

25. (2.25 points)

Given the following information for a portfolio written on claims-made policy form:

Calendar Year	Paid ULAE	Paid Claims	Year-End Outstanding Case Reserve	Year-End Outstanding IBNR
2009	\$409	\$3,625	\$7,575	\$6,250
2010	\$476	\$5,875	\$10,450	\$7,500
2011	\$614	\$7,950	\$13,750	\$8,750
2012	\$761	\$10,375	\$16,500	\$10,625

Claim amounts include ALAE.

a. (1.5 points)

Calculate a ULAE provision as of December 31, 2012 using the Kittel adjustment.

b. (0.5 point)

Explain the purpose of the Kittel adjustment.

c. (0.25 point)

Briefly explain a shortcoming of the classical method that is not addressed by the Kittel adjustment.

Exam 5 Question #25

a.

<u>CY</u>	<u>PD ULAE</u>	<u>Pd claims</u>	<u>Reported claims</u>	<u>Ratio</u>
09	409	3625	17450	.0388
10	476	5875	23825	.0320
11	614	7950	30450	.0320
12	<u>761</u>	<u>10,375</u>	<u>37,500</u>	<u>.0318</u>
	2260	27,825	109,225	.0330

Selected CY 09-12 Avg

Unpaid ULAE= .0330 (50% (16500 +10625)= 447.6

1) Pd ULAE/Avg (Pd claims and reported claims)

2) Pd claims + case ols +IBNER

\supset (assuming "year-end O/S IBNR" = IBNER)

OR

	Pd ULAE	Pd	Reported = Paid + Δ case + IBNR
09			5875+(10450-7575)+(7500-6250)=
10	476	5875	10000
11	614	7950	12500
12	761	10375	15000

ULAE / Avg(paid, reported)

10 476/((5875+10000)/2) =.05997

11 =.06000

12 =.06000

.0600 avg select

$$.06 \times .5 \times 16500 + .06 \times 10625 = 1132.5$$

IBNR

- b. It accounts for ULAE on reported but not yet paid claims. It is an adjustment to the classical technique. It is useful for cases like this where there is growing business + it is not steady state.
- c. A short coming of the classical method is the assumption that 50% of the ULAE is incurred when claims are opened and 50% of the ULAE is closed. This is not addressed by the kittel method. The problem is that the 50%-50% assumption is inflexible and doesn't distinguish between the cost of closing a claim and maintaining a claim.

OR

When inflation affects paid ULAE and claims differently

OR

Both assume 50% of ULAE is paid on opening and 50% on closing. This assuming is not always true.

- b. Most candidates received high partial credit. Very few candidates selected an ultimate ratio for accident year 2012 that considered ultimate ratios from prior years.
- c. Many candidates received full credit. Some of the common mistakes were not selecting a method by saying it does not matter and therefore not having a reason, or not giving a valid reason.

25.

- a. Candidates generally did not score well on this part.

Many candidates received partial credit for:

- using the average of paid and incurred losses in the denominator of the ULAE ratio
- selecting a ULAE ratio that was appropriate given the ratios calculated by year
- calculating the ULAE provision

Most candidates failed to properly calculate incurred losses as the sum of paid losses, the change in case reserves, and the change in IBNR. Errors made in the incurred loss calculation included simply adding paid losses to the year-end reserve values or not including IBNR.

Some candidates did not properly use the average of paid and incurred losses in the denominator of the ratio. Additionally, many candidates calculated a ULAE ratio based on the sum of all years (a weighted average) instead of calculating the ratio by year to identify potential trends. Some candidates determined a ULAE ratio but did not calculate the ULAE provision. Finally, of candidates that did calculate the ULAE provision, almost all candidates failed to properly calculate the ULAE provision. The most common errors in this final step of the calculation included applying the ratio to the sum of year-end case reserves and IBNR for all years, or applying the ratio to 50% of case reserves and 100% of IBNR, despite the question clearly identifying the policy as being claims-made.

- b. Most candidates received either no credit or partial credit on this part. Many candidates failed to describe the purpose of the Kittel adjustment, and simply mentioned that the adjustment used the average of paid and reported losses in the denominator of the ratio. Candidates receiving partial credit failed to mention that the adjustment is intended to improve upon the classical method in the case of growing lines of business.
- c. The majority of candidates who attempted this part provided an acceptable response.

26.

- a. There were many potential causes to the discrepancy in the data – the most common responses were case reserve strengthening, claim payment slowdown, and the presence of an unpaid large loss. Credit was given to any explanation that made sense given the data.

In addition to stating a reason for the discrepancy between paid and reported methods, candidates received credit for explaining how the ultimates for some of the methods were