

EXAM 6 – UNITED STATES, SPRING 2019

15. (4.25 points)

Given the following information for an insurance company which only writes Commercial Multiple Peril (CMP) and Workers' Compensation (WC) insurance (all dollar figures are in millions):

	Premiums Written					
	Direct		Reinsurance Assumed From Non-Affiliates		Net	
	CMP	WC	CMP	WC	CMP	WC
2014	\$93	\$120	-	-	\$90	\$117
2015	\$114	\$131	-	-	\$95	\$120
2016	\$129	\$141	-	-	\$97	\$128
2017	\$137	\$156	-	-	\$100	\$135

	CMP	WC
Company Underwriting Expense Ratio	25%	25%
% of Written Premium on Direct Loss Sensitive Retro-Rated Plans	0%	12%
% of Written Premium on Assumed Loss Sensitive Retro-Rated Plans	0%	4%
Industry Average Loss & LAE Ratio	80%	85%
Industry Loss & LAE Ratio	94%	97%
Adjustment for Investment Income	0.961	0.934

Schedule P, Part 1 Net Loss & Loss Expense Percentage (Incurred/Premiums Earned)		
Year	CMP	WC
2008	79%	77%
2009	76%	65%
2010	76%	70%
2011	63%	75%
2012	350%	65%
2013	76%	76%
2014	70%	80%
2015	79%	84%
2016	62%	72%
2017	72%	71%

Calculate the 2017 RBC Charge for Written Premium (R5) for this insurer.

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SAMPLE ANSWERS AND EXAMINER'S REPORT

Common mistakes included:

- Indicating an incorrect threshold for the usual range
- Omitting the reserve development for calculations of the loss ratios and the loss reserve deficiency (redundancy)
- Omitting the LAE for calculations of the loss ratios and the loss reserve deficiency (redundancy)
- Applying a weighted average rather than straight average of prior year and second prior year loss ratios
- Switching the current reserves and required reserves in the reserve deficiency calculation, incorrectly resulting in deficiency

Part e

Candidates were expected to make an assessment for each of the IRIS ratios presented earlier in the problem, and why a regulator may be concerned about the financial health of this insurer.

Common mistakes included:

- Only stated that ratios were usual/unusual, and not elaborating on why the results would concern regulators
- Only mentioning and assessing one of the two ratios
- Stating that the insurer was over reserving or adequately reserving based on the result of ratio 13
- Opining on information not relevant to either ratio 11 or 13

SPRING 2019 EXAM 6US, QUESTION 15

TOTAL POINT VALUE: 4.25

LEARNING OBJECTIVE: C2

SAMPLE ANSWERS

	CMP	WC
Company Avg. LLAE Ratio (10 year avg.) (CMP 2012 ratio limited to 300%)	95.3%	73.5%
Ratio of Company Avg. LLAE to Industry LLAE	$\frac{95.3\%}{80\%} = 1.191$	$\frac{73.5\%}{85\%} = .865$
Company LLAE Ratio	$\text{Avg}(.94, .94 * 1.191) = 1.03$	$\text{Avg}(.97, .97 * .865) = .904$
Base WP RBC	$(1.03 * .961 + .25 - 1) * 100 = 24$	$(.904 * .934 + .25 - 1) * 135 = 12.8$
<u>Loss Sensitive Adj.</u>		
Loss Sensitive Adjustment	0	$.3 * .12 + .15 * .04 = .042$
Loss Sensitive Discount	0	$.042 * 12.8 = .54$

SAMPLE ANSWERS AND EXAMINER'S REPORT

WP RBC After LS Discount	24	12.8 - .54 = 12.26
<u>Premium Concentration Adj.</u>		
Premium Concentration Factor	$.3 \frac{135}{235} + .7 = .872$	
WP RBC After Prem Concentration Factor $.872 * (24 + 12.26) = 31.62$		
<u>Excessive Premium Growth Charge</u>		
Annual Growth (All Lines Direct WP)		
2015	$\frac{245}{213} = 15.0\%$	Avg(15%,10.2%,8.5%) = 11.2%
2016	$\frac{270}{245} = 10.2\%$	Excessive Growth Factor = $(11.2\% - 10\%) * .225 * (100 + 135) = .66$
2017	$\frac{293}{270} = 8.5\%$	
Total Written Premium RBC Charge = $31.62 + .66 = 32.3$		
EXAMINER'S REPORT		
Candidates were expected to have an understanding of financial reporting details and be able to calculate the base RBC Charge for Written Premium. Candidates also needed to exhibit an understanding of the adjustments to the base RBC Charge that are required when an insurance company has written premium on retro plans, adjust for the concentration of premium, and exhibits excessive growth year over year.		
Common mistakes include:		
<ul style="list-style-type: none"> • Not using a 10 year avg. Company LLAE Ratio • Excluding or adjusting to a level other than 300% for 2012 CMP LLAE Ratio • Applying incorrect Industry LLAE Ratio to adjust Company LLAE Ratio • Adding Loss Sensitive Discount calculated versus subtracting it • Applying the Loss Sensitive Discount to Net WP rather than base WP RBC • Using Net Written Premium to calculate annual growth rates • Not combining CMP and WC premiums to calculate annual growth rates • Failure to apply Growth factor after all other adjustments 		
SPRING 2019 EXAM 6US, QUESTION 16		
TOTAL POINT VALUE: 2.25		LEARNING OBJECTIVE: C3
SAMPLE ANSWERS		
Part a: 1.5 points		