

EXAM 6 – UNITED STATES, FALL 2019

17. (2.5 points)

Given the following information from an insurance company's 2018 annual statement (all figures are in thousands of dollars):

ASSETS

	Current Year Net Admitted Assets
1. Bonds	688,592
2. Stocks:	
2.1 Preferred stocks	15,539
2.2 Common stocks	56,376
5. Cash, cash equivalents and short-term investments	4,089
9. Receivables for securities	984
14. Investment income due and accrued	1,839
15. Premiums and considerations:	
15.1 Uncollected premiums and agents' balances in course of collection	46,045
15.2 Deferred premiums, agents' balances and installments booked but deferred and not yet due	22,596

LIABILITIES, SURPLUS AND OTHER FUNDS

	Current Year
28. Total liabilities	742,934
37. Surplus as regards policyholders	62,787

UNDERWRITING AND INVESTMENT EXHIBIT
PART 1B - PREMIUMS WRITTEN

Line of Business	1 Direct Business (a)	Reinsurance Assumed		Reinsurance Ceded		6 Net Premiums Written (Cols. 1 + 2 + 3 - 4 - 5)
		2 From Affiliates	3 From Non- Affiliates	4 To Affiliates	5 To Non- Affiliates	
35. TOTALS	280,430	133	6,040	1,073	129,839	155,691

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UNDERWRITING AND INVESTMENT EXHIBIT

PART 3 - EXPENSES

	Other Underwriting Expenses
2. Commission and brokerage:	
2.1 Direct, excluding contingent	54,087
2.2 Reinsurance assumed, excluding contingent	1,798
2.3 Reinsurance ceded, excluding contingent	21,769
2.4 Contingent - direct	86
2.5 Contingent - reinsurance assumed	14
2.6 Contingent - reinsurance ceded	180

OTHER INFORMATION

Ceded Unearned Premium - Affiliates	1,070
Ceded Unearned Premium - Non-Affiliates	66,006
Investment in Parent, Sub, & Affiliates	22,657

a. (1.5 points)

Calculate the 2018 IRIS ratio 4 (Surplus Aid to Policyholders' Surplus) for the company, and indicate whether it is in the range of usual values.

b. (1 point)

Calculate the 2018 IRIS ratio 9 (Adjusted Liabilities to Liquid Assets) for the company, and indicate whether it is in the range of usual values.

SAMPLE ANSWERS AND EXAMINER'S REPORT

FALL 2019 EXAM 6U, QUESTION 17	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: C2
SAMPLE ANSWERS	
Part a: 1.5 points	
<p>[1] Reinsurance Ceded Commission = Reinsurance commission ceded excluding contingent + Contingent commission ceded = 21,769 + 180 = 21,949</p> <p>[2] Reinsurance Premium Ceded = Ceded WP to Affiliates + Ceded WP to Non- Affiliates = 1,073 + 129,839 = 130,912</p> <p>[3] Ceding Commission Ratio = $\frac{[1]}{[2]} = 17\%$</p> <p>[4] UEPR Non-Affiliates (given in problem) = 66,006</p> <p>[5] Surplus Aid = [3] * [4] = 11,067</p> <p>[6] PH Surplus (given in problem) = 62,787</p> <p>IRIS Ratio 4 = $\frac{\text{Surplus Aid}}{\text{PH Surplus}} = \frac{[5]}{[6]} = 18\%$</p> <p>Outside usual range of values - usual range is below 15%</p>	
Part b: 1 point	
<p>[1] Adjusted Liabilities = Total Liabilities – Deferred and not yet due = 742,934 – 22,596 = 720,338</p> <p>[2] Liquid Assets = Liquid Assets – Investment in Parent, Sub, & Affiliates = 688,592 + 15,539 + 56,376 + 4,089 + 984 + 1,839 – 22,657 = 744,762</p> <p>IRIS Ratio 9 = $\frac{[1]}{[2]} = 97\%$</p> <p>Usual range for the ratio includes results below 100%. Therefore, this result is in the usual range.</p>	
EXAMINER'S REPORT	
<p>Candidates were expected to have an understanding of IRIS ratios, including what information to utilize from an annual statement to calculate them. Candidates were also expected to comment on the reasonableness of IRIS ratios for a given insurer.</p>	
Part a	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Candidates were expected to identify the correct premium and commission elements from the annual statement to calculate the Ceded Commission Ratio and, as a result, Surplus Aid. Candidates then needed to calculate IRIS Ratio 4 and comment on its reasonableness.

Common errors included:

- Failure to include both Reinsurance Ceded Commission elements when calculating Ceding Commission Ratio
- Failure to include both Reinsurance Premium Ceded elements when calculating Ceding Commission Ratio
- Including Ceded UEPR – Affiliates in the calculation of Surplus Aid
- Incorrect usual range used in determining reasonableness of IRIS Ratio 4 calculated

Part b

Candidates were expected to identify the correct asset and liability elements from the annual statement to calculate Adjusted Liabilities and Liquid Assets. Candidates then needed to calculate IRIS Ratio 9 and comment on its reasonableness.

Common errors include:

- Failure to subtract Deferred Assets from Total Liabilities when calculating Adjusted Liabilities
- Subtracting uncollected premium (15.1) from Total Liabilities
- Failure to subtract Investment in Parent, Sub, & Affiliates when calculating Liquid Assets
- Failure to include all the needed line items when calculating Liquid Assets
- Incorrect usual range used in determining reasonableness of the calculated IRIS Ratio 9

FALL 2019 EXAM 6U, QUESTION 18

TOTAL POINT VALUE: 2.75

LEARNING OBJECTIVE: C2

SAMPLE ANSWERS

Part a: 0.25 point

Sample 1

The company's RBC Ratio is between 200% and 300% and its combined ratio is greater than 120%

Sample 2

The combined ratio of 125% is greater than 120%

Part b: 2 points

Sample 1

$$285\% = 18m / ACL \rightarrow ACL = 6,315,789$$

$$RBC = ACL \times 2 = 12,631,578$$

$$12,631,578 = 0 + (300,000^2 + R2^2 + 500,000^2 + 10,000,000^2 + 1,000,000^2)^{.5}$$

$$7,629,992 = \text{Current } R2$$

$$300\% = 18m / ACL \rightarrow ACL = 6m \rightarrow RBC = 12m$$