22. (2 points)

Given the following data as of December 31, 2016:

Accident Year	Cumulative Closed Claim Counts as of (months)			
	12	24	34	48
2013	660	959	1,119	1,154
2014	768	1,104	1,317	
2015	620	825		
2016	806			

Accident Year	Cumulative Reported Claim Counts as of (months)			
	12	24	36	48
2013	1,100	1,155	1,178	1,178
2014	1,200	1,380	1,463	
2015	1,000	1,100		
2016	1,300			

Justify whether the closed claim counts for each accident year at 12 months maturity will be increased, decreased, or not adjusted when applying the Berquist-Sherman technique with paid claim development adjustment.

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QUESTION 22

TOTAL POINT VALUE: 2 | **LEARNING OBJECTIVE: B5**

SAMPLE ANSWERS

Sample #1

A to A Factors

AY	12-24	24-36	36-48
2013	1.050	1.020	1.000
2014	1.150	1.060	
2015	1.100		

Avg	1.100	1.040	1.000	1.000
CDF	1.144	1.040	1.000	1.000

* Assume no development past 48 months

Disposal Rate

660 / 1178 = .560
768 / 1463 = .525
620 / 1144 = .542
806 / 1487 = .542

2013	Decrease. Since .560 > .542
2014	Increase. Since .525 < .542
2015	No Change. Since .542 = .542
2016	No Change. Since latest diagonal

Sample #2

AY	12-24	24-36	36-48
2013	1.050	1.020	1.000
2014	1.150	1.060	
2015	1.100		

Vol Weighted	1.102	1.042	1.000
CDF	1.148	1.042	1.000

AY	Ultimate	Closed	DR
2013	1,178	660	56.0%
2014	1,463	768	52.5%
2015	1,146	620	54.1%

2016	1,492	806	54.0%

Select latest diagonal

AY	Adj Closed Count	Change
2013	636	-24
2014	790	22
2015	619	-1
2016	806	0

EXAMINER'S REPORT

Candidates were expected to complete the initial steps required when performing a Berquist-Sherman adjustment for changes in the settlement rate of claims. The potential need for adjustments to each accident year is determined by comparing historical disposal rates to the latest disposal rate at the same maturity.

Candidates were expected to estimate ultimate counts through application of the chain ladder method on reported claim counts. Candidates were then expected to either calculate the adjusted closed claim counts for each accident year and compare them to the original unadjusted closed claim counts, or to simply recognize the relationship between disposal rates in order to make the proper recommendation.

Common errors included:

- Not developing reported claim counts to ultimate, and instead basing decisions on relationships between ratios of closed-to-reported claim counts.
- Deriving ultimate claim counts using the chain ladder method on the closed count triangle instead of reported. Calculation of ultimate claim counts based on the triangle of closed claim counts was not appropriate, as it resulted in ultimate counts that fall short of the given cumulative reported counts.
- Calculating a development pattern using the reported count triangle, but applying the pattern to the cumulative closed counts.
- Calculating disposal rates as reported count divided by ultimate count.
- Attempting to identify a general trend or relationship in historical disposal rates, as opposed to addressing each accident year individually.
- Misstatement of the direction of the required adjustment, e.g., stating that an accident year's closed counts should be increased, when should have been decreased, and vice versa.
- Comparing historical disposal rates to an average disposal rate at 12 months, as opposed to the accident year 2016 disposal rate at 12 months.
- Calculating the disposal rates for each accident year, but not comparing or elaborating on the need for potential adjustments.