

EXAM 5, FALL 2013

23. (2 points)

The following table summarizes the results of various ultimate claim projection techniques as of December 31, 2012 in total for all accident years:

Technique	Ultimate Claims
Reported Development	\$10,000
Paid Development	\$8,000
Expected Loss	\$8,300
Reported Bornhuetter-Ferguson	\$9,500
Paid Bornhuetter-Ferguson	\$8,100
Reported Berquist-Sherman	\$8,350
Paid Berquist-Sherman	\$8,150

a. (0.5 point)

Describe a potential operational change that explains the results above.

b. (0.75 point)

Identify three questions that the reserving actuary should ask the claims department to better understand the impact of the operational change identified in part a. above on the unpaid claims estimate.

c. (0.75 point)

Briefly define three diagnostic tools that can be used to test the reasonability of ultimate claim selections.

Exam 5 – Question #23

- A. The case reserve estimation is strengthening because the reported development method and reported BF method both give high estimates. The reported BS method is close to other method. The ultimate loss seems reasonable after case outstanding adjustments.

Or

- A. Reported is higher than paid so potentially a slow down in closure. This is supported by BS being more accurate.
- B. Is there a change in the claims system?
Is there a change in philosophy regarding setting initial reserves?
Is there a change in focus on settling small versus large claims?

Or

- B. Did you change the case outstanding philosophy?
Is there any change in the claim system (automatic case outstanding formula)?
Did you hire more experienced adjusters or change the claim adjuster team?
- C. Using frequency = ultimate count/exposures, severity = ultimate claims/ultimate count and projected loss ratios to test the reasonability of ultimate claim selections.

If there are strengthening in case reserves with no deterioration of claims experience and no changes to claims settlement speed, the frequency, severity and projected loss ratios should be stable compared to historical years. Assuming the claims process is consistent over the historical years.

Or

- C. Implied Avg. Severity – Resulting ult. Claims/projected claim counts
Implied avg. frequency – resulting ult. Claim counts/exposures
Monitor expected claim emergence vs. actual claim emergence to determine overall accuracy and bias.

22.

- a. Many candidates answered this question correctly. Most candidates who did not receive full credit missed either the stop loss error in 2010 or both of the quota share errors in 2011 & 2012. A small amount of candidates received no credit on this question.
- b. Most candidates answered this question correctly or received almost full credit. The majority of the points were taken off for not correcting the net data provided. Most candidates knew to develop gross losses and were able to explain the relationship between gross, net and ceded.
- c. Few candidates received full credit on this question. A majority of candidates misread the question and assumed that it asked them to compare gross and net tail factors. Of those that did compare the ceded and gross tails, many got the relationship wrong. For the candidates that correctly explained the relationship between the gross and ceded tails, some were not able to explain the impact of the quota share and stop loss.

23.

- a. The majority of candidates scored well on this part. This part involved describing a potential operational change (case reserve strengthening, but alternatively slower settlement of claims is acceptable) which required an explanation using the data for full credit. Some common errors were:
 - Candidates just stated “change in reserve adequacy” without clear rationale for this conclusion.
 - Candidates stated “all reported are higher than paid”. However, it is necessary to distinguish among the reported methods as Berquist-Sherman was a critical element.
- b. The majority of candidates scored well on this part. This part requires candidates to provide three questions to claim department regarding the operational change noted in part a. Some common errors were:
 - A simple repeat of the operational change.
 - Questions that are not related to the operational change.
 - Asking if there was a recent large loss that was reported but not paid. The reported Berquist-Sherman method would not have been in line with the paid methods if this was the case.
 - Repeating the questions with minor alterations.
- c. The majority of candidates scored very poorly on this part. This part requires candidates to provide three diagnostics for ultimate claim estimate. Most candidates attempted the question as if it is a continuation of previous parts and tried to explain the answers of the previous parts. The common errors include stating disposal rates, statistics related to paid, reported, case. They do not provide direct diagnostic to ultimate claim reasonability.