

12. (1.25 points)

Given the following information regarding an experience rating plan:

- Reported losses and ALAE limited by basic limits and maximum single limit per occurrence (MSL) for the policy being rated as of March 31, 2016 = \$175,000.
- Company subject basic limit loss and ALAE for experience period = \$225,000.
- Expected experience ratio = 0.875.
- Expected percentage basic limit loss and ALAE for experience period unreported at March 31, 2016 = 0.425.
- Credibility = 0.35.

a. (1 point)

Calculate the experience modification factor.

b. (0.25 point)

Briefly describe a scenario in which it would be appropriate for schedule rating to be used in addition to experience rating.

EXAM 5 SPRING 2017 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 12	
TOTAL POINT VALUE: 1.25	LEARNING OBJECTIVE(S): A11
SAMPLE ANSWERS	
Part a: 1 point	
<p><u>Sample 1</u> $\text{Mod} = Z * (\text{AER} - \text{EER}) / \text{EER}$</p> <p>Expected Development of Loss = $225,000 * 0.875 * 0.425 = 83,672$ $\text{AER} = (175,000 + 83,672) / 225,000 = 1.15$ $\text{Mod} = (0.35 * (1.15 - 0.875)) / 0.875 = 0.11$</p> <p><u>Sample 2</u> $\text{EER} = 0.875$ $\% \text{unreported} = 0.425$ $\text{Expected Dev} = \text{CSBL} * \text{EER} * \text{unreported}$ $= 225,000 * 0.875 * 0.425$ $= 83,671.875$</p> <p>$\text{AER} = (175,000 + 83,671.875) / 225,000 = 1.150$ $\text{Mod factor} = z * ((\text{AER} - \text{EER}) / \text{EER}) + 1$ $= 1.11$</p>	
Part b: 0.25 point	
<p><u>Sample 1</u> If there is a new safety program to be implemented by the insured, there was no performance that would be displayed by this plan in the experience rating method. The actuary would judgmentally select a schedule rating in addition to the experience plan.</p> <p><u>Sample 2</u> In a situation where certain rating characteristics are not in the experience (so not captured by experience rating) but are expected to exist in the future policy period being rated.</p> <p><u>Sample 3</u> If a company just introduced a new loss control method. This needs to be accounted for in the schedule rating as well as using experience rating. After the loss control method has been implemented for a few years, it will only be in the experience rating because then it would be fully recognized in the loss experience.</p> <p><u>Sample 4</u> In the case of a small company where experience results alone are not fully credible, schedule rating can be incorporated.</p>	
EXAMINER'S REPORT	
Candidates were expected to calculate the experience rating modification factor. Therefore, candidates had to calculate the expected unreported losses and ALAE, the projected ultimate losses and ALAE (reported plus unreported), the actual experience ratio, and the experience	

EXAM 5 SPRING 2017 SAMPLE ANSWERS AND EXAMINER'S REPORT

modification factor. Additionally, candidates needed to understand the proper application of schedule rating avoiding possible overlap with experience rating.

Part a

Candidates were expected to calculate the expected unreported losses and ALAE, the projected ultimate losses and ALAE (reported plus unreported), the actual experience ratio, and the experience modification factor.

Common errors included:

- Calculating expected unreported losses.
- Not applying the expected experience ratio for the expected unreported loss calculation.
- Not using the unreported percentage or using it solely as a development factor.
- Applying the factors to reported losses rather than basic limit loss.
- Applying credibility improperly (only to the actual experience ratio).

Part b

Candidates were expected to understand that schedule rating is for individual risk characteristics that are expected to have a material impact on the future loss experience but are not adequately reflected in the prior loss experience (or experience rating plan).

Common errors included:

- Providing a reason for schedule rating that had already been contemplated in the insured's experience. For example, stating "safety program" was not sufficient; while a new safety program would be incorporated through schedule rating, an insured with a safety program that had been in place for many years would have the safety program addressed through experience rating.