Maximizing the Value of Your Actuarial Opinion and Reports

September 10, 2017
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What the regulator expects

- Conformance with Annual Statement Instructions,
 ASOPs, and CAS Statements of Principles
- Clear conclusions
 - In the report: a descriptive narrative and welldocumented exhibits
- Opinion type (reasonable, excessive, etc.) that matches the conclusions
- Consistency between SAO, AOS, Annual Statement, and report

Possible topics

- Resources available to SAO writers
- How regulators might use the SAO
- How a regulatory actuary might review the SAO
- Common issues with SAOs, AOSs, and reports
- Opinion statistics
- Recent changes to Annual Statement
 Instructions

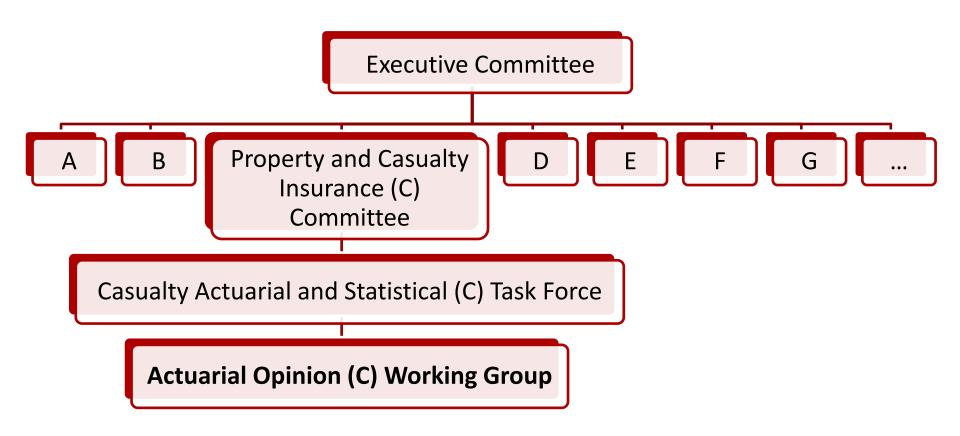
- NAIC Annual Statement Instructions Property/Casualty
- American Academy of Actuaries' P/C Loss Reserve Law Manual
- AAA Committee on Property and Liability Financial Reporting's practice note
- American Academy of Actuaries' Seminar on Effective P/C Loss Reserve Opinions
- Actuarial Standards of Practice, particularly:
 - 23 (Data quality)– 41 (Communications)
 - 36 (SAOs)— 43 (Unpaid claim estimates)

- Statements of Statutory Accounting Principles, including:
 - 55 (Unpaid Claims, Losses, and Loss Adjustment Expenses)
 - 62R (Property and Casualty Reinsurance)
 - 65 (Property and Casualty Contracts)
- Regulatory Guidance document promulgated annually by the NAIC Actuarial Opinion (C) Working Group

Regulatory Guidance

- Prepared by the NAIC Actuarial Opinion (C) Working Group
- Supplements the NAIC Annual Statement InstructionsProperty/Casualty
- Purpose is to provide clarity and timely guidance to companies and appointed actuaries regarding regulatory expectations with respect to the SAO, AOS, and report
- Generally included in COPLFR's practice note
- Not binding

NAIC 2017 Committee Structure



Actuarial Opinion (C) Working Group's 2017 charge:

"Propose revisions to the following, as needed, especially to improve actuarial opinions, actuarial opinion summaries and actuarial reports, as well as the regulatory analysis of these actuarial documents and loss and premium reserves.

- Financial Analysis Handbook.
- Financial statement instructions.
- Regulatory guidance to appointed actuaries."

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 - Financial Analysis Handbook.
 - Financial statement instructions.
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Actuarial Opinion (C) Working Group's 2017 charge:

- 11 open calls from July 2016 through December 2016
 - 11 open calls from January 2017 through September 5, 2017
 - One regulator-to-regulator call each summer to discuss our review of the prior year-end's SAOs, AOSs, and reports
 - rmanciai statement mstructions.
 - Regulatory guidance to appointed actuaries."

- What guidance do you find most useful?
- Are you familiar with the Regulatory Guidance document?
- Who needs more instruction?
 - Regulators?
 - Appointed actuaries?
 - Company management or boards?
 - Rating agencies?

How regulators might use the SAO

Regulatory users of the SAO

Who might use the SAO, and how?

Financial analyst

- Fill out the Actuarial Opinion
 Assessment of the Financial
 Analysis Handbook
- Prepare or edit the Insurer
 Profile Summary

Financial examiner

- Plan for the exam
 - Prioritize exam work
 - Prepare interview questions
 - Build the risk matrix

Regulatory focus: solvency

Excerpt from sample Actuarial Opinion Assessment of *FAH*

8. Determine whether the Appointed Actuary commented on various topics and issues in Exhibit B of the Actuarial Opinion as required by the *Annual Statement Instructions* - Property/Casualty.

		Comments
a.	Risk of Material Adverse Deviation:	
i.	Description of company-specific risk factors	 Exposure to environmental claims Concentration of reserves in long-tailed lines subject to inflation pressures
ii.	Identification of materiality standard and the basis for establishing this standard	 15% of surplus Selection was driven by the fact that the SAO is prepared for the regulatory review of the company
iii.	Risk of material adverse deviation ("yes" or "no")	Yes
iv.	Bright Line Indicator triggered (If "yes," comments from the Appointed Actuary should be pursued if the Appointed Actuary does not believe a risk of material adverse deviation exists.)	No

Excerpt from sample Actuarial Opinion Assessment of *FAH*

8. Determine whether the Appointed Actuary commented on various topics and issues in Exhibit B of the Actuarial Opinion as required by the Annual Statement Instructions -The Actuarial Opinion Assessment helps the analyst: Verify compliance with the Annual Statement *Instructions* g-tailed Identify risks Highlight areas that may merit follow-up with the hat the regulatory actuary or the company eview of the company Risk of material adverse deviation ("yes" or "no" Yes Bright Line Indicator triggered (If "yes," iv. No comments from the Appointed Actuary should be pursued if the Appointed Actuary does not believe a risk of material adverse deviation exists.

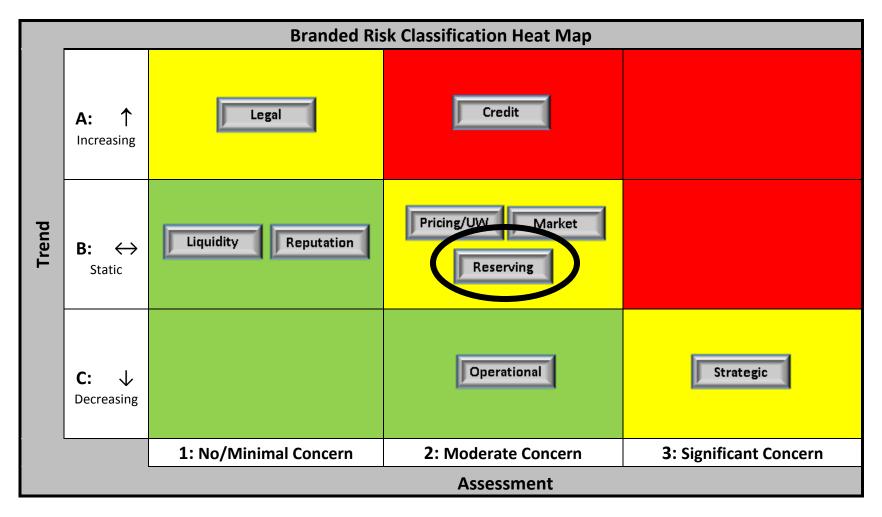
Excerpt from sample Insurer Profile Summary

Reserving:

- The appointed actuary cited two risk factors in his SAO: environmental liabilities and concentration
 of reserves in long-tailed lines subject to inflation pressures.
- The appointed actuary concluded that there was a risk of material adverse deviation in the carried reserves.
- Reserve development has been favorable in each of the past five calendar years, and the carried reserves have been slightly above the appointed actuary's central estimate in each of these years.

No/Minimal Concern	Moderate Concern	Significant Concern	Trend		
	Environmental liabilitiesLong-tailed lines		\leftrightarrow		
Company's reserving proceduresAppointed actuary's analysis			\leftrightarrow		
Overall Reserving Assessment: Moderate Overall Trend:					

Excerpt from sample Insurer Profile Summary



Excerpt from sample Insurer Profile Summary

The Insurer Profile Summary (IPS) is a living document maintained by the state of domicile to house high-level summaries of risk-focused financial analysis, examinations, internal and external changes, priority scores, supervisory plans, and other standard Information (from 2016 *FAH*).

The analyst can use the information in the SAO to complete information in the IPS on reserving risk and other risk categories (strategic, pricing/underwriting, operational, etc.).

1: No/Minimal Concern 2: Moderate Concern 3: Significant Concern

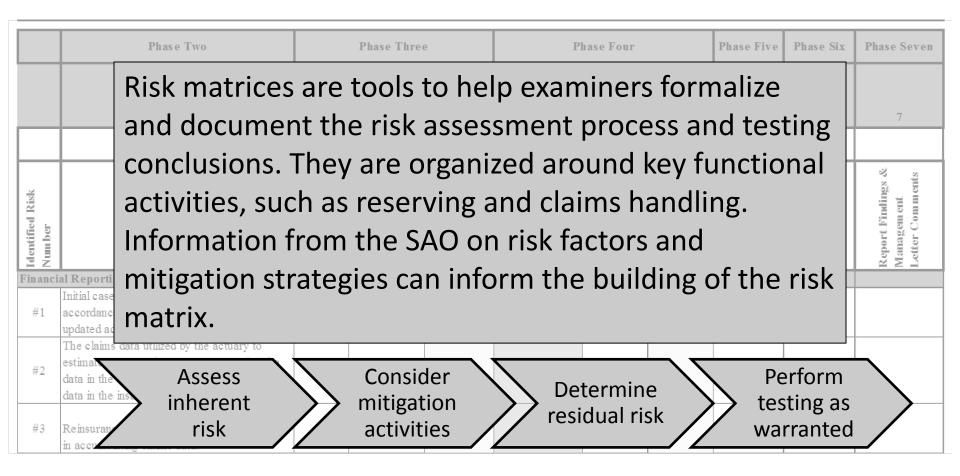
Assessment

Trend

Sample risk matrix

	Phase Two		Phase Three	2	Pl	hase Four		Phase Five	Phase Six	Phase Seven
	2a	3a	3b	3c	4a	4b	4c	5	6	7
	Risk Identification	Risk Mi	itigation Strate Assessmen		Residual	Risk Assess	ment			
Identified Risk Number	Identified Risks	Risk Mitigation Strategy	Evidence & Document Testing Controls	Overall Risk Mitigation Strategy Assessment	Calculated Residual Risk	Judgmental Residual Risk	Overall Residual Risk Assessment	Examination Procedures / Findings	Prioritization Results Supervisory Plan	Report Findings & Management Letter Comments
Financia	al Reporting Risks									
	Initial case reserves are not established in accordance with insurer standards and are not updated accurately.									
#2	The claims data utilized by the actuary to estimate reserves does not correspond to the data in the insurer's claims system and to the data in the insurer's accounting records.									
	Reinsurance is not properly taken into account in accumulating claims data.									

Sample risk matrix



Regulatory users of the SAO

Who might use the SAO, and how?

Regulatory actuary

- Understand risk factors
- Recognize changes from previous SAOs
- Recommend areas of focus for exam team and examination actuary

Examination actuary

- Understand changes over the course of the exam period
- Identify areas of the actuarial report that merit further attention
- Prepare appointed actuary interview questions

Regulatory focus: solvency

Sample exam recommendations

Recommendation in regulatory actuary's pre-exam memo In SAO and report Appointed actuary discusses his "I recommend that: analysis of DD&R UEPR. The report The examination actuary review includes summary exhibits but not the methodology and assumptions the detailed work papers. used by the appointed actuary to estimate DD&R UEPR, and The Company's carried DD&R UEPR exceeds the appointed The exam team ask the Company actuary's materiality standard. how it determined its carried The Company's carried DD&R reserve." UEPR does not equal the appointed actuary's estimate.

Sample exam recommendations

In examination actuary's final report

"We reviewed the methodology and assumptions used by the appointed actuary to estimate unearned premium reserves associated with not-yet-issued death, disability, and retirement policies. We find the methodology to be appropriate. We recommend that the appointed actuary review the Company's actual experience when selecting parameters such as lapse rates and retirement rates, instead of relying entirely on industry benchmarks..."

In management letter sent by Department to Company

- "It is recommended that the appointed actuary consider Company experience when selecting parameters for the analysis of unearned premium reserves associated with not-yetissued death, disability, and retirement policies."
- "It is recommended that the Company maintain documentation of its selected DD&R UEPR."

Sample interview questions

In SAO	Sample interview question for appointed actuary
"The use of industry benchmark factors increases the variability in my estimates." Report doesn't describe the industry source.	"How did you select your industry benchmark?"
"In 2015, the Company implemented an initiative to reserve claims to ultimate sooner in the life of the claim." Report provides little additional commentary.	"Have you noticed an increase in average case reserves? If so, how did that affect your analysis?"
"I have identified the significant company-specific risk factors as X, Y, and Z."	"Do you have any additional comments on the risk factors mentioned in your SAO and report?"

Regulatory users of the SAO

- What challenges have you encountered when working with regulators?
- Have you ever gotten questions on your SAO,
 AOS, or report from regulators?
- What are your experiences with risk-focused exams?

How a regulatory actuary might review the SAO

- 1. Compare the text of this year's SAO to last year's. Are there any significant changes?
 - i. Did the type of opinion (reasonable, excessive, inadequate, etc.) change?
 - ii. Have any company-specific risk factors been added or removed?
 - iii. Has the materiality standard or RMAD conclusion changed?

- 2. Compare the numbers in this year's Exhibits A and B to last year's. Were there any big changes?
- 3. Do the SAO and AOS comply with the *Annual Statement Instructions*?
- 4. Is there consistency between the numbers in the SAO, AOS, and report?

- 5. Does the information in the SAO, AOS, and report align with the information in other filings, e.g., the balance sheet, Notes to Financial Statements, Schedule F, Schedule P, and Management's Discussion and Analysis?
- 6. Does anything in the Relevant Comment paragraphs (A&E, IRIS ratios, etc.) merit further attention?

- 7. Did the company experience adverse reserve development during the calendar year? If so, review the materiality standard and RMAD conclusion in last year's SAO.
- 8. Where are the company's carried reserves in relation to the appointed actuary's range or point estimate? Has this relationship changed since last year? Has the range width changed significantly?

- What should regulatory actuaries focus on when reviewing SAOs?
- Have you ever discussed your SAO, AOS, or report with a regulatory actuary?

Common issues with SAOs, AOSs, and reports

Common issues and possible fixes

Most appointed actuaries are doing a great job with their SAOs, AOSs, and reports. Keep up the good work.

Nonetheless, a few issues arise fairly regularly.

Common issues and possible fixes

Common issue	Possible fixes
 Reconciliation issues between the SAO, AOS, report, and other filings e.g., Carried reserves in SAO that don't match those in AOS Indicated reserves in AOS that don't match those in report Values on Exhibits A and B of SAO that don't match those in the Annual Statement Reserves Salvage and subrogation Discount 	 Implement a technical review process to catch possible errors Develop a spreadsheet that can be used to cross-check documents Explain any legitimate discrepancies in the appropriate document (SAO, AOS, or report)

Common issue	Possible fixes
Inconsistency between the	Review the Notes to Financial
information in the SAO/AOS/report	Statements, Schedule P
and other filings, e.g.,	Interrogatories, and other
 Reinsurance disclosures in the SAO 	schedules of the Annual Statement
that don't align with the	Review the information every year
information in Schedule F	for changes; consider developing
 Retentions listed in the report that 	an annual questionnaire for
don't match the information in the	management
Management's Discussion and	Clarify information with
Analysis	management

Common issue	Possible fixes
Difficult-to-navigate reports	 Use footnotes on all numerical exhibits Consider using one analysis segment as an example, providing more extensive documentation of how the exhibits fit together
Lack of documentation for parameters	 In the report (which is a confidential document), explain the source of the industry benchmark information Provide more justification than "actuarial judgment" for initial expected loss ratios or loss costs

Sample summary exhibit in report

Workers' Compensation

Net of reinsurance

Net of subrogation In \$000s	Carried	Indicated	Redundancy/ (Deficiency)
Case loss reserves	18,600	18,600	0
IBNR loss reserves	7,000	9,900	(2,900)
Total loss	25,600	28,500	(2,900)
ALAE	3,000	2,400	600
ULAE	2,000	3,600	(1,600)
Total loss and LAE	30,600	34,500	(3,900)

⁼ Gross of subrogation IBNR reserves from Exhibit III, Sheet 4, Col. 5

⁻ Subrogation IBNR reserves from Exhibit III, Sheet 10, Col. 3

⁺ IBNR reserves for discontinued segment from Exhibit V, Sheet 1, Col. 7

Sample summary exhibit in report

Workers' Compensation Net of reinsurance Net of sub ndancy/ Suggestion: Add footnotes to iciency) document the source of the Case loss r IBNR loss i (2,900)numbers in the exhibit **Total loss** (2,900)ALAE 3,000 2,400 ULAE 2,000 (1,600)34,500 **Total loss and LAE** 30,60

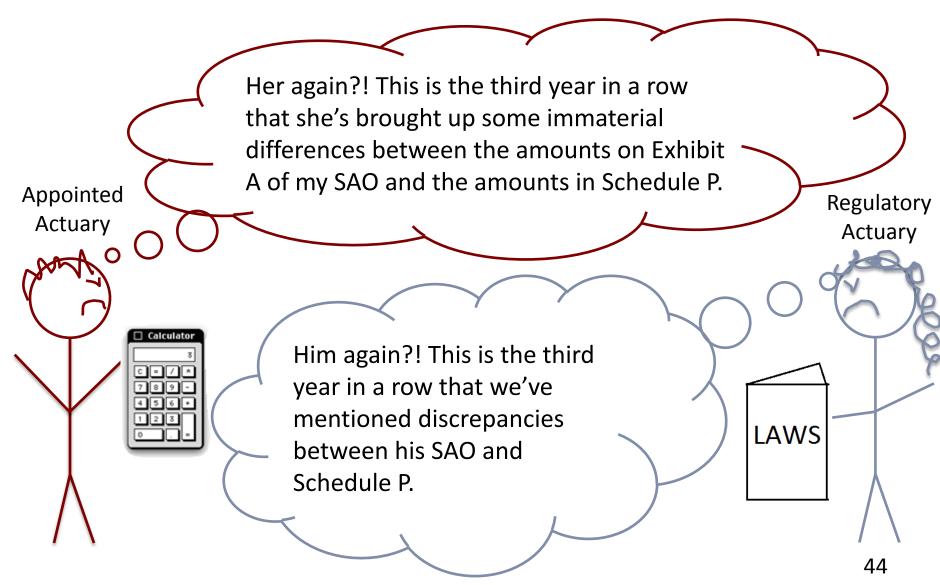
- = Gross of subrogation IBNR reserves from Exhibit III, Sheet 4, Col. 5
- Subrogation IBNR reserves from Exhibit III, Sheet 10, Col. 3
- + IBNR reserves for discontinued segment from Exhibit V, Sheet 1, Col. 7

Common issue	Possible fixes
 Incomplete or difficult-to-follow Schedule P reconciliations, e.g., No reconciliation of gross data No reconciliation of earned premium Lack of clear connection between the "actuarial data" in the analysis and the "actuarial data" in the reconciliation exhibits Poorly-documented reconciliation performed by the company and inserted into the report with little explanatory information and no footnotes 	 Reconcile all data material to the opinion and analysis, including gross amounts, earned premium, and claim counts, as warranted Show the mapping between the data used in the analysis and the data labeled as "actuarial data" in the reconciliation exhibits If the company performs the reconciliation, ensure that the exhibits are clear to a third party reader of the report

"In the actuarial report, the actuary should state the actuarial findings, and identify the methods, procedures, assumptions, and data used by the actuary with sufficient clarity that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work as presented in the actuarial report."

ASOP No. 41, Section 3.2

Common issue	Possible fixes
Attribution of an unusual IRIS #11 or #12 ratio to "reserve strengthening" or "low surplus," with no additional information	Provide information about the segments and accident years experiencing adverse development, possible causes, mitigation strategies, etc. The AOS and report (confidential documents) may include more information than the SAO (public document).
Incorrect dates, e.g., a signature date in February 2016 for a 2016 SAO	Be vigilant when using last year's SAO as a template for this year's
Information for a different company in the text of the SAO	Be vigilant when using the SAO you prepared for a different company as a template

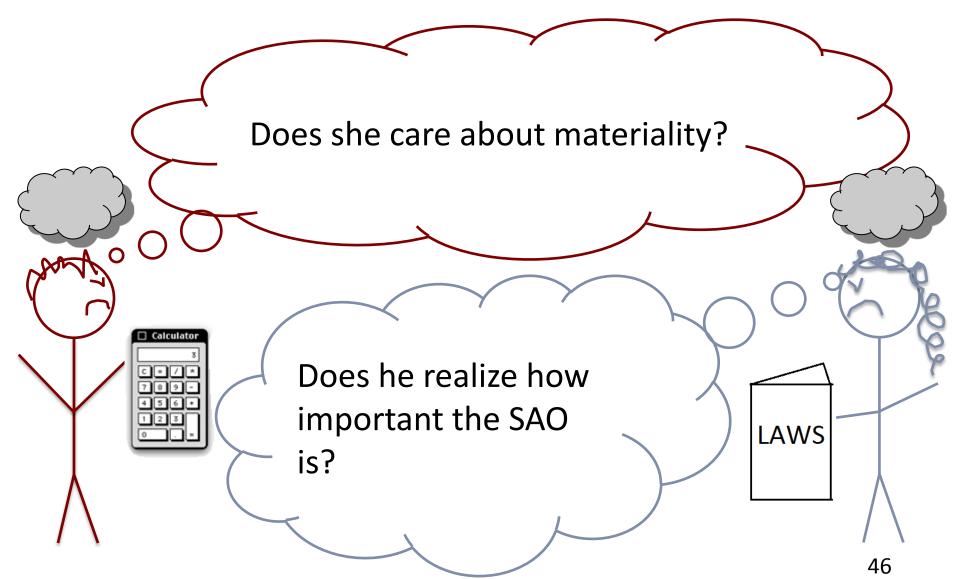


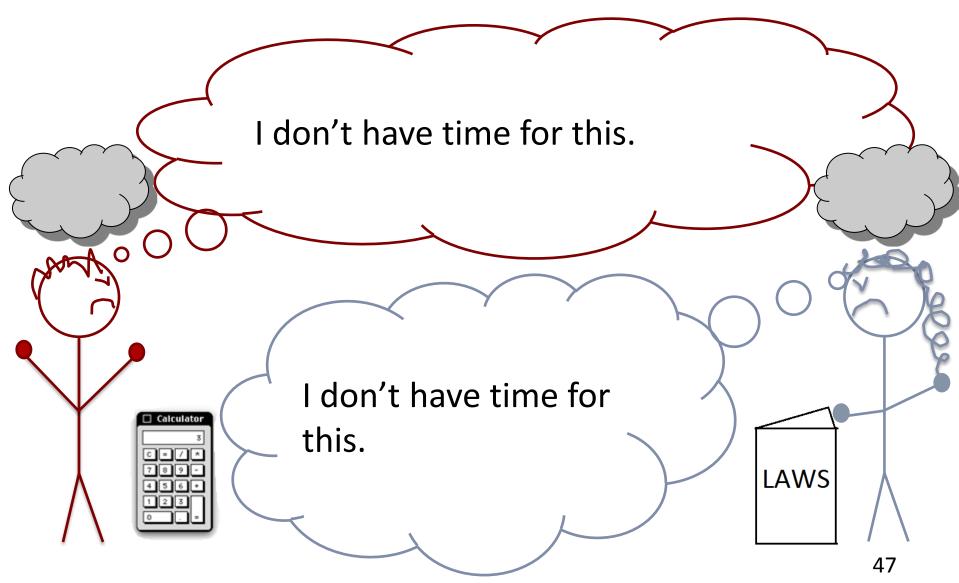
I'm a highly-respected actuary, my analysis is always great, and the company has had favorable reserve development for years. What's the big deal? Why's she bugging me again on petty things?



His analyses are usually great.
But we don't review the report
unless it's an exam year or
there's an issue. If he doesn't
take time to get the numbers in
the SAO correct, is he taking
time to get his analysis right?







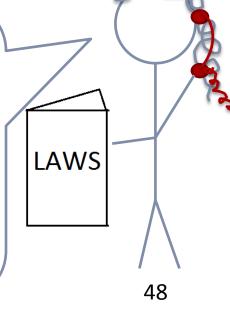
I'm confident in my analysis. My methodologies and parameters are appropriate. The company has experienced favorable reserve development for the past five years. It seems immaterial to worry about a few minor discrepancies between the SAO and Schedule P. I hope you're giving me enough credit for the work that I do.

Appointed Actuary

Regulatory Actuary



We appreciate the quality and depth of your analysis, and documented such in the department's last examination of the company. We don't always request the report, but we have a regulatory responsibility to review the SAO and AOS every year. When numbers are incorrect in the SAO, we worry that the appropriate level of detail was not given to this document – and, perhaps, to the analysis underlying the SAO.



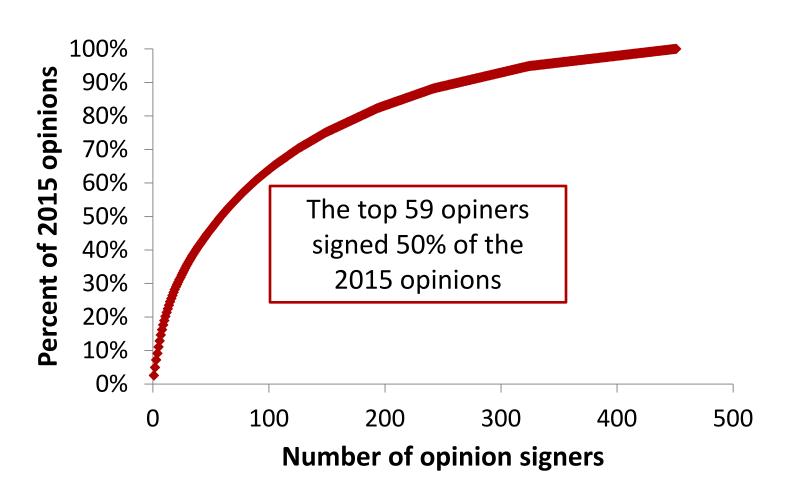
- What's the most challenging part of preparing the SAO, AOS, and report?
- Does your organization have an established peer review or technical review process?
- Have you ever gotten questions or feedback from regulators that you thought were inappropriate or unwarranted?

How many sign opinions?

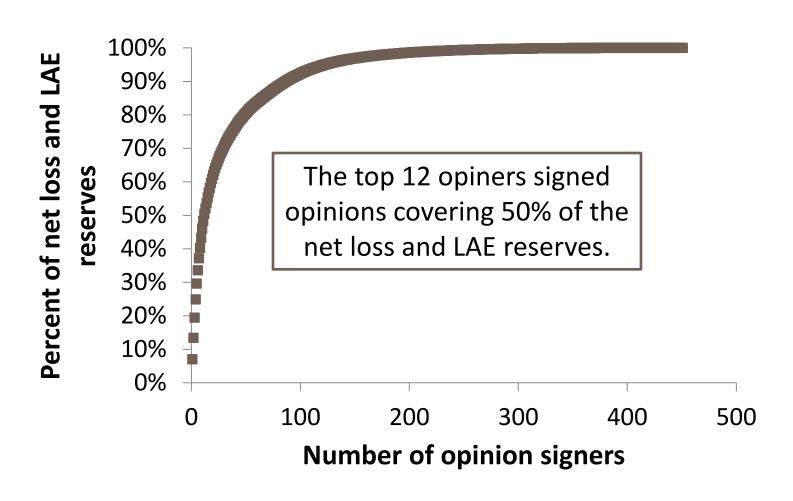
	# of opinions in NAIC	# of opinion
Year	database	signers
2016	2,454	469
2015	2,479	466
2014	2,556	451
2013	2,526	469

469 opinion signers in 2016 represents 6% of the CAS's 7,343 members (per CAS's 2016 annual report).

How are the 2,400+ opinions distributed amongst the 450+ signers?



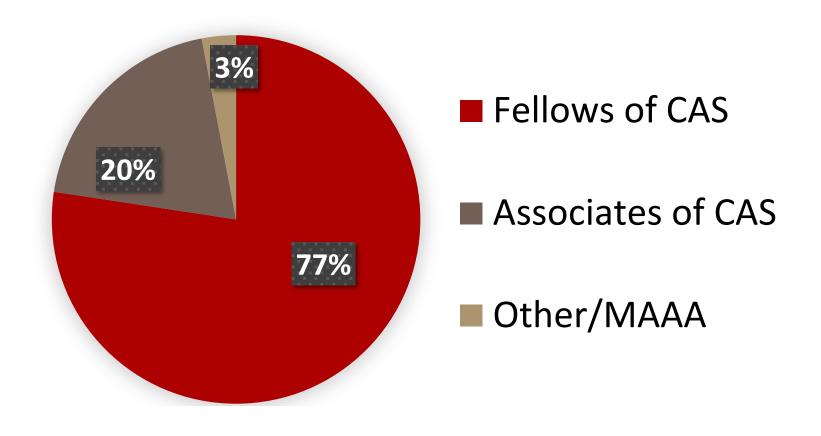
How are the \$619b net reserves distributed amongst the 450+ signers?



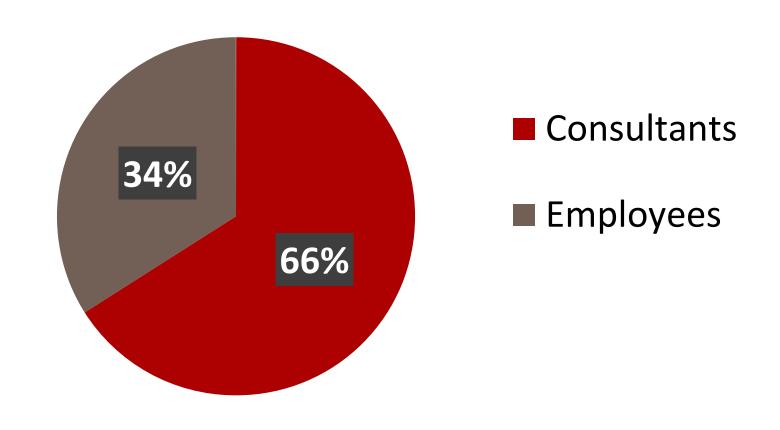
How many opinions did each opiner sign for year-end 2016?

	# opinions Issued	Percent of total
Top 20 opiners (20 to 62 opinions each)	708	29%
Top 59 opiners (10 or more opinions each)	1,231	50%
One-opinion-only		
opiners	142	6%
Total	2,454	

What are the credentials of the 2016 signers?



What percent of signers are consultants versus employees?



What percent of 2016 opinions were reasonable?

T of O in it and	# Opinions	Percent of
Type of Opinion	Issued	Total
Reasonable	2,446	99.7%
Excessive	4	
Deficient	1	
Qualified	2	
No Opinion	1	
Total	2,454	

What percent of 2016 opinions were reasonable?

Type of Opinion	# Opinions Issued	Percent of Total
Reasonable	2,446	99.7%
Excessive	4	
Deficient	1	
Qualified	2	
No Opinion	1	
Total	2,454	

What explains the "qualified" and "no opinion" SAOs in 2016?

- Qualified opinion no. 1: Sufficient gross loss and LAE data is not available for a block of business assumed by an insurer the Company bought; reserves are reasonable except for this component
- Qualified opinion no. 2: Financial guaranty insurer; actuary excluded statutorily-mandated contingency reserve (which is significant in comparison to net loss and LAE reserve) and certain other reserves for "situations near default" from scope; reserves are reasonable except for these components
- No opinion: Losses cannot be assigned to accident year, so actuary cannot perform independent analysis

Were there any "qualified" or "no opinion" SAOs in 2015?

- The same three companies had qualified or "no opinion" SAOs in 2015.
- There was one additional qualified SAO in 2015: The appointed actuary was unable to determine the reasonableness of the extraordinary anticipated subrogation the insurer was booking for three claims; reserves excluding the subrogation amount were deemed reasonable.

What percent of opinions have an RMAD?

RMAD	2010	2011	2012	2013	2014	2015	2016
Yes	28%	29%	28%	27%	27%	26%	25%
No	69%	68%	69%	70%	68%	69%	69%
N/A	3%	4%	3%	3%	5%	5%	6%

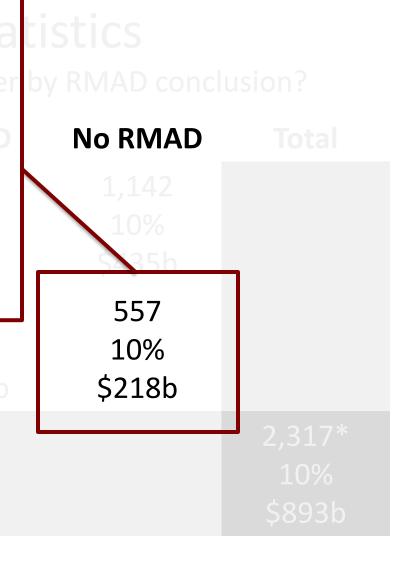
Does materiality standard differ by RMAD conclusion?

		RMAD	No RMAD	Total
Key:	1	418	1,142	1,560
Number of opinions	Consultant	13%	10%	10%
Surplus-weighted		\$49b	\$435b	\$484b
average materiality standard as % of		200	557	757
surplus	Employee	10%	10%	10%
		\$191b	\$218b	\$409b
Surplus		618	1,699	2,317*
	Total	11%	10%	10%
		\$240b	\$653b	\$893b

^{*}Total doesn't equal 2,454 because N/A RMADs are excluded

- There were 557 "no RMAD" opinions signed by employee appointed actuaries.
- The weighted average materiality
 standard was 10% of surplus for these
 557 companies.
- These 557 companies had a total of \$218 billion in surplus at 12/31/16.

Employee



Does materiality standard differ by RMAD conclusion?

		RMAD	No RMAD	Total
Key:	1	418	1,142	1,560
Number of opinions	Consultant	13%	10%	10%
Surplus-weighted		\$49b	\$435b	\$484b
average materiality standard as % of		200	557	757
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	Total	11%	10%	10%
		\$240b	\$653b	\$893b

^{*}Total doesn't equal 2,454 because N/A RMADs are excluded

- What other statistics would you find interesting?
- Why are excessive, inadequate, qualified, and "no opinion" opinions so rare?
- How have you explained the RMAD disclosure to management?
- Is it possible to sign too many opinions?

Recent changes to *Annual*Statement Instructions

Recent *Instructions* changes 2014-2015

- 2014 *Instructions*: Several changes
 - Intercompany pooling
 - Company-specific risk factors
 - Reviewing the prior appointed actuary's work
- 2015 *Instructions*: No significant changes

Recent *Instructions* changes

- 2016 Instructions: Several minor revisions
 - Change in appointed actuary
 - Manner of presentation to the board
 - Definitions of "board of directors" and "appointed actuary"
 - Title of data provider
 - Making use of the work of a non-actuary
 - Exhibit showing change in appointed actuary's estimates
 - Instructions when SAO or AOS found to be in error
 - Data and signature on SAO and report
 - Description of AOS reconciliation issues

Recent *Instructions* changes

- 2017 *Instructions*: No significant changes
- Regulatory Guidance is being refreshed for 2017, with a goal of removing unnecessary or duplicative information, keeping the document current and useful, and improving readability

Recent Instructions changes

- What parts of the *Instructions* are hard to understand?
- What requirements should be removed?
- Is there enough guidance available:
 - For appointed actuaries on preparing the documents?
 - For company management on interpreting the documents?