amendments not reflected in
- 6.3 influence of claims management policies / mix / UW strategy / case reserving / infrequent large losses
- **7 Capital requirements**
- 7.1 Advise Board...capital requirements for **projected business**
- **8 Actuarial Investigations**
- 8.2 desires to assess the value using **discounting** methods,...should be satisfied as to the resilience of the financial position of the company in all reasonably foreseeable circumstances

# What do professional standards say



- 8.4 each valuation parameter : Expected level and MAD
- 8.5 value placed on liabilities must make appropriate provision for future expenses
- 8.8 judge and decide whether the investment policy is appropriate...if it is not, the company must be informed of any constraints and additional reserves, which may need to be set up
- 8.9 review the reinsurance arrangements and recommend possible alternatives
  
- **8.10 Premium and claim reserving**
- 8.10.1 UPR - method to allow for incidence of risks
- 8.10.2 URR - additional reserves to be set up if UPR is inadequate to cover likely claims cost including claim handling charges and administrative expenses
- 8.10.3 Claims Reserves - Certify the adequacy of the IBNR and IBNER claim reserves in the solvency statements. To use actuarial methods for determination.

# What do professional standards say



- **9 Written reports**
- 9.1 report in writing to the Board of Directors of the company on the results and implications of any valuation carried out for statutory purposes before any report is made to the IRDA and ensure that...
- 9.1.1 The financial results are presented in a way that demonstrates the true underlying position of the company
- **10 Confirm compliance with APS 21 and other applicable Guidance Notes / Actuarial Practice Standards in written reports or explain the reasons**
- **Professional Conduct Standards (PCS)**
- **1 General**
- 1.2 all members to maintain the highest standards of conduct
- 1.3 seek advice from an actuary / IAI when in doubt

# What do professional standards say



- **2 Professional Standards**
- 2.1 Obligation to serve the public interest
- 2.2 Duty to the profession
  
- **2.5 Confidentiality**
- Information acquired during professional work not to be disclosed unless consent has been obtained from the client / firm
  
- **3 Standards for advice**
- 3.1 expected to use best judgement whilst paying proper regard to any relevant professional guidance
- 3.5 include sufficient information and discussion about each relevant factor and about the results
  
- **4 Breach of Professional Guidance**
- A material breach - guilty of misconduct - liable to disciplinary action

# What do the regulations allow?



- Assets to be at book value
- Classification of admissible assets
- No discounting of Liabilities
- No Negative IBNR for any Loss Year
- Solvency at Entity level
- Profits at an Entity level
- Capital can be infused to ensure solvency at all times

# External consultant engagement



- Can you engage external consultant.
  - Criteria
  - Board approval
- Conflict of interest
- Non disclosure agreement
- Reliability of the conclusion
- How much data, firewalls, privacy details, onsite working
- Independent assessment
  - Will the results be taken
  - How will the results be communicated to the Board
  - Do we apprise the board to go ahead with the independent assessor
  - Cost of assessment
  - Implication on the reserving actuary- is he accountable for the reserves of the earlier period

# What would you do



- Set adequate reserves
- Take Opinion of Peer Reviewer and any Group Actuary
- Discuss and Report in writing with the management and Board
  - Valuation results and sensitivity analysis
  - Implications on current solvency and future business plan
  - Comparison with peers (similar size, age and business mix)
- Study Corrective action plan of Board to improve Solvency
  - Acceptance of shareholders to infuse more capital
  - Liquidate some assets (if favourable market conditions)
  - Control new business / more selective underwriting
  - Control expenses / dividend holiday
  - Increased use of reinsurance
- Project Solvency Ratio over next 3 years
- Inform about the situation and Corrective Action Plan to the regulator

Questions...



Thank You