

Practice Exam Errata

On April 16, 2018, I posted a new version of Practice Exam 2 with a revised problem 10. This will be known as version 2. If you used version 1 of this practice exam, please see the version 1 errata below.

On April 21, 2018, I posted a new version of Practice Exam 2. The only change was the corrected solution for #8 mentioned below. This will be known as version 3.

Practice Exam 2 (Version 2)

- ◇ **#8 Solution:** To receive full credit, the solution should also mention that the Cape Cod method incorporates information from an exposure base. The paper emphasizes this as the main driver of the reduction in variance

Practice Exam 2 (Version 1)

- ◇ **#6efg Solutions:** The solutions for parts e, f, and g were left off by mistake. Here are the solutions:

Part e:

- The p-p plot will exhibit an "S" shape where predicted is lower than expected at the bottom left of the graph and predicted is higher than expected at the top right of the graph. This indicates that the tails produced by the model are too light

Part f:

- The p-p plot will produce a half "U" shape where predicted is less than expected for most of the graph (they are around the same near the top right of the graph). This indicates that the expected loss estimates produced by the model are biased high

Part g:

- Alternative to Mack model – Use the correlated chain ladder model. It treats the level of each accident year as random AND it allows correlation across subsequent accident years. It is applied to cumulative claims
- Alternative to ODP model – Use the changing settlement rate model. It treats the level of each accident year as random AND it reflects changes in settlement rates across the accident years. It is applied to cumulative claims

Errata

- ◇ **#10 Solution:** For problem 10, I did not make it clear that the problem was referring to a single account. Since it refers to a single account, the ultimate deductible losses net of the aggregate limit in part c. should have been capped at the aggregate limit. This is actually an issue in the original paper as well. The service revenue exhibits on page 239 of Siewert show ultimate losses net of the aggregate that are **GREATER** than the aggregate limit. This appears to be an error in the original paper. To remove the ambiguity from the practice exam, I have revised the problem to look at losses in aggregate rather than a single account
- ◇ **#22b Solution:** We want to choose the allocation that performs best (i.e. highest return) under a marginal decomposition. This is **LOB B**, not LOB A