

2012 CLRS

Documenting Your Reserve Analysis

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Antitrust Notice

- The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.
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- It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

Your Responsibilities

- The Code of Professional Conduct specifically requires the following of all actuaries subject to the Code:
 - Precept 1, Annotation 1-I says, an Actuary shall perform Actuarial Services with skill and care.
 - Precept 4: an Actuary who issues an Actuarial Communication shall take appropriate steps to ensure that the Actuarial Communication is clear and appropriate to the circumstances and its intended audience, and satisfies applicable standards of practice.

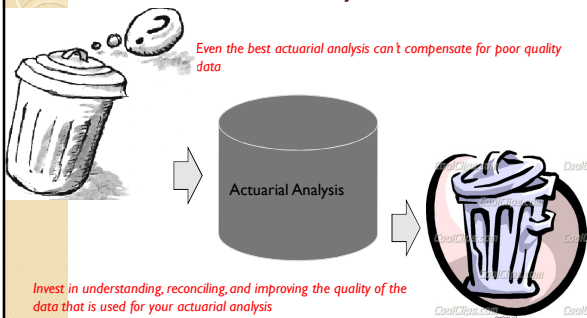
Data & Documentation - Resources

- ASOP No. 23 – Data Quality
- ASOP No. 41 – Actuarial Communications
- ASOP No. 43 – Property/Casualty Unpaid Claim Estimates
- NAIC Instructions

ASOP No. 23 – Data Quality

- Selection of Data – Considerations
 - Appropriateness, reasonableness, comprehensiveness, limitations, alternative data, methodologies
- Reliance on data supplied by others
- Review of the data (for reasonableness and consistency)
- Professional judgment in use of data
- Documentation and Disclosure
 - Sources, reliance, judgments, limitations

What's the Quality of YOUR Data?



ASOP No. 41: Actuarial Communications

- Revised December 2010
- Effective for actuarial communications issued on or after May 1, 2011
- Applies to actuaries issuing actuarial communications within any practice area.
 - Actuarial communication is any written, electronic or oral communication issued by an actuary with respect to actuarial services
 - Does not apply to communications that do not include a statement of actuarial opinion or other actuarial findings

ASOP No. 41: Requirements for Actuarial Communications

Actuary should ensure:

- Form and content of each actuarial communication is clear and appropriate for the intended users.
- Actuarial communication is issued within a reasonable time period, which recognizes the needs of the intended users.
- Actuarial communication clearly identifies the actuary (or actuaries) responsible for it.
- If the actuarial findings will be relied upon by any intended user, an actuarial report is to be completed.
 - Report may be one or several documents
 - If several documents, specify which documents constitute the report

ASOP No. 41: Actuarial Report

- Required Disclosures
 - Scope/intended purpose and Intended users
 - Acknowledgement of qualifications
 - Cautions on risk and uncertainty
 - Limitations or constraints on the applicability of the findings
 - Conflict of interest, if any
 - Information material to the findings on which the actuary has relied and does not assume responsibility
 - Information date
 - Subsequent events, if any

ASOP No. 41 (continued)

- Responsibilities to Other Users
 - Recognize the risks of misquotation, misinterpretation, or other misuse
 - May include language to limit distribution to others
 - No obligation to communicate with other users
- Explanation of Material Differences
 - Where the same actuary issues an actuarial communication on the same issue that differs from a previous communication:
 - Make clear that the former communication is no longer valid and explain why changes occurred

ASOP No. 43: Property/Casualty Unpaid Claim Estimates

- ASOP No. 43 applies to the actuary only with respect to unpaid claim estimates that are communicated as an actuarial finding (as described in ASOP No. 41) in written or electronic form.
- The terms “best estimate” and “actuarial estimate” are not sufficient identification of the intended measure, as they describe the source or the quality of the estimate but not the objective of the estimate.

ASOP No. 43 – Disclosures

- Disclose:
- The intended purpose(s) and use(s) of the estimate;
 - The scope of the estimate;
 - **Three** key dates (accounting, valuation, and review);
 - Significant risks and uncertainties associated with the estimate;
 - Significant events, assumptions, or reliances that have a material effect on the unpaid claim estimate;
 - Limitations, if any, on the actuary’s analysis such that there is a significant risk that a more in-depth analysis would produce a materially different result;
 - If the actuary specifies a range of estimates, the actuary should disclose the basis of the range provided.

NAIC Instructions Actuarial Report (and Workpapers)

- The appointed actuary must give assurance that the actuarial report and underlying actuarial workpapers will be maintained at the company for seven years in the Statement of Actuarial Opinion.
- The Actuarial Report must be available to the regulator no later than **May 1** or within two weeks after a request from an individual state commissioner.
- Must be consistent with appropriate Actuarial Standards of Practice... and Statements of Principles (currently under review) promulgated by the Casualty Actuarial Society.
- Must contain both **narrative** and **technical** components

NAIC Instructions (cont.)

- “The narrative component should provide sufficient detail to clearly explain to company management, the Board of Directors, the regulator, or other authority, the findings, recommendations and conclusions, as well as their significance.
- The technical component should provide sufficient documentation and disclosure for another actuary practicing in the same field to evaluate the work. This technical component must show the analysis from the basic data, e.g., loss triangles, to the conclusions.”

NAIC Instructions (cont.) Content of Actuarial Report

- Description of actuary’s relationship to the company, including role in advising Board or management **NEW**
- Exhibit which compares actuary’s conclusions to the carried amounts consistent with the liability groupings used in the actuarial analysis **Newly worded**
- Exhibit that reconciles and maps the data used by the actuary, consistent with the liability groupings used in the actuarial analysis, to the Schedule P line of business reporting **Newly worded**

NAIC Instructions (cont.)
Content of Actuarial Report

- Exhibit showing the change in the actuary's estimates from the prior report, including extended discussion of factors underlying any material changes **NEW**
- Extended comments regarding risks and uncertainties that could result in material adverse deviation
- Extended comments on factors that led to unusual IRIS ratios and how these factors were addressed

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Insights on an Effective Actuarial Report

Your mission is to:

- Tell the story
 - Include background, historical information, details
 - What, where, why, when, how,...and how much?
- Provide a road map
 - Help the reader navigate through the narrative and exhibits
 - Describe the process and the steps along the way

Chapter I: Executive Summary

- Main audience: Management (including the Board), but really includes all users
- Overall conclusions in the aggregate and maybe by segment (Schedule P Line of Business or other)
- Discussion regarding uncertainty, range estimates
- Exhibit comparing current estimate with prior years
- Table of Contents to direct reader to further detail and illustrate organization of report

Chapter 2: Company Background

- Main audience: Regulator
- History of the company
- Lines and types of business written
- Discussion of overall reinsurance program by line and year, including commutations or retroactive arrangements
- Overview of claims handling and claims characteristics
- Highlight significant changes in the organization in the current year or historically

Chapter 3: Technical Narrative

- Main audience: Actuaries or “technical types”
- Describe the process used to get your estimates
 - What data was used? How was it segmented?
 - What methods were used?
 - How was reinsurance handled (different methods for net and gross data)?
 - How were the loss adjustment expenses analyzed?
 - What assumptions were used and why?
 - How were estimates selected?

Chapter 4: Technical Exhibits

- How technical should you get?
 - Probably depends on volume and complexity
 - If a small company, probably could include “everything”
 - If a large company, aggregated exhibits probably ok; indicate in the narrative or via a list what other information is available or include it in an appendix
- Organization trumps detail!
 - More informative to discuss what, why, and how in an organized manner than to present triangles and data at every possible level of detail with no explanation

Further Considerations

- Support selections
- Support assumptions & judgment
- Support ranges (where they are used)
- Request a peer review

Support Selections

- Relevance of benchmark data
- Loss development factor selections
- Loss ratios used in Born-Ferg analysis
- Ultimate selections and/or weighting
- Significant assumptions
- Documentation of roll-forwards
- Use of “actuarial judgment”

Support Assumptions & Judgment

- Don't just state WHAT was done; say WHY
- How did you apply actuarial judgment?
 - If another reasonable alternative assumption would cause a material difference in estimates, the assumption requires further explanation.
 - What considerations helped form your judgment?
 - Not asking for you to give away your secrets, just be more informative
 - If you used external data or benchmark data, cite where it came from and why it is applicable to your analysis.

Support Ranges

- A range is often provided in reports with no explanation of how it was derived
- ASOP No. 43 4.2a: "In the case when the actuary specifies a **range** of estimates, the actuary should disclose the basis of the **range** provided, for example, a **range** of estimates of the intended measure (each of such estimates considered to be a reasonable estimate on a stand-alone basis); a **range** representing a confidence interval within the **range** of outcomes produced by a particular model or models; or a **range** representing a confidence interval reflecting certain risks, such as process risk and parameter risk..."

Use Peer Review(s)

One of the most effective ways to test whether you have accomplished your mission is to have a peer review (or two) performed

- A non-actuary (someone from your communications or investor relations department) will read the report with a different perspective than a fellow actuary and can provide tremendous insights on how to improve your "story"
- Have a fellow actuarial professional review your report with "informed skepticism," verifying data, considering methodology and assumptions, and testing calculations.
- Develop and use a checklist

Report Workshop

- Ten minute reading period
 - Evaluate the written text and supporting exhibits per the guidelines in the previous slides
 - Feel free to ask clarifying questions during the period
- Discussion
 - Thoughts from participants
 - Guidance from panel

Issues with Narrative

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Issues with Exhibits

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Overall ASOP and Instructions compliance

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Key Takeaways

- Know the standards that apply to the work you are doing
- Thorough documentation and disclosure is your best defense
- Can another actuary evaluate and follow the work?
- Support your assumptions and selections
- A quality peer review(s) can go along way to ensure the quality of your work.

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