17. (2 points)

Given the following as of December 31, 2015:

Accident Year	Reported Claims ($000)	Paid Claims ($000)	Reported Claim Count Development Factor to Ultimate
2013	15,000	15,000	1.0
2014	12,000	10,000	1.1
2015	7,000	3,000	2.0

Selected Ratios:

Age (months)	Case Outstanding to Previous Case Outstanding	Incremental Paid Claims to Previous Case Outstanding
48	0	0
36	0	3.5
24	0.5	2.0

a. (1.5 points)

Estimate the accident year 2015 unpaid claims using the case outstanding development technique.

b. (0.5 point)

Assess whether the case outstanding development technique is appropriate for accident year 2015.

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QUESTION 17

TOTAL POINT VALUE: 2 | **LEARNING OBJECTIVE(S): B3**

SAMPLE ANSWERS

Part a: 1.5 points

Sample 1

2015 unpaid: @ 12m = c/o = 7000-3000 = 4000
@ 24m = c/o = 4000*0.5 = 2000
@ 36m = c/o = 0
Paid claim: @ 12m = 3000
@ 24m = 2*4000
@ 36m = 3.5*2000
Total unpaid: 2*4000 + 3.5*2000 = 15000

Sample 2

	Case Outstanding				Paid Claims	
	12	24	36	24	36	48
13	-	-	0	-	-	-
14	-	2000	0	-	-	-
15	4000	4k*.5=2000	0	4000*2=8000	7000	

Unpaid 2015 Claims = 8K + 7k = 15,000

Sample 3

AY 2015 unpaid claims = 4000000 * 2 + 2000000 * 3.5 = $ 15000000

Sample 4

Age:	12	24	36	48
AY 2015 case outstanding:	4000	2000	0	0
AY 2015 incremental paid:	3000	8000	7000	0

AY 2015 unpaid = 8000 + 7000 = 15000

Part b: 0.5 point

- Method only valid for report year analysis or where most or all claims are reported in the first accident period. The reported claim development factor is 2.0 means that all losses are not reported in the first accident period thus the method is not valid.
- Accident year 2015 has significant pure IBNR thus method is not appropriate.
- Accident year 2015 has significant number of unreported claims thus method is not appropriate.
- Accident year 2015 claim development factor highly leveraged thus method is not appropriate.

EXAMINER'S REPORT

Candidates were expected to know how to use the case outstanding development technique to calculate unpaid losses and when the method is not valid.

Part a. of the question was straightforward and candidates scored very well on this part.

Part b. was more challenging, requiring candidates to identify that there was significant pure IBNR on the year, making the proposed method inappropriate. Many candidates did not make this connection and scored poorly on this part.

Part a

Candidates were expected to know how to apply the case outstanding development technique to calculate unpaid losses.

Specifically, candidates were required to calculate the case outstanding at 12 months (given the reported and paid), as well as at 24 and 36 months using the case outstanding to previous case outstanding factors from the table. Secondly, candidates were expected to calculate the paid at 12 to 24 months and the paid from 24 to 36 months using the incremental paid claims to previous case outstanding factors from the table to the case outstanding calculated above. Lastly, candidates were expected to add the projected future paid amounts to arrive at a total unpaid at 12 months.

Common mistakes included:

- Correctly calculating the case outstanding at one or more evaluations, but incorrectly calculating the unpaid amounts.
- Including the 3,000 paid at 12 months to calculate unpaid claims. This amount has already been paid and should be excluded from the unpaid claim estimate.

Part b

Candidates were expected to recognize when the case outstanding development technique is not appropriate.

Specifically, candidates were expected to recognize that AY 2015 has significant claim count (pure IBNR) development based on a claim count development factor of 2.0. Candidates were then expected to recall that the case o/s method is only suitable for projecting case o/s development on reported claims, and does not work well when there is pure IBNR.

Common mistakes included:

- Suggesting an alternate method to the case o/s method, without addressing why the case o/s method was inappropriate
- Observing that the claim count development factor of 2.0 was leveraged, but not tying this to why the case o/s method would not work well.
- Stating that there was not enough historical data to use the method.