23. (3 points)

Given the following information for an insurance company:

Actuarial Range of Reasonable Estimates for Unpaid
Loss & LAE ($ millions):

Low	Central	High
90	100	115

- Booked unpaid loss and LAE is $100 million
- Surplus is $200 million
- Surplus at next lower RBC level is $187 million

a. (0.75 point)

Propose and calculate three materiality standards, based on different metrics, for the Statement of Actuarial Opinion (SAO).

b. (0.25 point)

Select and briefly justify a materiality standard for the SAO.

c. (0.75 point)

Fully evaluate whether there is a significant risk of material adverse deviation.

d. (0.75 point)

A regulator has proposed mandating a materiality standard for SAOs, with Appointed Actuaries required to use a fixed percentage of a specified metric. Fully evaluate this proposal.

e. (0.5 point)

Two months after issuing the SAO, the Appointed Actuary learns of an error in the data used in determining the opinion. Describe the considerations for the Appointed Actuary with respect to the SAO.

CONTINUED ON NEXT PAGE

- Reasonable opinion
- Listing a different opinion for PPA Gross, PPA Net, and WC.

FALL 2019 EXAM 6U, QUESTION 23	
TOTAL POINT VALUE: 3	**LEARNING OBJECTIVE: D1**
SAMPLE ANSWERS	

Part a: 0.75 point

Any three of the following:

- 10% of Unpaid Reserves = 10% * 100M = 10M
- 10% of Surplus = 10% * 200M = 20M
- Distance to RBC Action Level = 200M – 187M = 13M

Note: other selected standards based on different percentages followed the same logic as above.

Part b: 0.25 point

One of the following:

- I select 10% of Unpaid Reserves because $10M is the lowest and therefore most conservative value of the three options.
- I select 10% of Surplus because surplus erosion of that magnitude is sufficient cause for concern.
- I select the distance to the next RBC action level (13M) because this level of risk will have practical regulatory ramifications for the company.

Note: other selected standards based on different percentages followed the same logic as above.

Part c: 0.75 point

Sample 1
Using a materiality standard of 10% of Unpaid Reserves, there is RMAD because carried plus 10M is within the actuarial range (100M + 10M < 115M).

Sample 2
Using a standard of 10% of Surplus, there is not RMAD because carried plus 20M is outside the actuarial range (100M + 20M > 115M).

Sample 3
Using a materiality standard of the distance to the next RBC action level, there is RMAD because carried plus 13M is within the actuarial range (100M + 13M < 115M).

Sample 4
Alternative expressions of the same concept received full credit, for example: "there is RMAD because the range indicates 15M of possible adverse development which is greater than my materiality standard of 13M."

Note: other selected standards based on different percentages followed the same logic as above.

Part d: 0.75 point

Sample 1

The materiality standard is not a one size fits all number. It is set based on professional judgment as to the magnitude of an omission, under/overstatement that would cause a user to reach a different conclusion or follow a different course of action. This may or may not be equal to the metric specified, depending on the user. For example, management may be concerned with having their financial rating downgraded, and a smaller standard would make this happen. Therefore, the actuary may want to use a smaller standard of materiality than the state is proposing, or a larger standard for well capitalized companies.

Sample 2

A fixed standard might help with consistency across the industry. However, different companies have different lines of business (e.g. short-tail Property vs. long-tail Workers Compensation), different reinsurance structures, and different capital levels. A fixed standard cannot adequately account for these differences. Actuaries use their professional judgment to select a standard that makes sense given the circumstances.

Sample 3

A fixed standard may add consistency to the industry and serve to prevent 'gaming' from companies in financial distress but the cons outweigh the pros. Companies and users have different needs so a one-size-fits-all approach cannot make sense in all cases. Actuaries or company personnel need to have a voice in setting the standard that's appropriate for their company.

Part e: 0.5 point

Sample 1

The AA should determine if the error is material, and if so, notify the principal and re-issue the SAO.

Sample 2

The AA should check for materiality, and whether the opinion would have been different if the error had been reflected originally.

Sample 3

The AA should check for materiality, and if it is material, notify the company within 5 days, and the insurance commissioner 5 days after that.

EXAMINER'S REPORT

Candidates were expected to understand the actuary's responsibilities with respect to material adverse deviation.

Part a

Candidates were expected to propose and calculate three reasonable materiality standards from the problem statement. Percentages could vary, i.e. "5% of Unpaid Reserves" was also acceptable.

Common errors included:

- Responses that related to the reserve range (e.g. "Midpoint – Low = 10M") were not accepted because materiality pertains to solvency or financial health rather than the actuarial range of estimates itself.

Part b

Candidates were expected to select and provide a reasonable justification for one of the standards calculated in part a.

Common errors included:

- Responses that selected a standard but provided insufficient justification did not receive full credit. For example, "I select 10M because it is the lowest" did not receive credit – the candidate needed to indicate why "lowest" is desirable.

Part c

Candidates were expected to apply their selected materiality standard correctly.

Common errors included

- Going "the wrong direction", i.e. comparing to Central – Low (i.e. 100M – 90M = 10M) rather than High – Central (i.e. 115M – 100M = 15M)
- Drawing the wrong conclusion from the correct setup, i.e. "because Central + Materiality Standard is within the Range, no RMAD exists"

Part d

Candidates were expected to provide a full, thoughtful evaluation of the proposal.

Arguments in favor of the proposal and against the proposal were both accepted, if they were reasonable and clearly described.

Common errors included:

- Failing to provide a full justification, i.e. brief answers with only one or two concepts did not receive full credit
- Focusing on a single element of the proposal rather than evaluating multiple major themes

Part e

Candidates were expected to describe the materiality evaluation, and indicate further obligations if the error was found to be material. Full credit was given if the candidate indicated both concepts, even if the connection was not made clear. The candidate was not required to enumerate the deadlines imposed on the actuary.

Common errors included:

- Jumping straight to the opinion correction process without referencing the materiality check
- Declining to describe the second step of the actuary's considerations (i.e. the need to re-issue if material, or communicate to the principal/other users)

- Disavowing the actuary of obligations due to two months having passed since the opinion was issued

FALL 2019 EXAM 6U, QUESTION 24	
TOTAL POINT VALUE: 3.5	**LEARNING OBJECTIVE: D1**
SAMPLE ANSWERS	
Part a: .5 point	

Any one of the following for i. SAO and any one of the following for ii. AOS:

i. SAO

- *Regulator*
- *Board of Directors*
- *Investors*
- *Management*
- *General public*

ii. AOS

- *Regulator*
- *Board of Directors*

Part b: 1.5 points

i. SAO

Sample 1

To communicate actuary's opinion of carried reserves to stakeholders informing them of risks/uncertainties and if RMAD exists.

Sample 2

Provide Appointed Actuary's opinion on the carried reserves, comment on materiality standard, risk of material adverse deviation, etc.

ii. AOS

Sample 1

Show how booked reserves compare to actuarial estimates (gross and net) and disclose historical adverse development if necessary.

Sample 2

Provide actuary's range of reserves and/or point estimate, the company carried reserves, as well as comment on if the insurer's one year reserve development to prior year's surplus has exceeded 5% in 3 of the last 5 years.

iii. Actuarial Report

Sample 1