Claim Audits and Implications for Actuarial Analyses

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Overview

- The Actuarial-Claims Connection

- Hypothetical Case Studies
  - Run-off Business

  - Due Diligence

  - Statement of Actuarial Opinion

  - Estimating Ultimate Losses - Standard Lines

  - Estimating Ultimate Losses - Asbestos

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The Actuarial-Claims Connection

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Current Environment

- Increased regulatory scrutiny of actuarial work
  - Need to develop techniques, practices, and tools relating to loss reserve ranges and uncertainty

- Actuarial contributions to SEC filings
  - Need to support disclosures regarding reserve ranges, underlying assumptions, and uncertainty

- Actuarial involvement in financial markets
  - Need to communicate with investors the risks associated with the various insurance disciplines (claims, underwriting, actuarial)

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CAS Statement of Principles Considerations

- Understanding the trends and changes affecting the data base is a pre-requisite to the application of actuarially sound reserving methods.

- Considerations include:
  - Emergence patterns
  - Settlement patterns
  - Development patterns
  - Reopened claims potential
  - Operational changes
  - External influences
  - Reasonableness

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CAS Statement of Principles Considerations

- "A review of the insurer's claim practices should be made to assure that assumptions regarding the claims process are appropriate."

- "No material departure from expected results should be accepted without attempting to find an explanation for the variation."

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General Considerations

- Is historical data predictive of the future?
  - Changing legal environment (e.g., asbestos claims)
  - New types of claims being reported
  - Change in policy interpretation/coverage
  - Change in claim handling which impacts timing and level of payments
  - Change in claim handling which impacts case reserving practices
- You need to be comfortable with these answers before selecting methods and assumptions and formulating findings and opinions

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What is a Claim Review?

- Understanding management philosophies and stated practices
- Determining whether claim practices conform to management goals and industry best practices
- Reviewing claim files and interviewing key personnel to evaluate claims handling practices
- Estimating case reserves
- Evaluating interaction and communication between claims and other departments, especially actuarial
- Provide additional approaches to traditional actuarial methods of estimating ultimate losses

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Hypothetical Case Studies –
Case Study 1

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Hypothetical Case Study 1
Run-off Business

- Your Task: perform a probability level analysis on the aggregate unpaid claim liabilities for a company in run-off

- Information available prior to claim review:

  – Company in run-off for 20 years

  – Remaining liabilities consist primarily of A&E

  – Few remaining open claims

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Hypothetical Case Study 1
Run-off Business

- Approach: perform a claims review to assess the variability in the remaining open claims
  - Select a sizeable and representative sample to review
  - Estimate the outstanding case reserves for each claim reviewed
  - Determine a reasonable 75th and 90th percentile estimate

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Hypothetical Case Study 1
Run-off Business

- Work closely with the actuary to craft an approach to establishing probability level assessments
  - Start with claim review estimates of 75th and 90th confidence intervals
  - Fit a distribution to each claim using percentile matching technique
  - Apply simulation to model the aggregate reserve distribution
  - Determine various probability level outcomes based on the aggregate distribution
  - Adjust for correlation and parameter risk
- Test for reasonableness against the claim review results

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Hypothetical Case Study 1
Run-off Business

- Impact:
  - An aggregate distribution based upon specific information obtained from individual claims
  - Identification of and adjustment for one open claim with the potential for significant development, not sufficiently represented using actuarial methods and materially impacting the results

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Hypothetical Case Studies – Case Study 2

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Hypothetical Case Study 2
Due Diligence

- Your task: conduct a due diligence review of an insurance company that recently merged with another insurance company

- Information available prior to the review:
  - Company A had been reserving claims using a "known and proven" criteria; Company B had been reserving claims using a "probable ultimate value" criteria. These companies merged.
  - The merged company's claims management adopted Company B's case reserve approach (probable ultimate value)
  - Assuming that the probable ultimate approach was in place in the claim department, the merged company's actuaries applied faster development patterns to the incurred data than they would have under the known and proven approach

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Hypothetical Case Study 2
Due Diligence

- Issue: confirm reasonableness of development patterns

- Approach: claims review to ascertain if case reserves are being set to probable ultimate value

  – Interview claims management and claims examiners/adjusters

  – Select a representative and sizeable sample of claim files to review at both Company A and Company B office locations

  – Assess whether the case reserves on the claim files post-merger are at probable ultimate value

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Hypothetical Case Study 2
Due Diligence

- Findings:
  - Company A claim staff were still reserving based on a known and proven standard, and not probable ultimate value
  - In some cases, Company A claim staff were unaware that a change had been instituted by management

- Impact:
  - The actuaries' application of faster development patterns to incurred losses materially understated the projected ultimates

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Hypothetical Case Study 2
Due Diligence

- Result:
  - Had the due diligence team relied upon the statements of claims management, the development patterns used by the actuaries would have appeared reasonable
  - However, the potential buyer would have realized significant adverse development post-acquisition

- Impact:
  - Claim review resulted in a negotiated transaction that reflected the reserve deficiency masked by the development patterns

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Hypothetical Case Studies – Case Study 3

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Hypothetical Case Study 3
Statement of Actuarial Opinion

- Your task: Issue a Statement of Actuarial Opinion

- Information available prior to the review:
  - Aggregate data for single line
  - Claims handled by unrelated Third Party Administrator (TPA)
  - Unusual case reserve increases in latest calendar year due to unanticipated adverse development on several claims
  - Somewhat higher-than-expected paid data
  - Insurance department completed limited scope examination in past year
  - Client has never audited TPA files

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Hypothetical Case Study 3
Statement of Actuarial Opinion

- Issue: adjust IBNR to account for increase in case reserves?

- Solution: perform a claim review to confirm the TPA's assertion that case reserves were raised on several claims due to unanticipated adverse development

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Hypothetical Case Study 3
Statement of Actuarial Opinion

- Findings: there was a change in claim reserve philosophy and practices
  - Case reserves had been grossly inadequate for a period of several years
  - Claims not aggressively handled and resolved
  - New supervisor implemented reserve increases on select files only
  - Case reserves were significantly overstated just prior to settlement
  - More cases were settling, and at higher amounts due to overstated reserves

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Hypothetical Case Study 3
Statement of Actuarial Opinion

- Results:
  - Reevaluation of reserve increases were not completed yet
  - Impact on settlement process and amounts clarified
  - Potential impact on expenses was noted
  - Potential impact on new reportings noted

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Hypothetical Case Study 3
Statement of Actuarial Opinion

- Impact on Statement of Actuarial Opinion
  - Adjust underlying reserve analysis (via Berquist Sherman, reliance on alternative methods, adjustment to factors selected in prior years' studies, etc.)
  - Inclusion of risk factors
  - Inclusion of statements regarding material defects in the data
  - Inclusion of statements regarding uncertainty

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Hypothetical Case Studies – Case Study 4

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Hypothetical Case Study 4
Estimating Ultimate Losses – Standard Lines

- Your task: estimate ultimate losses for a reserve study

- Information available prior to the review:
  - Aggregate data
  - Workers compensation only
  - Change in claim system in 1995
  - Data in the claim system is complete and accurate for claims reported in 1995 and subsequent
  - Data in the claim system is incomplete for claims reported prior to 1995
  - There are 35 claims open with report years prior to 1995

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Hypothetical Case Study 4
Estimating Ultimate Losses – Standard Lines

- Issue: cannot rely on triangulation methods for the older claims as data is incomplete

- Solution: perform a claim review on the older claims for the purpose of estimating the ultimate value of these claims
  - Review the claim file
  - Review any electronic claim system information
  - Interview adjuster
  - Apply appropriate WC law to facts
  - Estimate ultimate value of all elements (indemnity, medical, expense)

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Hypothetical Case Study 4
Estimating Ultimate Losses – Standard Lines

- Approach 1: bifurcate estimation process
  - Traditional actuarial techniques for new claims
  - Claim review estimates for old claims

- Approach 2: reasonableness check
  - Traditional actuarial techniques for all claims
  - Select loss development factors based in part on outcome of claim review
  - Compare ultimates to those attained in Approach 1

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Hypothetical Case Studies –
Case Study 5 - Asbestos

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Hypothetical Case Study 5
Estimating Ultimate Losses – Asbestos

- Your task: estimate ultimate losses for a reserve study

- Information available prior to the review:
  - GL exposures only; specifically, asbestos
  - Insureds/potential exposures countrywide
  - Individual claim data (i.e., by insured)
  - All loss (case) reserves are zero
  - Few loss payments
  - Defense costs relatively flat over past 3 years
  - Report dates known, also relatively flat over past 3 years

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Hypothetical Case Study 5
Estimating Ultimate Losses – Asbestos

- Issues: assume losses are mostly closed without payment; assume past expense data and reporting patterns are indicative of the future

- Solution: perform a claim review
  - Review claim files
  - Interview staff
  - Information from defense counsel
  - Information from coverage counsel
  - Evaluate potential losses
  - Assess reasonableness of expense and reporting assumptions

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Hypothetical Case Study 5
Estimating Ultimate Losses – Asbestos

- Findings:
  - Loss reserves are zero due to litigation concerns
  - Estimated "true" value of expected losses for each insured
  - Defense costs likely to increase due to new plaintiffs' strategy that imposes "failure to warn" theory, as yet untested in courts
  - Reported claims will decrease in one state due to law change, and will increase in another due to adverse legal decision

- Impact:
  - Adjust severity to account for realistic loss estimates and defense projections
  - Adjust frequency to account for anticipated changes

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