

Casualty Actuarial Society: Casualty Loss Reserve Seminar

Company Specific Risk Factors for SAO Users

Commitment Beyond Numbers



Erich A. Brandt, FCAS, MAAA
Gregory W. Fears Jr., ACAS, MAAA, ARM
Julie Lederer, FCAS, MAAA
Matthew K. Moran, FCAS, MAAA
September 7, 2018

Outline of Presentation

- Antitrust notice
- Background on:
 - Erich Brandt
 - Greg Fears
 - Julie Lederer
 - Matt Moran
- Risk of Material Adverse Deviation (RMAD) Background
- Regulators perspective on the company specific risk factors
- Matt's topics
- Risk of Material Adverse Deviation Research

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.
- Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding – expressed or implied – that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.
- 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.

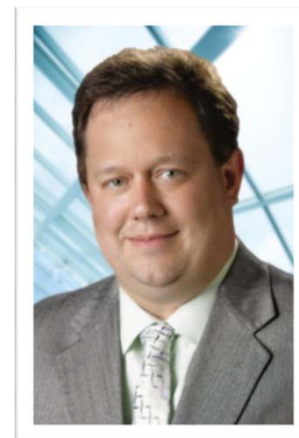


About the Presenters

- Fellow of the Casualty Actuarial Society
- Graduate of Illinois State University
- 21 years of experience, primarily in commercial lines
- Reserving studies for:
 - Insurance companies (SAO and financial exams)
 - Captive insurance companies
 - Self-insured entities
- Extensive experience reviewing industry financial statement data and associated trends
- Experience in workers' compensation, liability lines, medical professional liability and commercial automobile

Erich A. Brandt

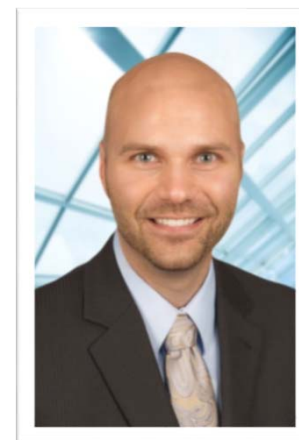
Senior Consulting Actuary
Pinnacle Actuarial Resources



About the Presenters

- Associate of the Casualty Actuarial Society
- B.A., Mathematics – Carthage College 2000
- Associate in Risk Management (ARM)
- 17 years of experience, primarily in commercial lines
- Reserving studies for:
 - Insurance companies (SAO and financial exams)
 - Captive insurance companies; Self-insured entities
- Funding recommendations for emerging coverages
- Experience reviewing industry financial statement data and associated trends
- Risk margin modeling
- Funding & reserving for public entities

Gregory W. Fears Jr.
Consulting Actuary
Pinnacle Actuarial Resources

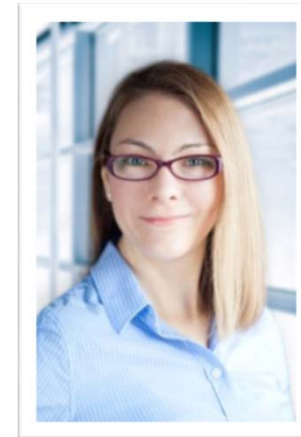


About the Presenters

- Fellow of the Casualty Actuarial Society
- Member of the American Academy of Actuaries
- Chartered Property Casualty Underwriter
- MBA – University of Notre Dame
- BS, Mathematics – University of Notre Dame
- As a consultant, performed reserving studies and helped prepare SAOs
- As a regulator, assists with analysis and examination of Missouri-domiciled carriers
- Chair of NAIC Actuarial Opinion (C) Working Group

Julie Lederer

Property & Casualty Actuary
Missouri Department of
Insurance



About the Presenters

- Fellow of the Casualty Actuarial Society
- Member of the American Academy of Actuaries
- BA, Economics – Michigan State University
- 25+ years of pricing and reserving experience, primarily in personal lines
- Appointed Actuary for Farm Bureau Insurance of Michigan
- Experience in personal auto, homeowners, workers' compensation, commercial automobile and extended warranty

Matt Moran

Chief Actuary, Director PC Actuarial
Farm Bureau Insurance of Michigan



RMAD: Sources for Guidance

- American Academy of Actuaries SAO Practice Note
- NAIC Property and Casualty SAO Instructions
- American Academy of Actuaries Discussion Paper prepared by the Task Force on Materiality
- Actuarial Literature
 - For example: Materiality and ASOP No. 36: Considerations for the Practicing Actuary – CAS Committee on Valuation, Finance and Investments

Relevant Comments Disclosures

- Materiality standard
- Major risk factors or considerations underlying the significant risks and uncertainties
- Risk of material adverse deviation
- Anticipated salvage and subrogation
- Discounting
- Voluntary and/or involuntary underwriting pools and associations
- A&E liabilities
- Retroactive, financial & uncollectable reinsurance
- IRIS ratios
- Changes in methods and assumptions
- Extended reporting endorsements
- Long duration contracts

NAIC Statement of Actuarial Opinion (SAO)

- Risk of Material Adverse Deviation (RMAD)
 - Paragraph in the SAO which identifies:
 - Significant risks or uncertainties that could result in a material adverse deviation (in the actuary's opinion)
 - Threshold for the RMAD – amount in \$US
 - Standard for the threshold
 - Major risk factors or considerations underlying the significant risks and uncertainties

RMAD Location and Requirements

- Statement of Actuarial Opinion (SAO)
 - Explanatory paragraph to describe major risk factors
 - 2013: “If such risk exists”, include
 - 2014: include regardless of yes/no disclosure
 - 2015 - 2017: no significant changes
 - Do not include:
 - General, broad statements about risks and uncertainties due to economic changes, judicial decisions, regulatory actions, political or social forces
 - Exhaustive list of all potential sources of risks and uncertainties
 - Explicitly state whether or not the actuary reasonably believes there are significant risks and uncertainties that could result in material adverse deviation

*Source – 2013 - 2017 Practice Note on P&C SAOs by American Academy of Actuaries COPLFR

RMAD Location and 2017 Requirements (cont.)

- Statement of Actuarial Opinion (SAO)
 - Exhibit B: Disclosures
 - Risk of Material Adverse Deviation
 - #5: Materiality standard in \$US
 - #6: Are there significant risks that could result in material adverse deviation? Yes / No / NA

*Source – 2016 Practice Note on P&C SAOs by American Academy of Actuaries COPLFR

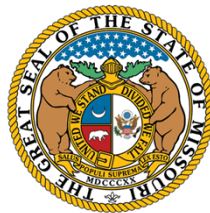
Discussion Question #1

- What information do you collect in regards to selecting a company's materiality threshold?
- Should this be different for groups with several affiliated companies?

Company-specific risk factors for SAO users

September 7, 2018

Julie Lederer



DIFP

Department of Insurance,
Financial Institutions &
Professional Registration

Three parts of the RMAD disclosure

1A. Describe company-specific risk factors.

“The Appointed Actuary should include an explanatory paragraph to describe the major factors, combination of factors or particular conditions underlying the risks and uncertainties the Appointed Actuary considers relevant” (2017 NAIC Instructions).

1B. Select materiality standard.

“An item or a combination of related items is material if its omission or misstatement could influence a decision of an intended user. When evaluating materiality, the actuary should consider the purposes of the actuary’s work and how the actuary anticipates it will be used by intended users” (ASOP 1).

2. Make RMAD conclusion.

“The Appointed Actuary should explicitly state whether or not he or she reasonably believes that there are significant risks and uncertainties that could result in material adverse deviation” (2017 NAIC Instructions).

My objectives

- Provide assurance that regulators read the risk factor disclosures in the SAO and find them valuable.
- Show how the disclosures are used in regulatory analysis and exams.
- Understand the challenges appointed actuaries face in writing the disclosures.
- Give some advice.

What we consider in our review

1. Are there new risks in this year's SAO?
2. Have any risks been removed?

What we consider in our review

3. How can we use other sources to inform our view of the risks mentioned in the SAO?

Actuarial report and AOS

Schedule P

Notes to Financial Statements

MD&A

ORSA summary report

10-K

Financial exams and analysis

Rating agency reports

What we consider in our review

3. How can we use other sources to inform our view of the risks mentioned in the SAO?

Actuarial report and AOS

Appointed actuary

Schedule P

Notes to Financial Statements

MD&A

Company

ORSA summary report

10-K

Financial exams and analysis

Regulators

Rating agency reports

Rating agencies

What we consider in our review

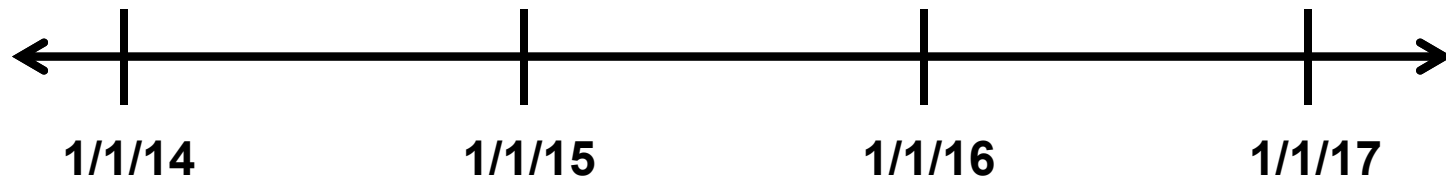
4. How can we use the risk factor disclosures?

Financial analyst <ul style="list-style-type: none">– Prepare or edit the Insurer Profile Summary– Pose follow-up questions to company management	Financial examiner <ul style="list-style-type: none">– Write C-level interview questions– Build the risk matrix– Prioritize exam work
Regulatory actuary <ul style="list-style-type: none">– Review or construct diagnostics– Recommend areas of focus for exam team and examination actuary	Examination actuary <ul style="list-style-type: none">– Write appointed actuary interview questions– Choose areas of focus when reviewing actuarial report

Using the risk factor disclosures



P&C carrier undergoing a financial exam covering the period from 1/1/14 to 1/1/17



Using the risk factor disclosures

In 2016 SAO: “I have identified the major company-specific risk factor as an initiative in the claims department, introduced in the second quarter of 2015, to close claims sooner. The claims initiative has increased the claims settlement rate and reduces the predictive power of paid loss development factors selected using historical data.”

Using the risk factor disclosures

More details in appointed actuary's year-end 2016 report on:

- Annual December meetings with management during which claims department initiatives are discussed
- Review of claim closure diagnostics
- Addition of paid Berquist-Sherman methodology to year-end 2016 analysis

Using the risk factor disclosures

Financial analyst edited Insurer Profile Summary.

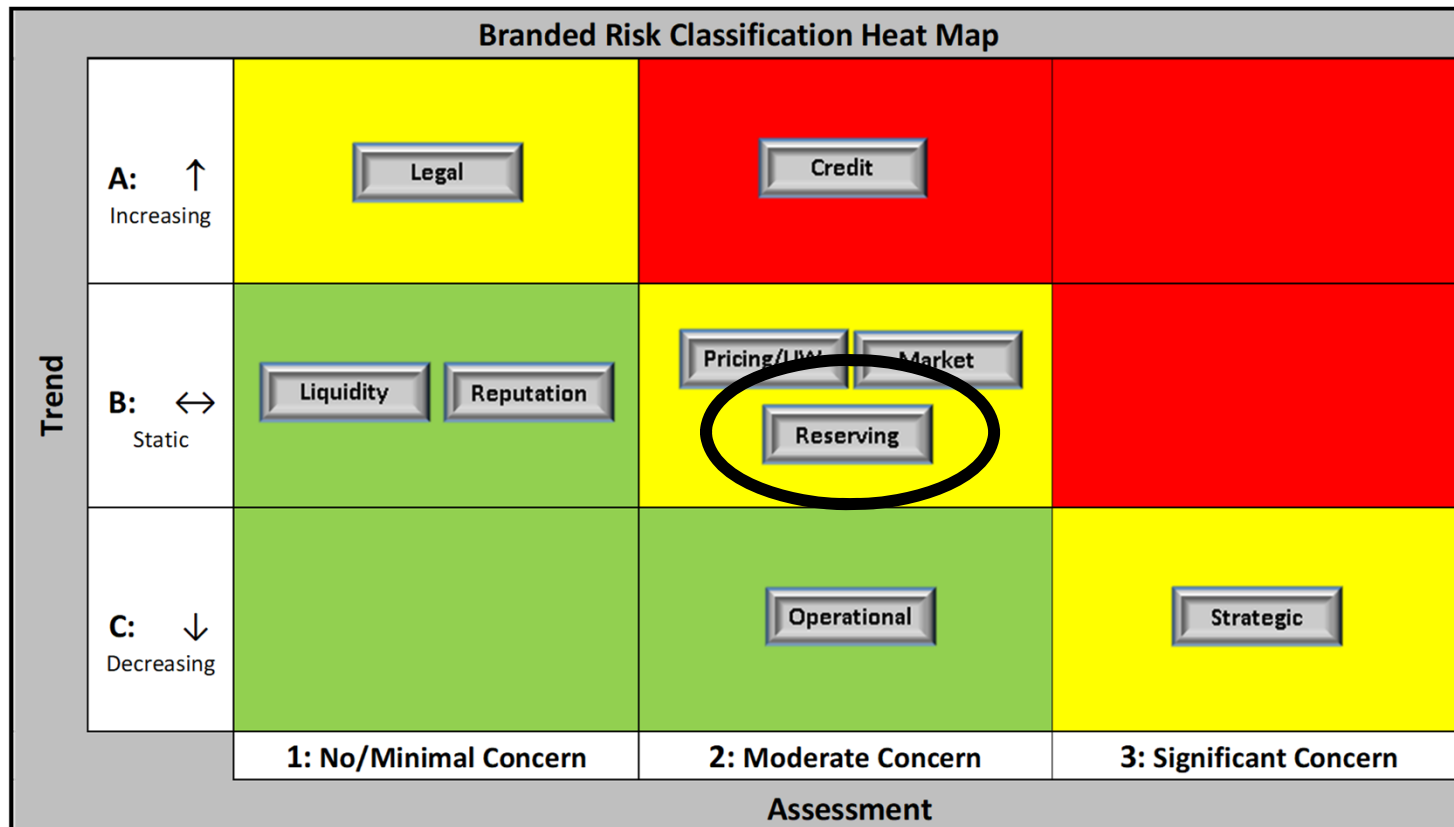
Reserving:

- The appointed actuary cited as a risk factor in his SAO a recently-introduced effort in the claims department to close claims sooner. The appointed actuary responded to this change in his 2016 analysis by incorporating an additional projection methodology.
- 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 about 5% above the appointed actuary's central estimate in each of these years.

No/Minimal Concern	Moderate Concern	Significant Concern	Trend
	<u>Claims department change which reduces the value of historical data; risk is mitigated by the incorporation of an additional reserving technique</u>		↑
- Company's reserving procedures - Appointed actuary's analysis			↔
Overall Reserving Assessment: Moderate		Overall Trend:	↔

Using the risk factor disclosures

Financial analyst edited Insurer Profile Summary.



Using the risk factor disclosures

Examiner-in-charge described mitigation efforts on the reserves and claims handling risk matrix.

	Phase Two				Phase Three			Phase Four
	2a	2d	2e	2f	3a	3b	3c	4a
	Risk Identification	Inherent Risk Assessment			Risk Mitigation Strategy/Control Assessment			Residual Risk Assessment
Identified Risk Number	Identified Risks	Likelihood	Impact	Overall Inherent Risk Assessment	Risk Mitigation Strategy	Evidence & Document Testing Controls	Overall Risk Mitigation Strategy Assessment	Calculated Residual Risk
#1	Changes in the insurer's underwriting, case reserving, or claims handling processes are not appropriately considered within the appointed actuary's reserving assumptions and methodologies.	Moderate-High	Severe	High	The appointed actuary reviews claims diagnostics, holds an annual meeting with management in December to discuss recent changes in underwriting and claims processes and adjusts his choice of reserving methods accordingly.	-Review notes from actuary's meeting with management. -Review the discussion of claims handling changes and their effect on the choice of reserving methodologies in reserve report.	Moderate Risk Controls	Moderate or High

Using the risk factor disclosures

Examiner used SAO disclosures to write interview questions.

Notes from interview of chief claims officer June 5, 2017, 2:00pm CDT

1. The statement of actuarial opinion mentions a recent initiative to close claims sooner. How are you monitoring progress?

-Claims department analyst prepares monthly report that summarizes claims closed during the month (lag from report date to settlement date, ultimate paid value, etc.). A comparison of the reports suggests that the average report-to-settlement time for claims less than \$20,000 decreased from 4 months to 3 months in 2016...

Using the risk factor disclosures

I, the regulatory actuary, used the disclosures to make a suggestion in my pre-exam memo.

III. Exam Recommendations

1. I recommend that the examination actuary review the adjustments the appointed actuary made in his analysis to respond to recent claims handling changes.
2. I recommend that the exam team...

Using the risk factor disclosures

Examination actuary described his review of the added methodology in his report.

V. Review of Methodology

In response to an increase in the rate of claims settlement, the appointed actuary reduced the reliance on the paid loss development method and incorporated a paid Berquist-Sherman technique into his analysis. We reviewed the application of this technique and the selected parameters and found them to be reasonable. For all accident years in total, the ultimate loss based on the Berquist-Sherman method is 6% lower than the ultimate loss based on the paid loss development method. The effect is concentrated in the most recent two accident years...

What do regulators find useful?

Question I posed to other regulators on a July 2018 call of the NAIC's AOWG: *What type of company-specific risk factor disclosures have you found particularly valuable in your SAO reviews?*

Some responses:

- Changes in case reserving methodology
- Changes in claims handling procedures
- Retirements or turnover in claims staff
- Differences between the company's risk profile and that of the average industry player (e.g., workers' compensation writer that focuses on high-risk industries).
- Recent changes in exposure (e.g., auto writer changing its target market from preferred to non-standard).

Regulators are interested in risks that increase the uncertainty in the appointed actuary's estimates and therefore could cause material adverse deviation in the carried reserves.

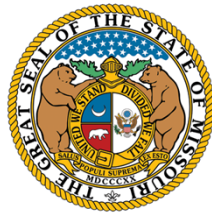
Discussion question #2

Opinion writers, what challenges do you face in writing the risk factor section of your SAOs?

- Knowing which risk factors are valuable to the users of the SAO?
- Understanding how the SAO will be used?
- Deciding how much information to include?
- Deciding what to put in the public SAO versus the confidential AOS and report?
- Determining a threshold for adding or removing risks?
- Obtaining information on risk factors from management?

Advice for appointed actuaries

- Keep up the good work. Most SAOs contain an appropriate discussion of company-specific risk factors.
- If there aren't any company-specific risk factors, disclose this in the SAO.
- Include risk factors in the SAO even if there are mitigating effects that blunt the impact (e.g., the addition of a method that responds to a claims handling change).
- Include risk factors in the SAO even if the RMAD conclusion is negative, pursuant to an *Instructions* change that took effect at year-end 2014.
- Consider providing additional information in the confidential report and Actuarial Opinion Summary.



DIFP

Department of Insurance,
Financial Institutions &
Professional Registration

Appendix



From 2017 SAO *Instructions*

6. The Appointed Actuary must provide RELEVANT COMMENT paragraphs to address the following topics of regulatory importance.

A. Company-Specific Risk Factors

The Appointed Actuary should include an explanatory paragraph to describe the major factors, combination of factors or particular conditions underlying the risks and uncertainties the Appointed Actuary considers relevant. The explanatory paragraph should not include general, broad statements about risks and uncertainties due to economic changes, judicial decisions, regulatory actions, political or social forces, etc., nor is the Appointed Actuary required to include an exhaustive list of all potential sources of risks and uncertainties.

From 2017 SAO *Instructions*

6. The Appointed Actuary must provide RELEVANT COMMENT paragraphs to address the following topics of regulatory importance.

- B. Risk of Material Adverse Deviation

The Appointed Actuary must provide specific RELEVANT COMMENT paragraphs to address the risk of material adverse deviation. The Appointed Actuary must identify the materiality standard and the basis for establishing this standard. The materiality standard must also be disclosed in U.S. dollars in Exhibit B: Disclosures. The Appointed Actuary should explicitly state whether or not he or she reasonably believes that there are significant risks and uncertainties that could result in material adverse deviation. This determination is also to be disclosed in Exhibit B.

From ASOP No. 36, Section 4.2

e. If the actuary reasonably believes that there are significant risks and uncertainties that could result in material adverse deviation, an explanatory paragraph should be included in the statement of actuarial opinion. (See sections 3.6 and 3.9 for guidance on evaluating materiality and adverse deviation.) The explanatory paragraph should contain the amount of adverse deviation that the actuary judges to be material with respect to the statement of actuarial opinion, **and a description of the major factors or particular conditions underlying risks and uncertainties that the actuary believes could result in material adverse deviation.** The actuary is not required to include in the explanatory paragraph general, broad statements about risks and uncertainties due to economic changes, judicial decisions, regulatory actions, political or social forces, etc., nor is the actuary required to include an exhaustive list of all potential sources of risks and uncertainties.

Note that ASOP No. 36 only requires a discussion of risk factors if the actuary believes there's a risk of material adverse deviation. Since year-end 2014, the SAO Instructions have required a discussion of risk factors regardless of the RMAD conclusion.

From 2017 *Regulatory Guidance*

H. Risk of Material Adverse Deviation

The Relevant Comments paragraphs on the Risk of Material Adverse Deviation (MAD or RMAD) are particularly useful to regulators. The first two RMAD comments below respond to questions that Appointed Actuaries have posed to regulators. The second two stem from regulators' reviews of Actuarial Opinions.

1. No company-specific risk factors – The Appointed Actuary is asked to discuss company-specific risk factors regardless of the RMAD conclusion. If the Appointed Actuary does not believe that there are any company-specific risk factors, the Appointed Actuary should state that.
2. Mitigating factors – Regulators generally expect Appointed Actuaries to comment on significant company specific risk factors that exist prior to the company's application of controls or use of mitigation techniques. The company's risk management behaviors may, however, affect the Appointed Actuary's conclusion on whether there is a significant risk of MAD.

Glossary

- **Actuarial Opinion (C) Working Group (AOWG):** An NAIC working group of the Casualty Actuarial and Statistical (C) Task Force which edits the SAO section of the Annual Statement Instructions
- **Branded risk classifications:** Risk categories promulgated by the NAIC and used by DOI financial analysts. There are nine branded risks: credit, legal, liquidity, market, operational, pricing/underwriting, reputation, reserving, and strategic.
- **COPLFR:** The Committee on Property and Liability Financial Reporting, a committee of the American Academy of Actuaries that prepares the annual practice note on P&C SAOs
- **DOI:** Department of Insurance
- **Insurer Profile Summary:** Regulatory document maintained by the DOI's financial analyst for the legal entity which describes the exposure of the entity to the various branded risks

Glossary

- **National Association of Insurance Commissioners (NAIC).** The U.S. standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia and five U.S. territories. Through the NAIC, state insurance regulators establish standards and best practices, conduct peer review, and coordinate their regulatory oversight.
- **Regulatory Guidance document:** A document prepared by the NAIC Actuarial Opinion (C) Working Group which supplements the NAIC Annual Statement Instructions – Property/Casualty (Instructions) in an effort to provide clarity and timely guidance to companies and appointed actuaries regarding regulatory expectations on the actuarial opinion
- **Risk assessment matrix:** Financial examination tool used to document the risks associated with the insurer’s key activities and summarize the conclusions from the examination’s testing procedures

Glossary

- **RMAD:** Risk of Material Adverse Deviation. The appointed actuary is asked to state in the SAO whether or not he or she reasonably believes that there are significant risks and uncertainties that could result in material adverse deviation.
- **SAO:** Statement of Actuarial Opinion, a supplement to the annual statement prepared by a qualified actuary which sets forth his or her opinion related to the reserves within the scope of the SAO.
- **SAO Instructions:** The section of the NAIC's *Annual Statement Instructions – Property/Casualty* that describes the requirements of the actuarial opinion

Board Presentations

- Smaller insurance companies often have a different Board composition than larger insurance companies. This can be especially true for companies that were founded to address the needs of a specific market segment (e.g. farm bureaus, medical malpractice carriers, etc.)
- Solvency for these Boards can be of higher importance (and more intuitive) than reserve ratios or RBC ratios. This can be a consideration in selecting an RMAD threshold that is a % of surplus. Other presentations (e.g. projections of premium to surplus ratios) often reinforce % of surplus as a preferred metric.

Board Presentations - continued

- Company specific risk factors (e.g. development on long-tail liability claims) can sometimes require more discussion with smaller boards than with large company boards that are made up of insurance professionals.

Discussion Question #3

- Would the RMAD language in the SAO vary depending on the make-up of the board of directors? Example: insurance professionals vs. other types of professionals
- What kind of language would you use to caveat the recoverables?

Reserve Ranges and RMAD

- Some feel that a range **excluding** process risk is the most appropriate to set upper and lower bounds for an actuarial central estimate for the SAO.
- Company management, regulators, etc. can still desire the information that ranges **including** process risk provide.
- One possibility is to create additional ranges **including** process risk and compare the amount from a selected percentile to the actuarial central estimate. If the difference in those amounts is greater than the RMAD threshold, then disclose adverse reserve development as a risk.

Connection to Financial Exams and ERM

- Discussion of company specific factors for RMAD can lead into discussion of ongoing risk factors from an ERM perspective.
- This can be especially true in smaller companies where the appointed actuary also has involvement in the company ERM program.
- The solvency emphasis of financial exams can often drive the discussion to reserve ranges that include process risk.

Connection to Financial Exams and ERM

- It can be helpful to keep the conversations on the two topics separate whenever possible. For example, concentration of property exposures can be an important consideration within an ERM framework. However, the short-tailed nature of property exposures typically results in a smaller contribution to the company RMAD.

Specific RMAD Paragraph - Risk Factors

- “rapid growth in ... long haul trucking ... is highly leveraged, and does not have a stable history of experience,”
- “...uncertainty in auto reserving indications resulting from changes in claim handling practices in recent years including the implementation of a new claims handling system...”
- “Risks to the Company include the low frequency and high severity nature of some of its exposures; changes in the mix of business...”

Specific RMAD Paragraph - Risk Factors

- “Rate level adequacy ... Case incurred variability”
- “Significant changes in subrogation philosophies and claims handling, including increases in claim settlement rates and increases in the strength of case reserves.”
- “The major factors contributing to this risk are exposure to asbestos and environmental liabilities, and to a lesser extent, exposure to other mass torts.”

Specific RMAD Paragraph - Risk Factors

- “...exposure to catastrophic weather events and having a concentration of exposure in few states...”
- “...plaintiffs’ expanding theories of liability, the risks inherent in major litigation, and inconsistent emerging legal doctrines.”
 - In relation to asbestos claims
- “...changes in case reserving practices and the recent increase in claim frequency.”

Specific RMAD Paragraph - Risk Factors

- “...unexpected changes in loss emergence patterns in Auto Liability and General Liability...”
 - “...experience in Auto has been driven by an increase in the frequency of large claims as well as a concentration of business in New York...”
 - “...one contributor to the changes for the large General Liability program is the significant growth in exposure ... which appears to have affected claims handling procedures at the TPA.”
 - Good example of risk factor combination
- “Loss development factors ... were based on industry triangles due to the lack of credibility of the Company’s historical experience.”
 - In relation to variability
- “...mold and construction defect/impaired building materials claims...”

MCCA Background

- The Michigan Catastrophic Claims Association (“MCCA”) is a non-profit unincorporated association of which every insurance company that sells automobile or motorcycle coverage in Michigan is required to be a member
- The MCCA was effective July 1, 1978 because insurance companies had difficulty obtaining reinsurance for Michigan’s automobile no-fault policies, which provide for unlimited lifetime medical benefits for people who are catastrophically injured in auto accidents.
- The current company retention level is \$555,000 per loss occurrence. The retention is increased each odd numbered year by 6% or the consumer price index, whichever is less.

MCCA Background - continued

- The MCCA is required to assess an amount each year that is sufficient to cover the lifetime claims of all persons catastrophically injured in that year and in addition, may adjust future assessments for excesses or deficiencies in prior assessments.
- The MCCA is currently in a deficit position

Discussion Question #4

- Does the current MCCA structure cause an RMAD?
 - Ability of the MCCA to assess the public - does this eliminate the risk?
 - Is there a likelihood that the MCCA could be eliminated and the exposure and assets distributed back to the primary insurers? Current state of MCCA is a deficit, so that would essentially result in the primary insurers each getting a share of that debt

Major Risk Factors – Disclosure

RMAD Major Risk Factors*	SAO Year					
	2012	2013	2014	2015	2016	2017
Claims Department Changes (handling, settlement or reserving)	5	5	6	4	7	3
Long tail Coverage / Line of Business	3	4	2	1	13	2
Uncertainty	1	2	7	5	1	6
Other Mass Tort exposure	-	2	5	5	3	2
Asbestos exposure	-	3	6	5	1	-
Asbestos & Environmental (A&E)	4	2	1	-	5	2
New Line of Business (lack of historical experience)	-	1	2	2	5	4
Rapid growth	1	4	-	3	3	3
Change in Economy	1	1	6	2	2	1
Construction defect exposure	2	2	3	2	2	1
Inflation	-	-	3	5	3	1
Workers Compensation Insurance	2	4	2	1	2	1
Lack of historical experience	-	3	1	1	4	1
Court/judicial decision recent or pending	-	1	-	3	2	3
Environmental exposure	2	2	3	-	-	1
Asbestos/A&E/Environmental Combination	6	7	10	5	6	3
Total Risk Factors Listed	41	53	70	57	67	50

*Top 30 Groups with highest 1 year adverse development - Sch P, Part 2

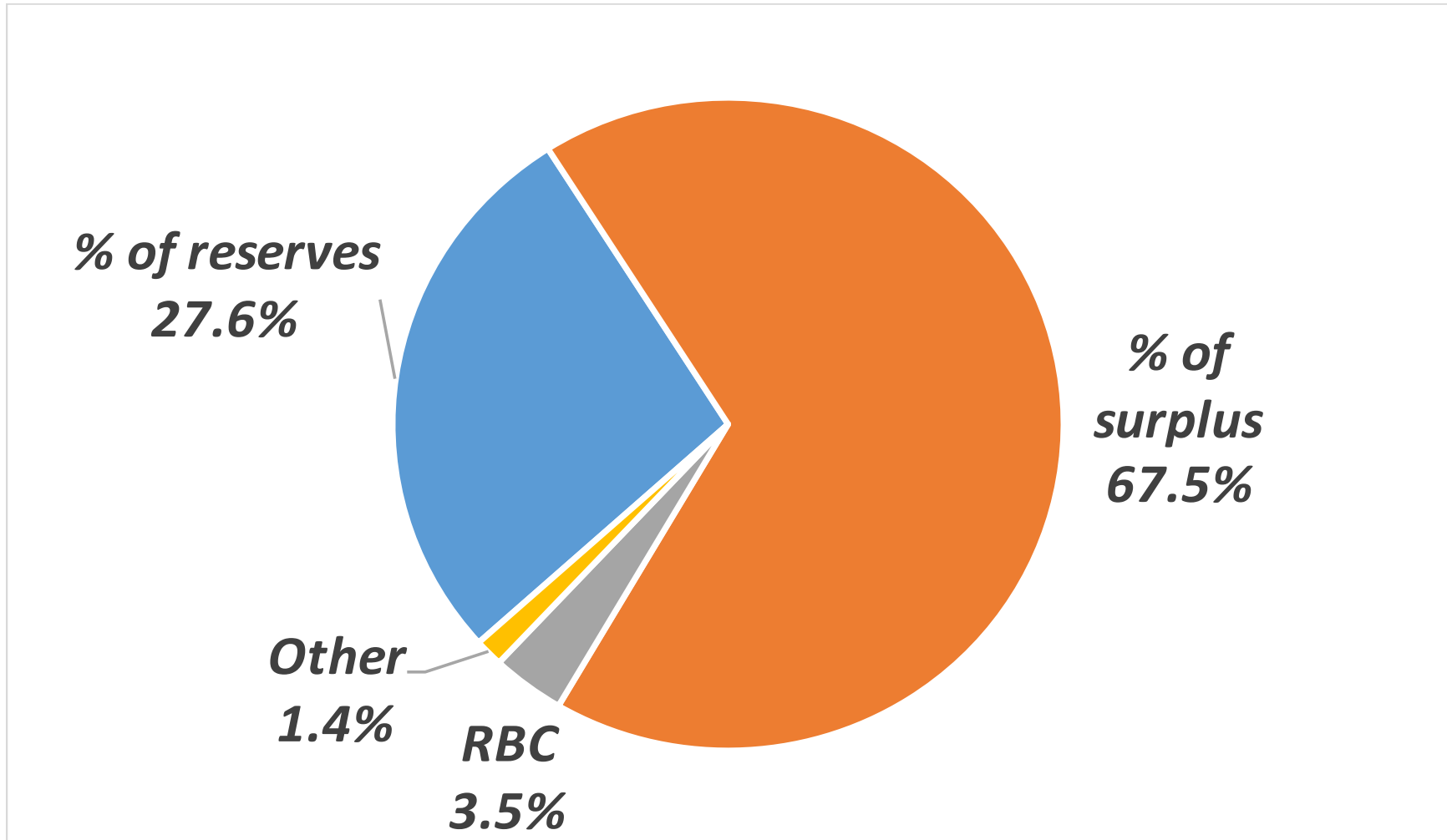
RMAD Disclosures Research

- How is actuarial profession reporting?
- Methodology
 - Review 2016 Statements of Actuarial Opinion (SAOs)
 - Target companies with \$20 million of earned premium (approx. 1,100 affiliated/unaffiliated companies)
- Initial focus on (objective) disclosures
 - #5: Materiality standard in \$US (and basis)
 - #6: Are there significant risks that could result in material adverse deviation?: Yes / No / NA
- From 2017
 - Actual reserve development (Schedule P – Part 2)
 - Comparison to materiality threshold (“breach”?)

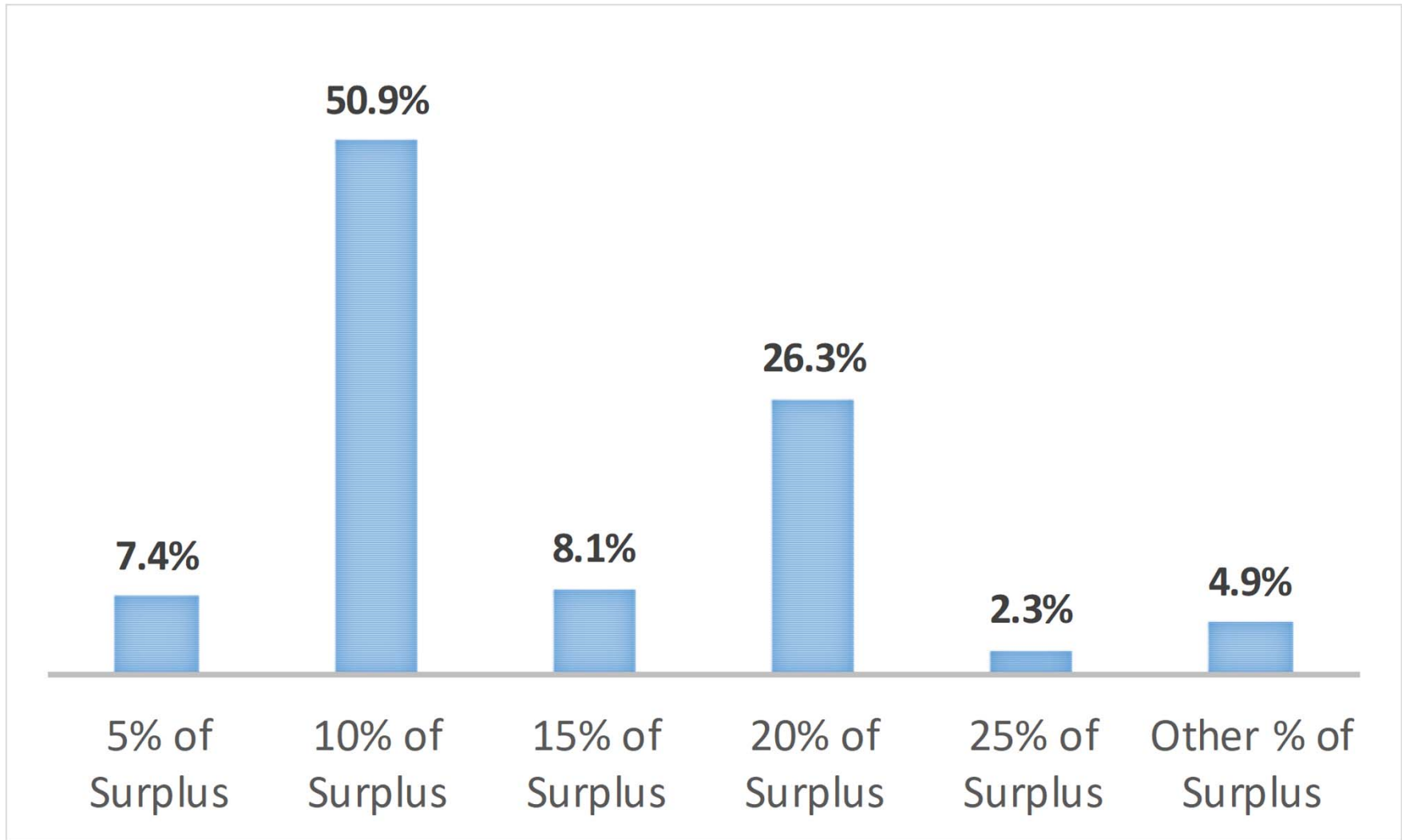
RMAD Paragraph Observations - Basis

- Several companies list multiple options for the RMAD before specifying why they chose a particular measure
 - Selecting the lowest and highest threshold were both observed as well as selections within their range of options
- Focus on selecting a particular measure in relation to risk-based capital adequacy levels
 - Some actuaries listed options for their RMAD threshold and chose the minimum so long as it was less than the reduction that would lead to Company Action Level RBC
- Several companies included purpose and intended use
 - Narrative included for the purpose of solvency monitoring or regulatory review/oversight
 - Referenced ASOP No. 36

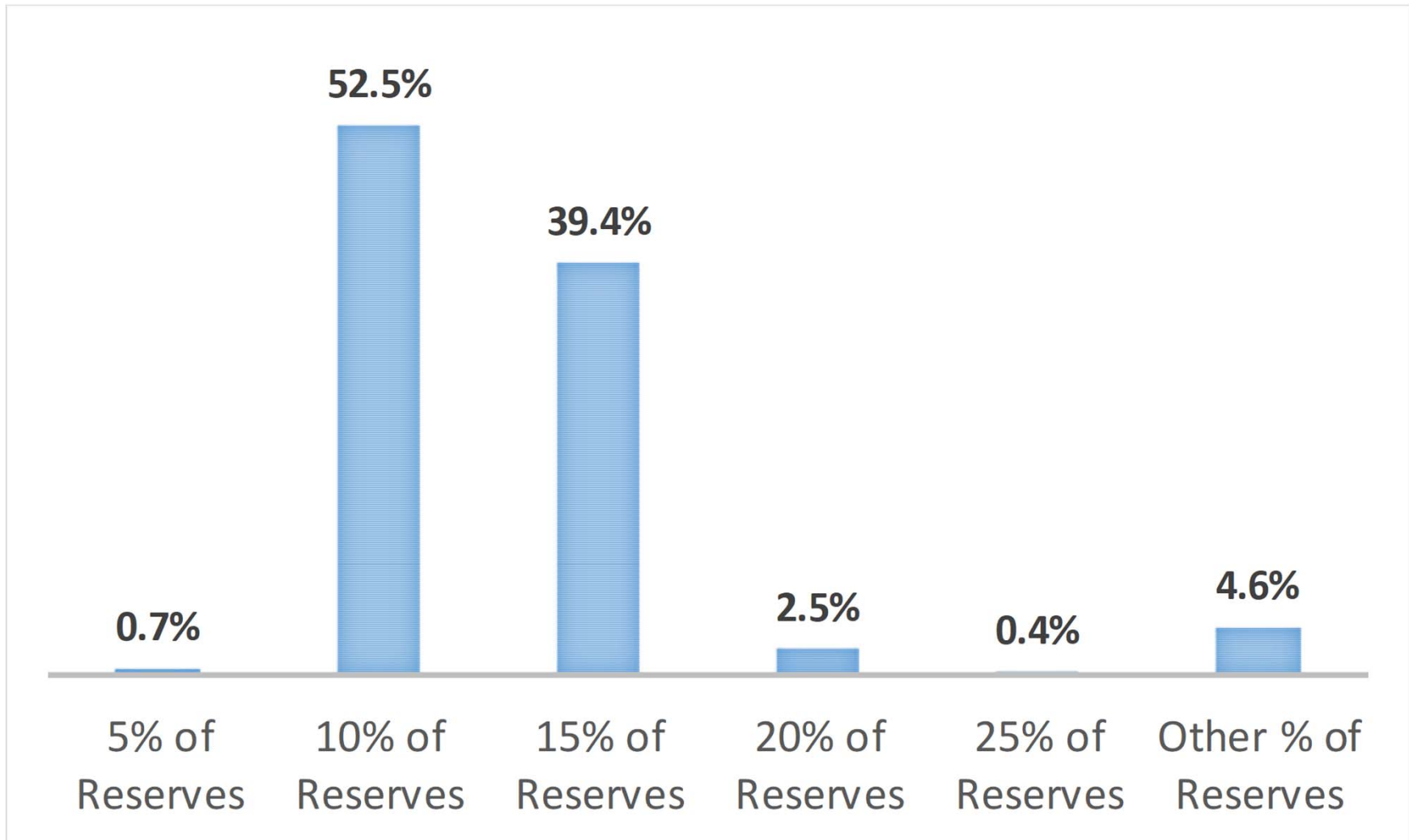
SAO Review: Basis for Threshold



Materiality Threshold: % of Surplus



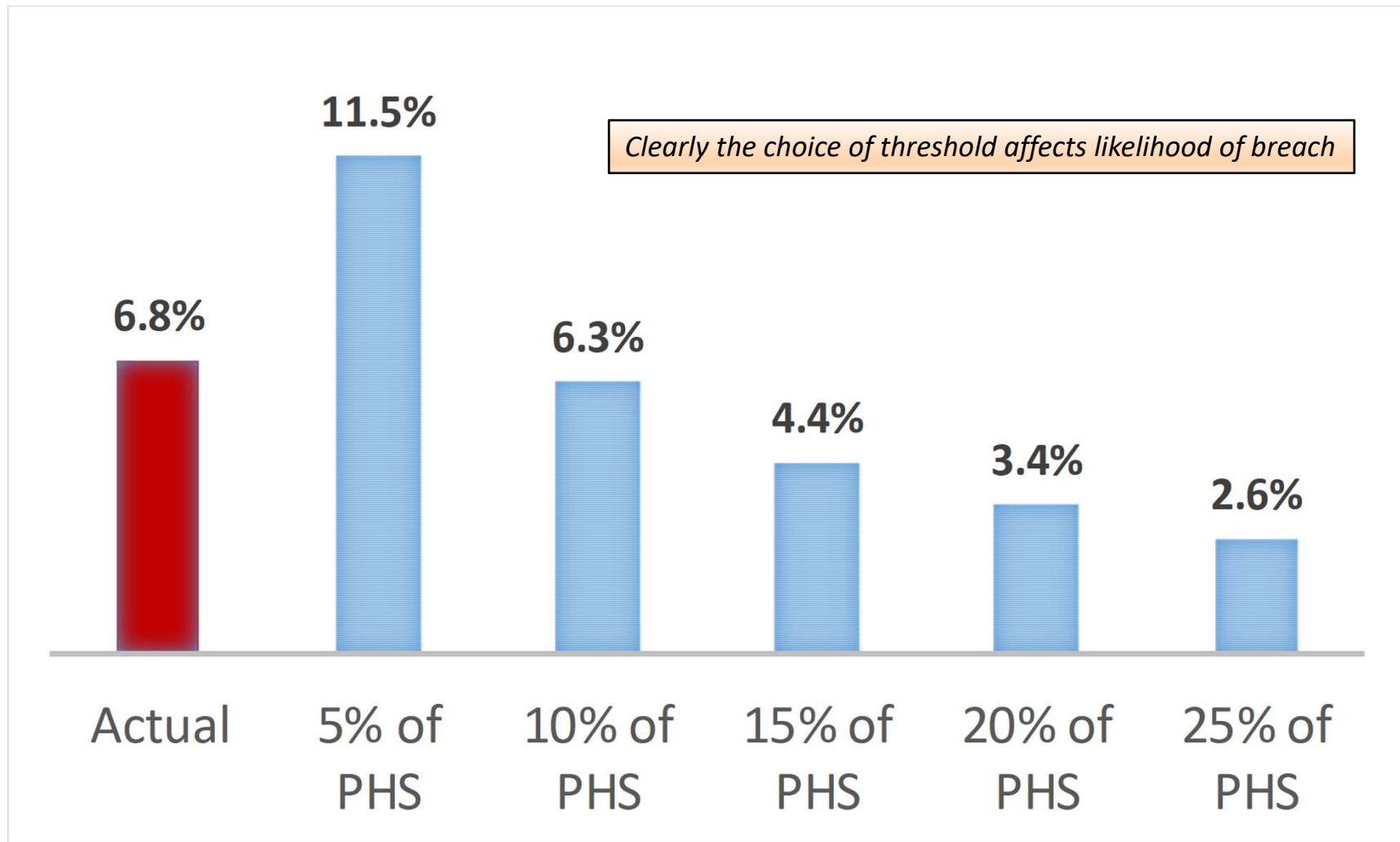
Materiality Threshold - % of Reserves



Discussion Question #5

- Does the % of reserves or % of surplus make a more reasonable materiality threshold?
- Does this change with the intended purpose?
- Does this vary by line of business?

MAD - Actual vs Modeled Thresholds



Discussion Question #6

- What amount of RMAD breaches per year would you expect to be reasonable?
- Specifically for companies that expected there was no RMAD?

Specific RMAD Paragraph Disclosures – Yes/No RMAD

- “the difference in the Company’s carried reserves and the higher end of my range of reasonable unpaid claim estimates is less than my materiality standard”
- “The carried reserves plus the materiality standard is also within the range of reasonable estimates.”
- “there is a risk of material adverse deviation from the carried gross reserves. ... there is not a risk of material adverse deviation from the carried net reserves.”
- “the probability of adverse development of this magnitude is greater than remote.”
- “uncertainty of variability in the reserves,”
- “stable book of business, strong capital position, low leverage ratio, and demonstration of historically adequate reserves,”

Final Discussion Questions

- What risk factors associated with ceded reserves could cause an actuary to issue a separate RMAD qualifications for gross versus net reserves?
- Do you consider multiple thresholds?
- If you change the basis for materiality threshold, should/how do you disclose this?

Conclusion

- Risk of Material Adverse Deviation (RMAD) Background
- Regulators perspective on the RMAD disclosures
- Risk of Material Adverse Deviation Research

- Questions?

Thank You for Your Time and Attention

Erich A. Brandt, FCAS, MAAA

ebrandt@pinnacleactuaries.com

309.807.2311

Gregory W. Fears Jr., ACAS, MAAA, ARM

gfears@pinnacleactuaries.com

309.807.2316

Julie Lederer, FCAS, MAAA

Julie.Lederer@insurance.mo.gov

573.751.1265

Matthew K. Moran, FCAS, MAAA

mmoran@fbinsmi.com

517.323.6643

