

EXAM 6 – UNITED STATES, SPRING 2019

18. (2.25 points)

Given the following information for an insurance company as of December 31, 2017 (all figures are in millions of dollars):

	2017	2016	2015	2014	2013	2012
One-year development in estimated losses and loss adjustment expenses incurred prior to current year	-1	2	4	3	-3	-2
Policyholders' Surplus	61	54	38	46	43	40

	Appointed Actuary's Estimate		Company's Carried	
	Gross	Net	Gross	Net
Loss Reserves	23	17	29	19
Defense and Cost Containment Reserves	27	20	22	18
Adjusting and Other Reserves	12	12	14	14

a. (1.5 points)

Construct items A through D for the Actuarial Opinion Summary (AOS).

b. (0.75 point)

Fully explain whether the Appointed Actuary must include an explanatory statement in item E of the AOS.

SAMPLE ANSWERS AND EXAMINER'S REPORT

SPRING 2019 EXAM 6US, QUESTION 18						
TOTAL POINT VALUE: 2.25				LEARNING OBJECTIVE: D		
SAMPLE ANSWERS						
Part a: 1.5 points						
<u>Sample 1</u>						
		NET			GROSS	
A.	Actuary's Range	N/A			N/A	
B.	Actuary's Point	49			62	
C.	Company Carried	51			65	
D.	Diff	2			3	
 <u>Sample 2</u>						
			NET		GROSS	
		Low	Point	High	Low	Point High
A.	AA estimate of loss & LAE (range)	44.1		53.9	55.8	68.2
B.	AA estimate of loss & LAE (point)		49			62
C.	Carried loss & LAE reserves		51			65
D.	Difference	6.9	2	-2.9	9.2	3 -3.2
(I assume the appointed actuary's range to be +/- 10% of point estimate.)						
Part b: 0.75 point						
<u>Sample 1</u>						
Ratios of one year development to prior year surplus						
	2017	2016	2015	2014	2013	
	-1/54 = -1.94%	5.26%	8.70%	6.98%	-7.5%	
Because 3 or more of the past 5 years have ratios of one-year development to prior policyholder surplus > 5%, the appointed actuary must include a statement in Item E of the AOS.						
 <u>Sample 2</u>						
Compute 1 year reserve development to prior surplus. If 3 out of 5 years > 5%, must explain.						
2017 -1/54 = -0.18						
2016 2/38 = 5.26%						
2015 4/46 = 8.7%						
2014 3/43 = 6.9%						
Yes, must explain because 2014-2016 are > 5%. So disclose those years and segments affected.						
EXAMINER'S REPORT						
Candidates were expected to demonstrate knowledge of the Actuarial Opinion Survey. They were expected to use information provided to construct a table with items A-D and determine whether or not the actuary needed to include an explanatory statement.						

SAMPLE ANSWERS AND EXAMINER'S REPORT

Part a

Candidates were expected to set up the reserve tables, showing columns for low, point estimate, and high end of range. Format and order of the rows was not critical. Candidates were expected to show both gross and net tables.

Since the actuary's range was not provided, candidates were not expected to fill in this row. If candidates stated an assumption for a range and correctly applied the range, points were not deducted.

Common mistakes included:

- Labeling the rows with only A-D without describing what is included in Items A-D.
- Including either Net or Gross but not both.
- Not adding Loss Reserves, Defense and Cost Containment Reserves, and Adjusting and Other Reserves.
- Miscalculating the reserves; most often by not including Adjusting and Other.
- Including a range without providing an assumption as to how the range was determined.

Part b

Candidates were expected to explain when the actuary is required to provide an explanatory statement, calculate the appropriate ratios, and apply the test to the ratios.

Common mistakes included:

- Calculating the ratios as adverse development to current policyholder surplus instead of to prior year policyholder surplus.
- Calculating the ratios as prior year adverse development to current policyholder surplus instead of current year adverse development to prior year policyholder surplus.
- Not including calculation or results of calculation.
- Incorrect number of years or threshold that would require a statement.
- Failure to include a statement describing the criteria/trigger that determines whether an explanatory note is needed
- Incorrectly applying the trigger to the calculation.

SPRING 2019 EXAM 6US, QUESTION 19

TOTAL POINT VALUE: 3

LEARNING OBJECTIVE: D

SAMPLE ANSWERS

Part a: 1 point

Sample 1

- If 10% of loss & LAE reserves is greater than the difference between adjusted surplus and company action level capital & surplus, regulators will need an explanation on why the actuary doesn't think there exists material adverse deviation.