

14. (1.75 points)

A retrospective rated policy has both a loss limitation and a maximum premium.

a. (0.5 point)

Demonstrate how the charges for the loss limitation and the maximum premium overlap.

b. (0.5 point)

Explain how the overlap is handled differently when using Table M versus Table L.

c. (0.75 point)

An actuary is pricing a large worker's compensation policy with a fixed loss limit of \$100,000. Recommend a table of insurance charges, Table M or Table L, that the actuary should use and provide two reasons supporting the recommendation.

EXAM 8 FALL 2016 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION: 14

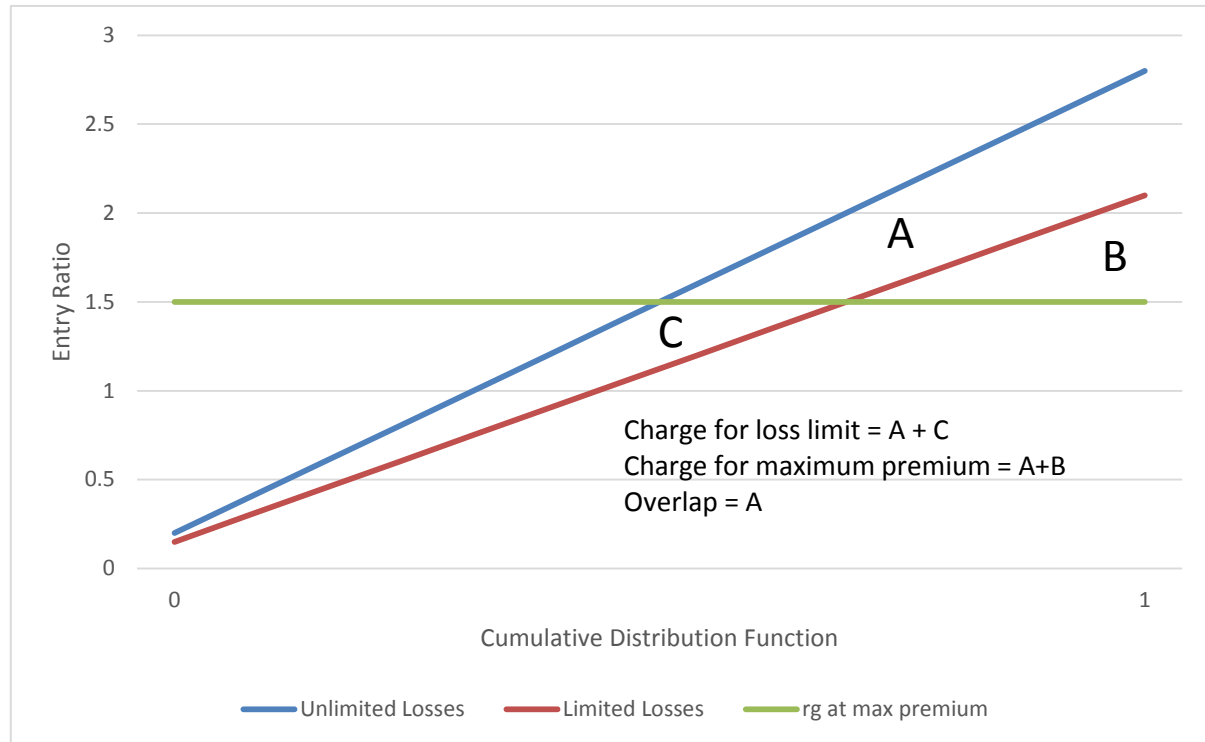
TOTAL POINT VALUE: 1.75

LEARNING OBJECTIVE(S): B5

SAMPLE ANSWERS

Part a: 0.5 point

- Draw a Lee Diagram labeling unlimited loss curve, limited loss curve, entry ratio at max premium, and indicating where the charges overlap



- When there is an occurrence limit as well as an aggregate limit, the occurrence limit makes it less likely that the aggregate limit will be hit. Thus, the charge for the aggregate limit should be reduced, otherwise there will be overlap.

Part b: 0.5 point

Sample Responses for Table M

- Adjust expected loss to a larger size to approximate a limited table M
- It uses the AEL procedure to make aggregate loss distribution less skewed approximating the overlap correction
- Uses the ICRL procedure to shift the curve to approximate a limited loss curve
- ICRL process involves using a larger sized insured which has a flatter distribution

Sample Responses for Table L

- Charges are calculated with both an occurrence and aggregate limit
- Builds tables for separate limits on capped losses

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Part c: 0.75 point

Sample Responses for Table M

- Based on countrywide data so more credible
- More easily updated for inflation by adjusting ELG table
- More flexible for changing loss limits from year to year as you do not need a separate table for each limit
- Table L is built using California taxes so not appropriate for use in other states

Sample Responses for Table L

- Table L provides more accurate estimation for the insurance charge
- Since there is a fixed loss limit there is not a need for a large number of tables to accommodate changing limits
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EXAMINER'S REPORT

Candidates were expected to understand how charges for an individual loss limit and a maximum premium overlap, and how that is handled between Table M and Table L.

Part a

Candidates were expected to know how charges for a loss limitation and maximum premium overlap.

Common mistakes include:

- Identifying that having an individual loss limit reduces the likelihood of hitting the aggregate loss associated with the maximum premium without also commenting on how that relates back to the charges for the loss limitation and maximum premium.
- Drawing the Lee Diagram but not correctly identifying the overlap area.

Part b

Candidates were expected to know how the overlap in charges is handled differently in Table M and Table L. Candidates performed very well on this part.

Common mistakes include:

- Stating ICRL without providing a brief description of the process.
- Stating that Table L does not have an overlap.

EXAM 8 FALL 2016 SAMPLE ANSWERS AND EXAMINER'S REPORT

Part c

Candidates were expected to know differences between Table M and Table L which could support a recommendation to use one table versus the other.

Common mistakes include:

- Assuming that part C was a policy with only a loss limit and not a maximum premium. This was an invalid assumption within the context of the question as there would be no need to use a Table M or Table L without the presence of a maximum premium.
- Assuming the loss limit meant an aggregate limit and there was no per occurrence limit. The intro to the question stated this was a retrospective rated policy with a loss limitation and a maximum premium. Within this context, a loss limit only refers to a per occurrence loss limitation.
- Stating that Table L could not be used outside of California (it shouldn't but it is).
- Stating that Table L was built using California data without providing any further detail (like that the CA taxes are included in the table – which is why you shouldn't use it outside of CA).
- Claiming that Table L is easier because you don't need to add the occurrence charge separately.