

20. (2.25 points)

An insurance company began operations in 2015. Given the following information related to a company's year-end 2015 financials (all figures in thousands of dollars):

- Paid loss: \$1,150
- Case reserves: \$550
- Management held IBNR: \$650
- Appointed Actuary's point estimate of ultimate loss: \$2,300
- Appointed Actuary's range of reasonable estimate of ultimate loss: \$2,100 to \$2,500
- Total adjusted capital: \$1,000
- Authorized Control Level Risk-Based Capital: \$475
- Materiality standard: \$100

a. (0.75 point)

Justify the type of opinion that should be issued for this insurance company.

b. (0.5 point)

Based on the information above, determine whether or not a risk of material adverse deviation (RMAD) is likely to exist.

c. (1 point)

Apply the Bright Line Indicator Test in regards to RMAD and explain how it is used by regulators.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 20													
TOTAL POINT VALUE: 2.25	LEARNING OBJECTIVE: D1												
SAMPLE ANSWERS													
Part a: 0.75 point													
<p><u>Sample 1 (ultimate loss)</u> company ult loss = $1150 + 550 + 650 = 2350$ range of 2100 – 2500</p> <ul style="list-style-type: none"> • reasonable <p><u>Sample 2 (reserves)</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td colspan="3" style="text-align: center;">range of unpaid claim estimates</td> </tr> <tr> <td style="text-align: left;">reserve carried</td> <td style="text-align: center;">low</td> <td style="text-align: center;">central</td> <td style="text-align: center;">high</td> </tr> <tr> <td style="text-align: center;">1200</td> <td style="text-align: center;">950</td> <td style="text-align: center;">1150</td> <td style="text-align: center;">1350</td> </tr> </table> <p>The appointed actuary should issue a reasonable opinion since the carried reserve falls within the appointed actuary's range of unpaid claim estimates.</p> <p><u>Sample 3 (IBNR)</u> AA IBNR = AA ultimate (2.3) – paid (1.15) – case (0.55) = 0.6 AA IBNR Range $0.6 \pm .2 = (0.4, 0.8)$ Management Well in AA range, <u>Reasonable</u></p>			range of unpaid claim estimates			reserve carried	low	central	high	1200	950	1150	1350
	range of unpaid claim estimates												
reserve carried	low	central	high										
1200	950	1150	1350										
Part b: 0.5 point													
<p><u>Sample 1</u> Booked reserves + materiality standard = 1300 Since 1300 is within reasonable range, RMAD exists</p>													
Part c: 1 point													
<p><u>Sample 1</u> If 10% of reserves is greater than the difference between company action level and total adjusted capital, comment should be sought if an actuary does not believe there to be a risk of material adverse deviation</p> <p>10% of 1200 = \$120k</p> <p>Company action level = $475 \times 2 = \\$950k$ Difference between total adjusted capital and company action level = $\\$1000 - \\$950 = \\$50k$</p> <p>Since $\\$120k > \\$50k$, comment would be sought</p>													

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EXAMINER'S REPORT

The candidates were expected to demonstrate knowledge of the Statement of Actuarial Opinion, specifically what type of opinion to issue, determination of whether RMAD exists, and details of the Bright Line Indicator Test.

Candidates generally scored very well on the core concepts of the type of opinion and determination of RMAD but struggled with respect to the details and use of the Bright Line Indicator Test.

Part a

The candidates were expected to compare management's held IBNR (or total reserves, or ultimate loss) to the actuary's range. Since the held amount is within the actuary's reasonable range, the actuary should issue a reasonable opinion.

Common mistakes included:

- Using actuary's point estimate (\$2,300 ultimate loss) instead of held IBNR/reserve/ultimate (\$2,350 ultimate loss)
- Comparing reserves to ultimates (often resulted in determination of Inadequate/Deficient opinion)
- Issuing an opinion type of "adequate" or "sufficient" instead of "reasonable", which are not valid types of opinions

Part b

The candidates were expected to compare management's held IBNR (or total reserves, or ultimate loss) *plus* the materiality standard to the actuary's reasonable range, and find that RMAD exists since the sum remains in the range using the given \$100 materiality standard.

The most common errors were:

- Using actuary's point estimate (\$2,300 ultimate loss) instead of held IBNR/reserve/ultimate (\$2,350 ultimate loss)
- Concluding RMAD does (does not) exist when held reserve + materiality standard is not (is) within the actuary's range
- Using a materiality standard other than the \$100 given
- Comparing reserves to ultimates
- Showing that a \$100 decrease in Total Adjusted Capital moves the company into the Company Action Level without recognizing whether the result is within the Appointed Actuary's range of reasonable estimates
- Comparing to the low end of the range instead of the high end (which would be risk of material *favorable* deviation)

Part c

The candidates were expected to compare 10% of reserves to the difference between Total Adjusted Capital and the Company Action Level capital, identify whether or not the test is satisfied in this example, and explain that regulators use the Bright Line Indicator Test to pursue comments

SAMPLE ANSWERS AND EXAMINER'S REPORT

from the Appointed Actuary in situations where the test is triggered and he/she does not believe RMAD exists.

Common mistakes included:

- Using 10% of capital instead of reserves
- Confusion with the trend test
- Using the \$100 materiality standard for comparison
- Using the actuary's reasonable range in a comparison
- Using Authorized Control Level instead of Company Action Level
- Concluding that RMAD exists as a result of the test (result merely leads Financial Analyst to pursue comments from the Appointed Actuary)