

EXAM 5, SPRING 2014

17. (2 points)

The actuary has observed that the adequacy of case outstanding is increasing for an insurer. Describe how each of the following would be influenced by this change and briefly explain why:

- i. Reported Claim Development Technique
- ii. Expected Claim Technique
- iii. Reported Bornhuetter-Ferguson Technique
- iv. Reported Cape Cod Technique

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## EXAM 5 SPRING 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT

### QUESTION: 17

**TOTAL POINT VALUE: 2 points**

**LEARNING OBJECTIVE(S): B4**

### **SAMPLE/ACCEPTED ANSWERS:**

- Reported Development method
  - This technique will overstate IBNR because the CDF will be higher and it is multiplied by a reported loss that is at a higher level.
- Expected Claim Method
  - This technique will produce accurate IBNR since it is based on an a priori estimate of future claims. Change in case adequacy will not change its result
- Reported Bornhuetter-Ferguson
  - This technique will overstate IBNR because increased case adequacy will produce higher CDFs which will then result in higher % unreported. This will give a higher IBNR estimate.
  - Overestimate but less than reported development method, since it is the weighted average of reported development and expected claim method.
- Reported Cape Cod
  - This technique will overstate IBNR for the same reason as BF method: the higher CDFs will give a higher % unreported and lower % reported which will overstate IBNR.
  - Overestimated since method uses the ECR which is calculated by the ratio of reported claims and used up premium. Reported claims overestimated and ECR overestimated.

### **EXAMINER'S REPORT:**

- As this is a fundamental part of unpaid claim estimates, candidates were expected to score very well and generally did so on this question. Over half of exam takers scored full credit on this question.
- When candidates lost credit, it was typically for not providing rationale to their answers. Other candidates confused the a priori nature of the expected claims method with the first half of the Cape Cod method that determines an ELR based on current reported claim activity.
- Some candidates seem to have focused on the concept of the Bornhuetter-Ferguson as a credibility-weighted average of development and expected claims, but were unclear on the mechanics of the method, confusing changes in credibility weights with increases and decreases in the ultimate loss projected by the technique.
- Some candidates noted the triangle should be adjusted, without specifying the nature of the adjustment or what the adjustment was intended to correct.