

# Adequacy of Reserves

(FCR Section 7)

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# Scope

- **Overview of Section**
- **Challenges likely to be faced**
- **Probable Solutions**
- **Areas requiring further clarification**

# Overview of the Section

- **Tables**
  - **Table 7.1: Adequacy of Reserves**
  - **Table 7.2: Reserves for Unexpired Policies**
  - **Table 7.3: Reserves for Cat & Large Risks**
- **Methodology & Data Constraints (7.1.1 to 7.1.5 )**
- **Monitoring Actual vs Expected (7.1.6)**
- **Detailed analysis of quantitative information submitted in the tables (7.2)**

# Table 7.1 Adequacy of Reserves

*Net of RI*

LOB	Reserve at the Beginning of the Year			Total Claims Paid	Reserve at the end of the Year			Change in Reserves
	O/S	IBNR	Other		O/S	IBNR	Other	
Fire								

- **Other Reserves: Different Interpretations**
  
- **Change: Addition of last column**
- **Challenge:**
  - **Reserves: Granularity of LoB**
- **Solution:**
  - **O/S: Actual Basis**
  - **IBNR: Allocation Method**

# Table 7.2 Reserves for Unexpired Policy

*Net of RI*

LOB	Reserve for In-force Policies	Premium Deficiency Reserve	Any Other Reserve
Fire			

- **Other Reserve: ???**
- **Change:** UPR, URR and Cat Reserves Columns dropped & replaced with Reserves for in-force policies.
- **Challenge:**
  - URR & PDR: Granularity of LoB

## Table 7.3 Reserves for Cat and Large Risks

*Net of RI*

LOB	Catastrophic Risk Reserve	Large Risk Reserve
Fire		

- **Risks/Claims: ??**
  
- **Change:** New Table
  
- **Challenge:** Definition of CAT and Large Claims
  - CAT event at industry level
  - Large Loss at company level
  - Percentile Basis/XL Trigger Point, Once large- ever large/latest large, Indexed/unindexed

# Reserve Methodology

- **Outstanding Claims Reserve: Auto Reserve**
- **IBNR Claims Reserve: CLM / BF / Others**
  - **Reserving Methodology for short tail and long tail LoB**
  - **RI Inward and Coinsurance Accepted**
  - **Cat and large claims**
- **PDR: ELR + Claims Handling expenses**
- **Homogeneity of reserving lines of business**

# Other Information

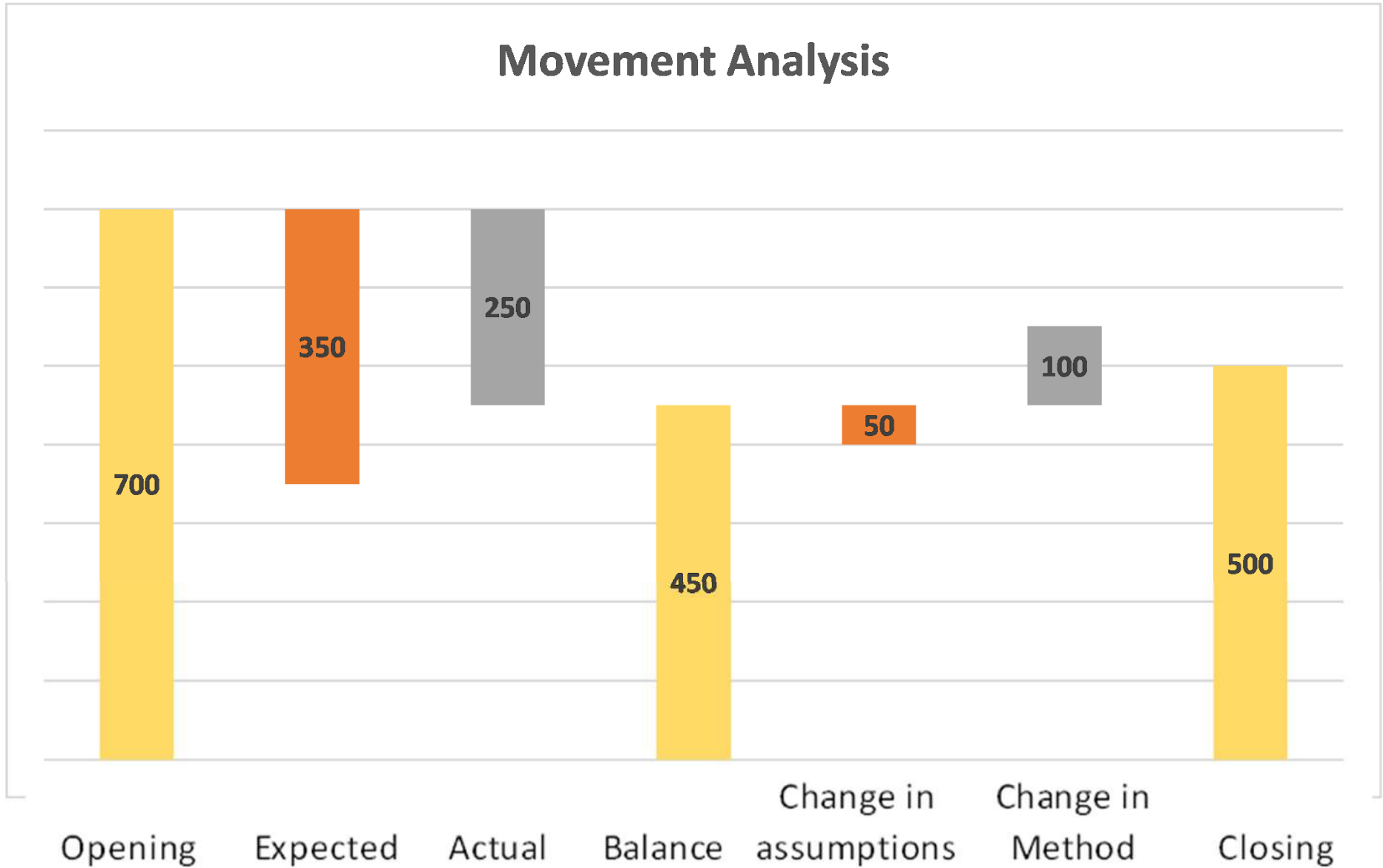
- **Percentile if Stochastic Approach**
- **Data and System Constraints**
- **Suitable reserves for Premium Inadequacy**
- **Impact of Other factors**



# Monitoring Actual vs Expected

- **A vs E analysis**
- **Reserves Utilization**
- **Hindsight Reserves**
- **ULR movement**
- **Movement (Change) Analysis**
- **Any Other??**

# Movement Analysis



## IBNR Allocation - 1

- IBNR for each accident period allocated in proportion of business measure for respective accident period
  - ✓ Simple to implement and understand
  - ✗ Ignores different claims experience of different segments
  - ✗ Ignores different claims development of different segments

## IBNR Allocation - 2

- IBNR for each accident period allocated in proportion of incurred claims for respective accident period
  - ✓ Simple to implement and understand
  - × Large amounts of IBNR come from recent years which have very low/nil/unreliable incurred amounts - Volatility
  - × Ignores different claims development of different years

## IBNR Allocation - 3

- **Weighted average of earlier 2 approach**
- **Credibility weights – % Development for respective accident period**
  - ✓ **Takes account of both claims experience and business volume**
  - × **Difficult to explain and implement to stakeholders**

# Analysis of Quantitative information

- **Change in reserve Composition by LoB**
- **Split of reserves into OS and IBNR**
- **Presence of PDR – Feedback to Pricing**
- **Uncertainty around CAT and Large claims Reserves and probable ranges.**
- **Any Other**

# Q & A