

24. (4.75 points)

A qualified actuary has been appointed to complete a Statement of Actuarial Opinion (SAO) for an insurance company for the year ending December 31, 2012. Given the following information for the insurance company (all figures in millions of dollars):

Net recorded loss and LAE reserve	1,250
Statutory surplus	400
Net income	250
Total adjusted capital	400
Authorized control level risk based capital	150
Low end of actuary's rate of unpaid loss and LAE	1,100
High end of actuary's range of unpaid loss and LAE	1,320
Actuary's central estimate	1,200

a. (2.5 points)

Propose three options for a materiality standard to be used with this SAO. Select one option and justify the selection.

b. (0.5 point)

Identify two places in the SAO where the selected materiality standard must be disclosed.

c. (0.5 point)

Discuss whether or not there is a risk of material adverse deviation (RMAD).

d. (1.25 points)

Prepare the RELEVANT COMMENTS section related to RMAD using the selected materiality standard.

**SAMPLE ANSWERS AND EXAMINER'S REPORT**

<b>QUESTION 24</b>	
<b>TOTAL POINT VALUE: 4.75</b>	<b>LEARNING OBJECTIVE: D</b>
<b>SAMPLE/ACCEPTED ANSWERS</b>	
<b>Part a: 2.5 points</b>	
<p>To receive full credit, the candidate must provide justification of reasoning for the selection of the three possible materiality standards, as well as the final selection. This proven understanding was determined to not be fully developed by any candidate. Much discussion took place around grading this part, and the fact that this was not immediately obvious from the question, as evidenced both from candidate answers and prior observations of the examination committee, was taken into consideration when arriving at the MQC score.</p> <p>10% of Loss and LAE Reserve = <math>.10 * 1250 = \\$125 \text{ M}</math> – This is a large amount of change in the Loss and LAE Reserve. The intended users of the SAO, company management and regulators, would be interested in a reserve movement of this magnitude.</p> <p>10% of PHS = <math>.1 * 400 = \\$40 \text{ M}</math> – This amount would trigger an IRIS ratio.</p> <p>Reserve Development that would trigger a change in RBC = Total Adjusted Capital - 200% of RBC = <math>400 - 150 * 2 = \\$100 \text{ M}</math> – Would result in increased regulatory attention, requiring company to submit plans to the regulator.</p> <p>The regulator and company management are the intended users of the SAO, and as such, are focused on the solvency of the insurer, making all of the above valid options. Given that the smallest of these three is the 10% of PHS, this is the one I would select as it is the most restrictive/conservative.</p> <p>Various justifications received credit, depending on the items selected by candidate (e.g., user is a regulator, uses SAO for monitoring financial health, therefore need materiality standard that addresses reserves/surplus; or the intended user is the regulator, regulators are concerned with reserve adequacy and need to monitor RMAD, therefore need materiality standard that addresses reserves; if the intended user was identified as company management, similar answers were given credit here as well.).</p>	
<b>Part b: 0.5 point</b>	
<p>The Relevant Comment paragraph and Exhibit B of the SAO Also accepted credit for identifying the “Disclosures” paragraph in lieu of Exhibit B</p>	
<b>Part c: 0.5 point</b>	
<p>Note: this will depend on the materiality standard selected in part a. Carried Reserves + Materiality Standard = <math>1250 + 40 (10\% \text{ PHS}) = 1290</math> This is in the range of reasonable results (between 1100 and 1320) so there is a risk of Material Adverse Deviation. Full credit was given when selecting an appropriately supported materiality standard plus the carried reserves and noting that the sum was outside (inside) the range of reasonable results which indicated that RMAD is not (is) present.</p>	
<b>Part d: 1.25 points</b>	
<p>In order to establish my materiality standard, I examined three amounts including 10% of the Company's net loss and LAE reserve, 10% of the Policyholder Surplus and the amount of reserve</p>	

## SAMPLE ANSWERS AND EXAMINER'S REPORT

change that could result in a change in RBC action level. My materiality standard selected which is the smallest of these three amounts is 10% of PHS or \$40 Million. I have identified the major risk factors for this company's reserves as \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. The existence of these risk factors leads me to conclude there is a risk of material adverse deviation for this company.

Note: Candidate was not expected to provide any specific risk factors. Instead, was expected to know that risk factors needed to be iterated if there was a risk of RMAD. If there was not a risk of RMAD, candidate received credit for simply stating that RMAD was not present, as risk factors are not needed.

### EXAMINER'S REPORT

#### Part a

No candidate received full credit for this part. Candidates were expected to list and calculate three materiality standards, as well as justify their selected materiality standard. Most candidates received at least partial credit by listing and calculating three materiality standards. Candidates who received greatest credit also provided sufficient justification for the selected standard.

Full credit included expectations above, as well as mention of the intended users of the SAO and materiality standard's influence on their decision making.

Common errors included using different percentages of the same item (e.g. 5% of surplus, 10% of surplus – one of these is assumed a better standard than the other), not calculating the dollar amount of the standard, not providing justification for selection, and using net income (not of interest to intended users of SAO). Standards based on net income and the actuary's range did not receive credit, as intended users of the SAO are focused on solvency, and the materiality standard is derived independently from the actuary's range.

#### Part b

Full credit was awarded for having both Exhibit B (Disclosures) and the relevant comments sections. Nearly all candidates correctly identified at least one location.

Candidates commonly erred by listing Scope, Exhibit A, and AOS.

#### Part c

Full credit was awarded for correct calculation and deduction of whether or not RMAD exists. Candidates fared well, with the majority obtaining full credit.

Common errors included using the actuary's central estimate instead of carried reserves as base of deviations, finding "risk of favorable deviation" by using the low end of the actuary's range, and drawing an incorrect conclusion based on the calculation.

#### Part d

This part was less straightforward, delving into details of the relevant comments paragraph. Given that three of the necessary items were derived in earlier parts of the question, candidate was expected to know that these items were included in the relevant comments paragraph.

Candidates who answered this part tended to score well, listing three of the four required items.

Full credit was awarded for hitting each of the four required items:

## SAMPLE ANSWERS AND EXAMINER'S REPORT

- Materiality standard in dollars
- Basis for standard
- Whether or not RMAD exists
- Risk factors (problem did not give clues, any risk factors or note to that extent received credit) – if RMAD does not exist, risk factors are not needed

Answers in bulleted/list format were accepted, paragraph form was nice but not necessary.

Exclusion of one of the items above was the most frequent error.