

EXAM 6 – UNITED STATES, SPRING 2015

22. (2.5 points)

The following is an excerpt from a company's Actuarial Opinion Summary as of December 31, 2013:

	Net Loss & LAE Reserves (\$000s)		
	Low	Point	High
A. Actuary's range of estimates	20,000		26,000
B. Actuary's point estimate		22,750	
C. Company carried reserves		23,000	
D. Difference between company carried and actuary's estimate	3,000	250	(3,000)

- 2013 net earned premium: \$55 million
- Policyholders' surplus as of December 31, 2013: \$31 million

a. (1 point)

Using the data provided above, calculate and justify two different materiality standards, using different metrics, to address the risk of material adverse deviation in the Statement of Actuarial Opinion.

b. (0.5 point)

Based solely on the materiality standards developed in part a. above, explain whether the Appointed Actuary would conclude that there are significant risks and uncertainties that could result in material adverse deviation.

c. (0.5 point)

Based on information other than that provided above, briefly describe two additional materiality standards that the Appointed Actuary might use to address the risk of material adverse deviation.

d. (0.5 point)

Identify two major risk factors that the Appointed Actuary may include in a Statement of Actuarial Opinion when addressing whether a company faces significant risks and uncertainties that could result in material adverse deviation.

CONTINUED ON NEXT PAGE

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 22	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: D1
SAMPLE ANSWERS (BY PART, AS APPLICABLE)	
Part a: 1 point	
<p>The following provides examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit; any two of the following received full credit (but responses could not simply be a different percentage of same metric):</p> <ul style="list-style-type: none"> • 2.5%, 3%, 5%, 10%, 15%, 20% or 25% of policyholder surplus • 3% 5%, 10%, 15% or 20% of carried reserves • \$3,000,000 • 12,667,000 <p>The following provides examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit;</p> <ul style="list-style-type: none"> • If standard was based policyholder surplus: 1) Intended users are regulators looking at financial health/solvency; OR 2) would trigger an exceptional value of an IRIS ratio • If standard was based on reserves: 1) Would cause a change in opinion/reserves to be outside reasonable range; OR 2) would cause management to make different decisions; OR 3) would trigger an exceptional value of an IRIS ratio; OR 4) would reduce surplus by an amount that could affect solvency; OR 5) as this is the value we are estimating, a percentage of the metric is reasonable/use % of reserves since the opinion in on reserves. • \$3,000,000: Would cause a change to reserve opinion/reserves would be outside of reasonable range • \$12,667,000: Would cause an exceptional value of IRIS ratio 2 	
Part b: 0.5 point	
<p>Candidate needed to show whether the carried reserves plus the materiality standard fell inside or outside of the actuary's range of reserve estimates.</p> <ul style="list-style-type: none"> • Option 1: (Candidate assesses RMAD under both standards) For \$2.3 million (10% of reserves), $\\$23 + \\$2.3 = \\$25.3 < \\26, so there is a risk of material adverse deviation. For \$3.1 million (10% of surplus), $\\$23 + \\$3.1 > \\$26$, so there's no risk of material adverse deviation. • Option 2: (Candidate selects standard with justification and assess RMAD) Select \$2.3 million (10% of reserves) as standard because it's lower than 10% of policyholder surplus. $\\$23 \text{ million} + \\$2.3 \text{ million} = \\$25.3 \text{ million}$, in actuary's range (\$20 million to \$26 million) so there is risk of material adverse 	
Part c: 0.5 point	
<p>The following provides examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit; any two of the following received full credit:</p> <ul style="list-style-type: none"> • Change in surplus to trigger next RBC action level • Change in surplus which results in a change in financial/investment rating • Change in capital that would cause company's capital to fall below the state's minimum required level • A change in reserves that would cause an exceptional value for an IRIS ratio • % of net income • Multiple(s) of net retained risk 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Part d: 0.5 point
<p>The following provides examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit; any two of the following received full credit:</p> <ul style="list-style-type: none"> • Asbestos/environmental reserves/exposure (cannot get credit for both) • Reinsurance collectability • Catastrophe exposure/concentration of property exposure in Florida • Mass tort claims • Construction defect exposure • Long-tailed lines (workers compensation, medical malpractice) • Operational change; change in claims handling or reserving process • Latent risk in products liability • Medical malpractice legislative issues • Impact of law change/tort reform • Pools and associations • Unknown/uncertain development patterns • Unearned premium reserves for long duration contracts • Exposure to claims-made extended reporting • High excess layers • Significant growth; rapid premium growth • Terrorism exposures • Workers compensation large deductibles • Lack of data • Risky investment strategy • New line of business • Mortgage defaults exposure • Chinese drywall claims • Changes in methods/assumptions; sensitivity of assumptions to estimate • Class action lawsuit • Discount rate used to discount reserves • Change in mix of business
EXAMINER'S REPORT (BY PART, AS APPLICABLE)
<p>The candidate was expected to know appropriate materiality standards and how to assess the risk of material adverse deviation in the context of a Statement of Actuarial Opinion for a given materiality standard, carried reserves and the range of reserve estimates. Candidates generally scored well on this question. There were two interpretations of part b. which were considered in the grading. The most difficult part was part c. asking for alternate materiality standards based on information other than that provided in the stem of the question.</p>
Part a
<p>The candidate was expected to know appropriate materiality standards in the context of assessing material adverse deviation in the Statement of Actuarial Opinion. To receive full credit, the candidate needed to calculate two different materiality standards and provide a justification on why it was appropriate to use. The justification needed to address the implications of the chosen materiality standard to receive credit. For example, if 10% of surplus was chosen as the materiality standard, simply saying that 10% is a "significant portion of surplus" was not sufficient</p>

SAMPLE ANSWERS AND EXAMINER'S REPORT

to receive credit. Saying that a 10% reduction of surplus would impact the perceived solvency or financial well-being of the company, IRIS ratios, or regulatory oversight concerns did receive credit. Credit was given for valid justifications despite a calculation error or indeterminable from the information provided. Common errors: candidate did not provide any justification for his/her materiality standards. No credit was given for a % of premium or % of the actuarial central estimate, as these are not to address the risk of material adverse deviation in the Company's reserves. If the same justification was given for both materiality standards, then credit was only given once.

Part b

The candidate was expected to know that when the carried reserves plus the materiality standard are within the actuary's range, a risk of material adverse deviation exists AND when the carried reserve plus the materiality standard are outside of the actuary's range, a risk of material adverse deviation does not exist. Full credit was given two different ways, depending on how the candidate interpreted the question. Option 1: The candidate correctly assessed RMAD for each materiality standard from part a; Option 2: The candidate selected a materiality standard from part a., provided justification for the selection, and correctly assessed RMAD. Common errors: (1) saying that RMAD exists when the carried plus the materiality standard fall outside of the actuary's range; (2) using the actuary's point estimate + materiality standard rather than carried + materiality standard.

Candidates could receive full credit for b without receiving full credit for a.

Part c

The candidate was expected to know additional materiality standards (other than the reserves or surplus provided in the question). Full credit was given for explaining how to determine the materiality standard. Common errors: providing less than 2 items; % of premium (written or earned) was not accepted since the materiality standard is used for purposes of addressing the risk of material adverse deviation in the loss reserve opinion. . No credit was given for a different % of same metric as part a. since it is presumed that one % would be preferable over the other.

Part d

The candidate was expected to know 2 risk factors that might contribute to a risk of material adverse deviation in a Statement of Actuarial Opinion. Full credit was given for 2 items that might be discussed in the RMAD relevant comments section. Common errors: providing less than 2 items. Full credit was not given for asbestos exposure and environmental exposure as this was considered a single item. No credit was given for generic items like inflation, trends, or changes in company management without explaining their applicability; generic items or changes in management aren't clearly linked to specific risk of the company relative to the loss reserves.