

# How Well Do You Know ASOP 43?

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# Disclaimer

The opinions expressed during this session are personal opinions and are in the spirit of providing guidance to you in the interpretation of ASOP 43. This is not a substitute to you reading and understanding the standard and forming your own opinion.

# Background on ASOP 43

- Effective 9/1/07
- Prior to ASOP 43
  - ASOP 36 covers statutory opinions
  - Outdated principles on reserving
- ASOP 43 covers all reserving work
  - Whether for statutory opinion or not
  - Applicable to both internal and external actuaries
- General Session at CLRS discussed observations on how well standard has been followed in practice
  - Much room for improvement

# Contest

- Created to raise awareness of guidance and responsibilities resulting from adoption of ASOP 43;
- Entrants were provided with information on fictional but realistic scenario involving an independent estimate of unpaid loss and allocated loss adjustment expense as part of an acquisition of “CLRSIC” insurance company by hedge fund manager “MCM”;
- Background and data provided for three lines of business (General liability, Commercial Auto, and Excess Liability) along with various constraints, areas of reliance, and special requests (discounting at a specified rate);
- Respondents to contest included actuaries from large and small consulting firms and several large multi-line writers
  - 13 contest entries from 34 people

# ASOP 43 – CLRS Contest Grades

ASOP 43 - CLRS Contest						
Summary Exhibit						
				<u>Average</u>	<u>Maximum</u>	<u>Pct</u>
<b>1</b>	<b>Intended Purpose or Use</b>			<b>0.9</b>	<b>1.0</b>	<b>90%</b>
<b>2</b>	<b>Scope</b>					
		<b>a. Intended Measure</b>		<b>2.2</b>	<b>4.0</b>	<b>56%</b>
		<b>b. Recoverables</b>		<b>1.6</b>	<b>2.0</b>	<b>78%</b>
		<b>c. Discounting</b>		<b>0.9</b>	<b>1.0</b>	<b>90%</b>
		<b>d. Types of Claim Adj Expenses</b>		<b>1.1</b>	<b>2.0</b>	<b>56%</b>
		<b>e. Types of Claims Covered</b>		<b>1.8</b>	<b>2.0</b>	<b>89%</b>
<b>3</b>	<b>Dates - Accounting Date/Valuation Date/Review Date</b>			<b>1.5</b>	<b>2.0</b>	<b>73%</b>
<b>4</b>	<b>Uncertainty</b>					
		<b>a. Significant Limitations/Constraints</b>		<b>2.0</b>	<b>3.0</b>	<b>66%</b>
		<b>b. Specific Risks</b>		<b>2.1</b>	<b>4.0</b>	<b>53%</b>
		<b>c. Sensitivity to alternative assumptions</b>		<b>1.2</b>	<b>4.0</b>	<b>31%</b>
		<b>d. Significant assumptions or reliances</b>		<b>2.1</b>	<b>4.0</b>	<b>51%</b>
<b>5</b>	<b>Analysis - Use of Multiple Methods/Models</b>			<b>0.9</b>	<b>1.0</b>	<b>92%</b>
<b>6</b>	<b>Overall Quality of Report in Relation to ASOP 43</b>			<b>10.4</b>	<b>20.0</b>	<b>52%</b>

# Items to discuss

- Intended measure
- Recoverables
- Expenses
- Other scope issues
- Discounting assumptions
- Constraints
- Uncertainty and changing conditions
- Understanding of business
- Sensitivity

# Intended Measure

From ASOP 43 (3.3.a):

“The actuary should identify...the intended measure of the unpaid claim estimate... “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”

Some examples from contest follow

# Intended Measure

1. The selected estimate represents our actuarial central estimate. As defined in ASOP No. 43, the actuarial central estimate represents an expected value over the range of reasonably possible outcomes.
2. Our selected estimate is an actuarial central estimate, which represents an expected value over the range of reasonably possible outcomes. Given the purpose of this estimate, MCM may also want to consider other measures such as those incorporating the effects of the time value of money and an appropriate risk margin.
3. The central estimates found in this report are intended to represent expected value amounts over the range of reasonably possible outcomes.
4. Table A displays our range of mean estimates of CLRSIC's unpaid claim liabilities as of December 31, 2007
5. The intended measure is the mean of the development and BF methods
6. The intended measure of our approach is a reasonable range of ultimate losses



# Recoverables

ASOP 43 requires you to identify both whether estimate is gross or net of recoverables (3.3.b) and to what extent collectibility is considered (3.3.c)

Some examples:

# Recoverables

1. As CLRSIC did not purchase reinsurance, our gross estimates also represent the Company's net unpaid claim liabilities after reinsurance. All estimates in this report are net of salvage and subrogation recoveries.
2. Our estimates are net of future salvage and subrogation recoveries. Collectibility risk associated with these recoveries has not been explicitly considered.

# Expenses

From ASOP 43 (3.3.d):

“The actuary should identify...the specific types of unpaid claim adjustment expenses covered in the unpaid claims estimate (for example, coverage dispute costs, defense costs and adjusting costs)”

Three examples from contest

# Expenses

1. The analysis includes ALAE, but does not include ULAE.
2. ALAE is included in this analysis.
3. ALAE liabilities have been combined with loss in our analysis. ALAE estimates provide for coverage dispute costs, defense costs and claim adjusting costs which are attributable to and recorded against specific claim files. We have not analyzed CLRSIC's unallocated loss adjustment expense (ULAE), which represents the Company's internal staff costs needed to adjust claims and are not typically assigned to individual claims.

# Defining Scope

ASOP 43 (3.3) requires you to identify the scope of the assignment, which would include the intended measure, the treatment of recoverables and their collectibility, the inclusion of expenses, the types of claims, and “any other items that...are needed to describe the scope sufficiently”

One example goes further

# Defining Scope

Our analysis is restricted to unpaid loss and ALAE claim estimates for three CLRSIC policy types. It does not consider other factors that could be critical to MCM's decision to purchase CLRSIC. A non-exhaustive list of items not addressed in our report includes:

1. An assessment of the Company's business plan and strategic plan, including current and future profits, growth, revenue and expense assumptions;
2. An analysis of the Company's management capabilities and other business functions such as sales, underwriting, claims, information management, finance, actuarial, legal, etc.;
3. An analysis of balance sheet items other than unpaid loss and ALAE claim liabilities, such as the type and quality of underlying assets, unearned premiums, commissions payable, taxes, restricted surplus, etc.;
4. An analysis of items contributing to CLRSIC's income statement;
5. An analysis of the Company's recent and anticipated cash flows.

# Discounting Assumptions

Contestants were informed company believes they may carry GL reserves on discounted basis and were instructed to discount GL losses using 10% interest rate. ASOP 43 discusses how to handle situations where assumptions are provided by principal (3.6.2 and 4.1.f)

Some examples of how this was handled:

# Discounting Assumptions

1. MCM requested that GL liabilities be discounted for the time value of money using a 10% interest rate, as it believes that it may be possible to carry GL liabilities on this basis. Our analysis does not provide guidance on the regulatory acceptability of discounting GL liabilities for the time value of money, nor the reasonability of using a 10% interest rate.
2. Our inclusion of the discounted unpaid claim estimate at 10% interest rate does not imply we are recommending the use of the 10% interest rate nor imply that we believe that the unpaid claim estimate for general liability may be booked on a discounted basis. ASOP 20 warns that a discounted unpaid claim estimate "...is an inadequate estimate of economic value unless appropriate risk margins are included." MCM has not requested that a risk margin be applied to the discounted general liability unpaid claim estimates and we have not provided one.
3. If the GL claim liabilities can be carried on a discounted basis in the statutory financial statements, we do not believe a 10% discount rate would be consistent with actuarial standards of practice...we are not expressing an opinion with regard to the appropriateness of this discount or the ability of MCM to book these liabilities on a discounted basis...we recommend that MCM seek additional advice to confirm their understanding of the discounting of GL unpaid claim liabilities.
4. We were asked to provide an estimate of GL liabilities on a discounted basis, using a 10% interest rate.



# Constraints

From ASOP 43 (3.2)

“where...the actuary believes that constraints create a significant risk that a more in-depth analysis would produce a materially different result, the actuary should notify the principal of that risk and communicate the constraints on the analysis to the principal”

Some examples:

# Constraints

1. Due to confidentiality constraints, we were not given the opportunity to discuss with CLRSIC management any operational changes not reflected in the aggregate historical data. If there have been such changes, the Company's unpaid claim liabilities could be higher or lower than our estimates. More generally, our inability to interview key personnel from the underwriting, claims, finance, information management, legal or actuarial departments has forced us to rely solely upon aggregate CLRSIC historical premium and loss data, without an ability to interpret the data in light of expert knowledge of the Company's operational facts and circumstances. We note, for example, that there are unusually large GL case reserves for accident year 2004, which suggest that one or more large claims may be present. If true, our estimate unpaid claim loss and ALAE for this accident year would likely be improved were we to incorporate claim department views on the ultimate disposition of such claims. Our analysis also incorporates our understanding of general industry pricing levels, which we have assumed would apply to CLRSIC, without the ability to verify the reasonability of our approach with Company management.
2. There have been significant constraints on our ability to conduct our work. We had no access to CLRSIC's personnel. Such constraints could create a significant risk that a more in-depth analysis would produce a materially different result.
3. No access was provided to company staff for data investigation, and we had limited time for detailed analysis.

# Uncertainty and Changing Conditions

ASOP 43 requires actuary to consider uncertainty (3.6.8) and changing conditions (3.6.7)

In contest, specified that tort reform changes were an issue

One example of how this was generally handled

# Uncertainty and Changing Conditions

We understand through discussions with CLSRIC management that tort reform has been enacted in several Northeastern states as of January 1, 2008. These legislative reforms are intended to address non-economic losses within liability claims. It is not known at the time of this analysis whether the reforms will apply only to newly reported claims or to all open claims. If applied to all open claims, these legislative reforms are likely to reduce CLSRIC unpaid claim liabilities incurred through December 31, 2007. We are unable to quantify the potential benefit of the tort reforms, due to the uncertain terms of the reforms, as well as a lack of historical data needed to quantify the impact.

# Understanding of business

ASOP 43 says actuary should have an understanding of the nature of the unpaid claims being estimated (3.5)

One example:

# Understanding of business

Based on discussion with MCM and senior management at CLRSIC, we understand that the Company writes three business segments:

1. **General Liability** – CLRSIC provides primary GL coverage to commercial retail stores at suburban shopping malls for their OL&T exposure. The most common claims are “slip and fall” accidents. Policy limits are \$1 M with no deductibles. The Company has written this business since January 1, 1993.
2. **Commercial Auto Liability** – On January 1, 2003, CLRSIC began to insure independent bus lines. The bus lines operate countrywide, but are concentrated in the Northeast and Mid-Atlantic states. Policy limits are \$1 M with no deductibles.
3. **Assumed Excess Liability** – CLRSIC has provided excess-of-loss reinsurance to its affiliate, CAREIC, for its trucking program since January 1, 1996. CAREIC retains \$2 M per occurrence. ALAE are within the retention. Policy limits range from \$1 M to \$10 M.

# Sensitivity

ASOP 43 (3.6.2) says actuary should

“consider the sensitivity of the unpaid claim estimates to reasonable alternative assumptions...(if) would have a material effect on the unpaid claim estimates...should notify the principal and attempt to discuss the anticipated effect”

## Examples

# Sensitivity

1. A 5% trend rate was selected based on general knowledge of industry history and current trends. This assumption was sensitivity tested, and it was found that a 1% increase in inflation (i.e. 5% to 6%) corresponds to a 3.5% increase in indicated ultimate losses. This represents a 6.5% increase in the estimate of total unpaid losses.
2. The sensitivity of key variables, such as trend rates and LDF selections, was considered. The overall results are potentially sensitive to any of these items, and reasonable alternative selections could change the results either upward or downward in a material fashion.
3. The change in discount rate from 10% to 9% results in a new central estimate of \$ 202.3 with associated indicated range of \$ 185.1 to \$222.9. See Table 5 for details. The scenario of a 9% interest discount rate and a 10% probability speedup in claims processing results in an actuarial central estimate of \$ 206.2 with associated reserve range of \$ 188.6 to \$ 226.4. The scenario of a 9% interest discount rate and a 10% probability slowdown in claims processing results in an actuarial central estimate of \$ 199.5 with associated reserve range of \$ 182.4 to \$ 219.3. The original select central estimate of \$ 197.2 lies within the indicated new reserve ranges as combined factors/assumptions are perturbed.
4. Reasonable alternative assumptions may produce estimates that are materially different...such assumptions include catastrophic losses, higher/lower loss development factors, higher/lower trend rates, alternative excess loss factors, etc...particularly true of XS line, where low frequency / high severity nature of business implies greater volatility of possible outcomes



## Other Items

- Identify purpose or use
- Use of multiple methods or models
- Assess reasonableness
- Disclose relevant dates
- Disclose changes relative to prior estimate