

EXAM 5, FALL 2014

15. (2 points)

Given the following data as of December 31, 2013:

Accident Year	Reported Claims (\$000)	Reported Development Factor to Ultimate	On-Level Earned Premium (\$000)
2011	20,900	1.600	38,000
2012	21,000	2.100	50,000
2013	11,500	3.700	67,000

- Annual loss trend = 7%.
- There has been a law change effective July 1, 2012, applicable to all claims occurring after the effective date.
- Estimated reduction to ultimate claims based on law change = 20%.

Estimate IBNR for accident year 2013 using the expected claims technique.

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**EXAM 5 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT**

QUESTION 15							
TOTAL POINT VALUE: 2				LEARNING OBJECTIVE: B3			
SAMPLE ANSWERS							
	(1)	(2)	(3)	(4)	(5) = (1)*(2)*(3)*(4)	(6)	(7) = (5)/(6)
	Reported Claims AY (000's)	LDF	Trend	Law Adjustment	Trended Ultimate	On Level EP	Loss Ratio
2011	20,900	1.6	1.145	0.800	30,631	38,000	80.6%
2012	21,000	2.1	1.070	0.889	41,949	50,000	83.9%
2013	11,500	3.7	1.000	1.000	42,550	67,000	63.5%
					ELR (average of 11 & 12):		82.3%
<p>AY 13 Ult = 67,000 * 0.822 = 55,104</p> <p>IBNR = 55,104 – 11,500 = 43,604</p>							
EXAMINER'S REPORT							
<p>Candidates generally did well on this question. The most common error was an incorrect calculation of the adjustment for the law change for 2012: a large portion of the candidates used an adjustment factor of 0.9 instead of 0.8/0.9. Another fairly common error was to include the 2013 year in the average loss ratio selection. Candidates who included 2013 only received credit if they provided a detailed, reasonable justification.</p>							