

Reserves

- P/C

- Life

ASSAL – July 2011

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Property and Casualty Reserves



SSAP No. 55—*Unpaid Claims, Losses and Loss Adjustments Expenses*

Claims, losses, and loss/claim adjustment expenses shall be recognized as expense when a **covered or insured event occurs**.

A covered or insured event:

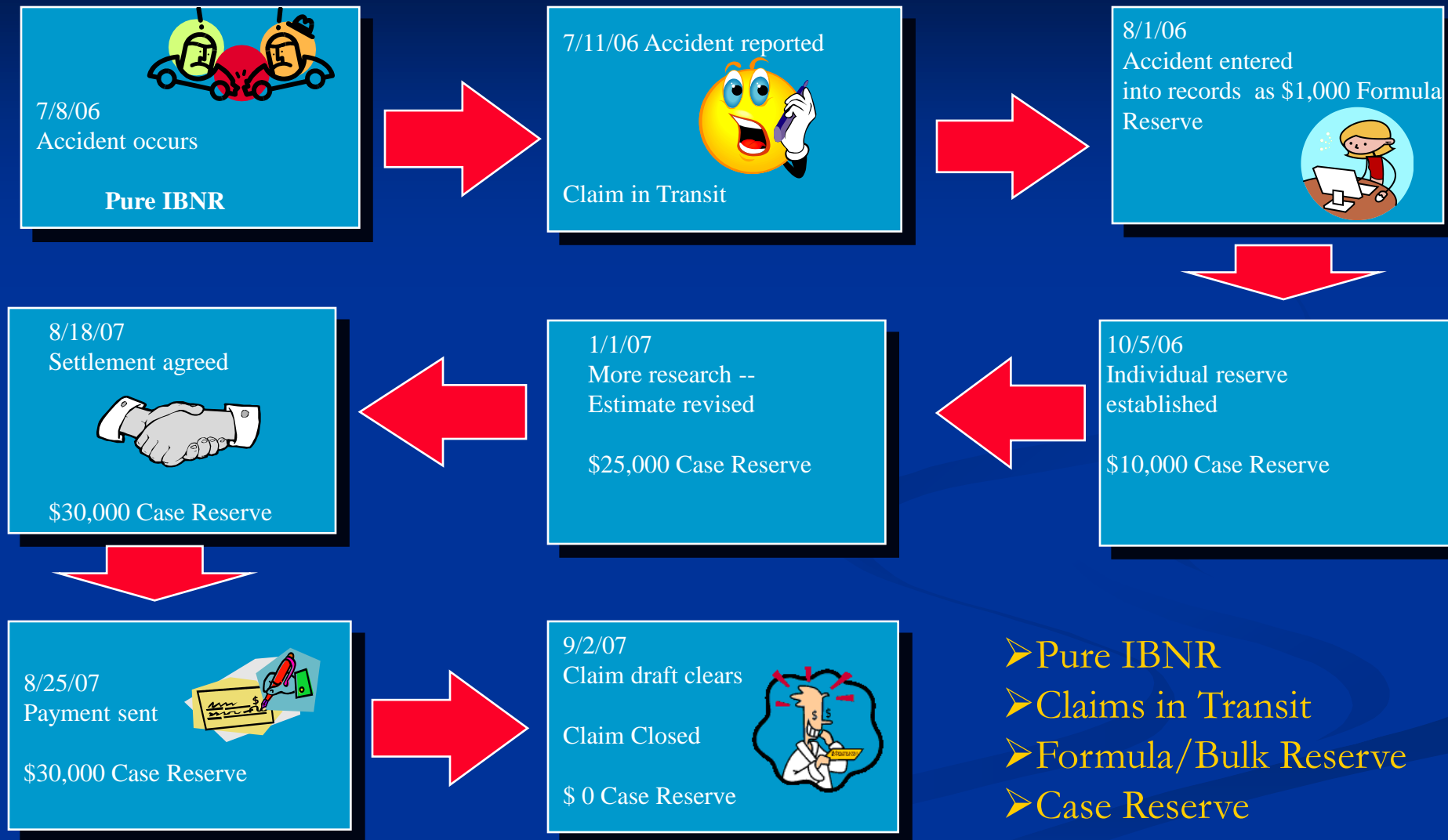
➤ Occurrence

- The occurrence of an incident which gives rise to a claim or the incurring of costs.

➤ Claims Made

- Reporting to the entity of the incident that gives rise to a claim.

Life Cycle of a Claim Reserve



Insurance Data Organization

➤ Accident Date

- The date on which the loss occurred.



➤ Report Date

- The date on which the loss is first reported to the insurer.

➤ Recorded Date

- The date on which the loss is first entered into the statistical records of the insurer.



Who Sets the Reserves?

- *Case Reserves*: Claims Representatives
- *IBNR/Bulk*: Actuaries & Company Management

SSAP 55: “Management’s Best Estimate”

- By line of business and in Aggregate
- Reserve will NOT be accurate with *certainty*.
- All **Reasonable** outcomes to be considered – not all **Possible** outcomes
- If all points within a range are probable (RARE), record the **Midpoint**.

What Costs are Considered?

Generally, the amount necessary to settle unpaid claims...

SSAP 55:

- Reported losses
- Incurred but not reported claims (IBNR)
 - Can include “Development on Known Claims”
- Loss adjustment expenses
 - Defense and Cost Containment (DCC)
 - Adjusting and Other (AO)

Loss Adjustment Expenses (LAE)

➤ DCC

- Defense, Litigation, Medical Cost Containment
- Cost of Experts ... *(potentially testify in court)*
- In DEFENSE of Claim:
 - Private investigators, appraisers
 - Attorney Fees – (Duty to Defend)

➤ AO: All other LAE

- Claim Adjusters
- In Determination of Coverage:
 - Private investigators, appraisers
 - Attorney Fees – (Litigation in determining coverage)

How Are Reserves Estimated?

SSAP 55

- Loss Reserve Projections by line of business
 - Not Just for Company in TOTAL...it's by line
- Results of More than One Method Should be Considered

How Are Reserves Estimated?

Report Year Data

- Similar to Accident Year, but
 - Use date of Report
 - NOT date of Accident.
- Used for Claims-Made policies

How Are Reserves Estimated?

Loss Development Analysis: **Triangle**

Loss Development = Change in Loss Over Time

Accident Year	Cumulative Paid Losses at Age				Estimated Ultimate
	12	24	36	48	
2002	100	200	300	300	Predict \$300 each year
2003	100	200	300		
2004	100	200			
2005	100				

How Are Reserves Estimated?

Are They Right?

Compare:

- Indicated Reserve: *Actuarial Estimate*
- Carried Reserve: *Amount on the Books*

Are They Adequate or Inadequate?

Same as...Are They Redundant or Deficient?

Salvage and Subrogation

Salvage: *Car value when it's totaled.*

Subrogation: *Paid claim but reimbursed by at-fault person.*

- Received: Adjust Paid Losses for amounts received.
- Anticipated: *If choose to anticipate recoverables, then estimate & deduct from the liability for unpaid claims or losses.*
(Required to maintain data & perform actuarial tests to support reasonableness.)

Discounting

- Time Value of Money
- No discounting, unless authorized
 - See SSAP 54 and 65
- Fixed and reasonably determinable payments

(Issue Paper No. 65)

Example: Workers compensation

- Tabular indemnity reserves
- Long-term disability claims

Structured Settlements

- Periodic fixed payments to claimant for a determinable period (or for life)
- Often purchase an annuity to fund the payments:
 - When reporting entity is owner and payee, no reduction to loss reserves. Annuity is an “other than invested asset”
 - When claimant is payee, reduce loss reserve. Cost of annuity recorded as paid loss.

Catastrophe Reserves



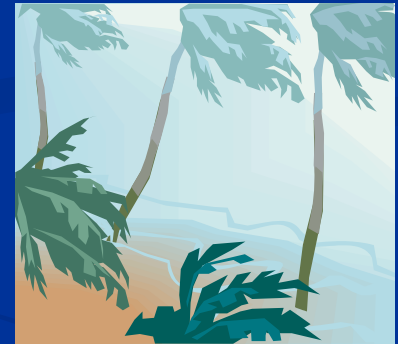
Hail

Tornado

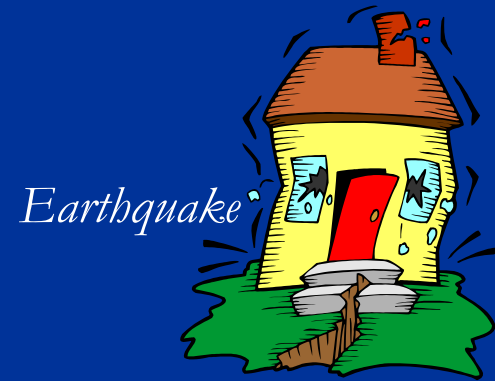


- Catastrophe Loss Reserves
Are established only
AFTER a catastrophe has
occurred

- Any reserves for the
“Potential for a CAT”
are Special Surplus Funds



Wind



Life and Health Insurance Reserves

Life Insurance Policy Reserves

- Excess of the present value of future benefits over the present value of future net premiums
 1. Based on an interest rate – minimum determined annually
 2. Based on a mortality table – changed every 10 – 15 years
 3. Cash value floor

Life Insurance Reserves

- Determination of future benefits
 1. Face amount
 2. Indexed (Cost of Living)
 3. Universal / Variable Life
- Net premiums
 1. Based on the interest and mortality of the reserve
 2. Level percentage of the guaranteed gross premiums

Life Insurance Reserves

- Net premiums
 1. Based on the interest and mortality of the reserve
 2. Level percentage of the guaranteed gross premiums
 3. Other patterns
 - Net level premium reserves (NLP)
 - Commissioners Reserve Valuation Method (CRVM)
 - CRVM graded to NLP
 4. May limit period of insurance

Life Insurance Reserves

■ Mean Reserves

1. Assume net premium paid annually
2. Calculate reserves at the end of each policy year
3. Mean of net premium and 2 terminal reserves
4. If premium is not paid annually, produces deferred premium.

Life Insurance Reserves

■ Deficiency Reserves

1. Present value of the excess of net premiums over guaranteed gross premiums
2. 1976 – Difference between actual reserve and minimum reserve based on maximum interest rate and specified mortality table
3. 1990's – Allowed to modify specified mortality with actuarial certification

Deferred Annuity Reserves

- The greatest present value of all possible future guaranteed benefits streams over future considerations. (CARVM) – discount at interest only.
 1. Surrenders
 2. Partial Withdrawals
 3. Annuitizations
 4. Death Benefits

Heath Policy Reserve

- Unearned premium reserve
 1. Net premium if there is a contract reserve
 2. Gross premium otherwise
- Contract reserve

Health Reserves

■ Contract reserves

1. Similar to life policy reserves
2. Morbidity (probability of becoming disabled and probability of staying disabled) set by regulation

Health Claim Reserves

■ Medical insurance

1. Analyze historical claim payment patterns
2. Categorize claims by period incurred and by period paid
3. Follow up studies

■ Disability / Long-Term Care

1. Present value of amount due in the future
2. Morbidity table may be specified in a regulation

U.S. Solvency Modernization Initiative

Principle-Based Reserving

Principles-Based Valuation Project

■ What is it?

- New calculation methodology that captures all material risks on life and annuities reserves by establishing those reserves based on a magnitude of risks, unlike the current formula approach.
- Movement away from industry data to credible company experience
- New business only

Principles-Based Valuation Project

■ Why is needed?

■ Good public policy

- Requires understanding of the real economic condition of the company.
- Improves the price of products to consumers

■ Eliminate flaws in current methodology

- Eliminates need to constantly develop new rules
- Focused on “what could happen” instead of “what happened”

■ International

- PBR is a step in the right direction towards international accounting if the NAIC moves in that direction.
- Allows U.S. to compete in the global insurance market

Basic Framework for PBR Calculation

The reserve is the greater of:

1. A prescribed formulaic amount (the net premium reserve)

And either

- 2a. A **deterministic calculation** assuming a single economic scenario
- 2b. A **stochastically derived amount** using multiple economic scenarios

Actions Taken Thus Far

- Adoption of a revised Standard Valuation Law by the NAIC membership at the 2009 Fall National Meeting.
 - Provides among other things that the Valuation Manual becomes operative
 - January 1 of the calendar year following July 1 of the calendar year in which all of the following have occurred:
 - (1) Adoption of VM by NAIC by 42 states or more (Done)
 - (2) Amended SVL enacted in states representing greater than 50% of direct premiums written as reported in the annual statements
 - (3) Amended SVL enacted in at least 42 of the 55 jurisdictions

Future Expected Actions

- Adoption of Initial Valuation Manual
 - August 2010 adoption by LATF
- Impact Study Current Being Completed by Towers Watson
 - If no material problems with 2010 Valuation Manual, updates to the Valuation Manual in Summer 2011 and adoption of Manual by full NAIC by end of 2011
 - Start introducing legislative packages for adoption at the individual states (late 2011, 2012)
- Update Summary Timeline
 - What groups need to do, by when, etc

Questions?