

EXAM 6 – UNITED STATES, FALL 2019

15. (3.75 points)

An insurance company has a 100% quota share treaty with an authorized reinsurance company. The reinsurance company has provided a \$100,000 letter of credit held by the insurance company.

- Recoverables on known case loss & LAE reserves: \$800,000
- Recoverables on loss & LAE IBNR: \$750,000

The following table includes all 2018 reinsurance recoverables as of December 31, 2018:

Claim Size	Accident Date	Payment Date (insurer to claimant)	Payment Date (reinsurer to insurer)
\$2,000,000	January 2, 2018	February 5, 2018	in dispute
\$200,000	March 9, 2018	April 5, 2018	unpaid
\$75,000	June 30, 2018	August 5, 2018	November 15, 2018
\$25,000	July 20, 2018	August 5, 2018	unpaid
\$50,000	September 1, 2018	October 5, 2018	November 15, 2018
\$80,000	October 3, 2018	November 5, 2018	unpaid
\$300,000	October 20, 2018	November 5, 2018	unpaid
\$40,000	November 7, 2018	December 5, 2018	in dispute
\$800,000	November 29, 2018	unpaid	unpaid

Assume full claim amount is transacted on “Payment Date”, and reinsurance payments are considered due on “Payment Date (insurer to claimant)”.

a. (2.25 points)

Calculate the provision for reinsurance.

b. (0.5 point)

Calculate the provision for reinsurance assuming the \$100,000 letter of credit was instead collateral held in a trust with the reinsurer.

c. (1 point)

Identify one asset and three liability items on an insurance company’s balance sheet that come directly from Schedule F.

## SAMPLE ANSWERS AND EXAMINER'S REPORT

- Not explicitly stating the trend

### Part b

Candidates were expected to calculate the average case reserve outstanding from Schedule P. To receive full credit they must identify the components of the numerator and denominator either by number or description.

Common errors include:

- Excluding Part 4 (Bulk / IBNR)
- Not specifying the correct Part 5 triangle

### Part c

Candidates were expected to provide and substantiate a reason why the triangle of case outstanding may be important.

Common errors include:

- Stating a trend that was inconsistent with the description of the trend's impact on ultimate

### Part d

Candidates were expected to provide 2 valid reasons why data from Schedule Part 5 should be used with caution.

Common errors include:

- Generalizing the answer to all parts of Schedule P and not specifically focusing on Part 5
- Stating that the triangles are net of reinsurance and only providing 1 reason

## FALL 2019 EXAM 6U, QUESTION 15

TOTAL POINT VALUE: 3.75

LEARNING OBJECTIVE: C1

### SAMPLE ANSWERS

Part a: 2.25 points

#### Sample 1

$$\text{Slow-paying test: } \frac{\overbrace{200+25}^{90+\text{overdue exclude dispute}}}{\underbrace{200+25+80+300}_{\text{unpaid excluding dispute}} + \underbrace{75+50}_{\text{paid in last 90}}} = .308 > .2 \rightarrow \text{slow paying}$$

$$\text{Total recoverable} = \overbrace{800 + 750}^{\text{case+IBNR recoverable}} + \overbrace{2,000 + 200 + 25 + 80 + 30 + 40}^{\text{total paid recoverable including dispute}} = 4,195$$

$$\text{Total unsecured recoverable} = 4,195 - 100 = 4,095$$

## SAMPLE ANSWERS AND EXAMINER'S REPORT

Paid recoverable 90+ (including dispute) = 2,000 + 200 + 25 = 2,225

Provision for reinsurance =  $\max(.2(4,095), .2(2,225)) = 819k$

### Sample 2

$$\text{slow paying ratio} = \frac{\text{recoverables on paid} > 90 \text{ days OD}}{\text{all paid recoverables} + \text{amounts paid last 90 days}} \left. \vphantom{\frac{\text{recoverables on paid} > 90 \text{ days OD}}{\text{all paid recoverables} + \text{amounts paid last 90 days}}} \right\} \text{exclude dispute}$$

Paid recoverable > 90 days OD = 200,000 + 25,000 = 225,000

All paid recoverable = 200,000 + 25,000 + 80,000 + 300,000 = 605,000

Amt paid last 90 days = 75,000 + 50,000 = 125,000

Slow paying ratio =  $225000 / (605000 + 125000) = .308$

.308 > .2, so slow paying reinsurer

Provision for reinsurance =  $.2 * \max(\text{unsecured recoverables, recoverables over 90 days overdue})$

Unsecured recoverables = 605,000 (from above) + 2,000,000 + 40,000

+ 800,000 + 750,000

- 100,000

= 4,095,000

Recoverable over 90 days overdue = 225,000 (from above) + 2,000,000

= 2,225,000

Provision for reinsurance =  $.2(\max(4,095,000, 2,225,000))$

= \$819,000

### **Part b:** 0.5 point

#### Sample 1

Collateral held in trust with reinsurer does not qualify as collateral for reinsurance provision calculation because it's not held by the insurer.

RP =  $20\% * \max(4,195 - 0, 2,225) = 839 = 839,000$

#### Sample 2

Remove it as collateral as it's held by the reinsurer

$20\% * \max(2225, 4095+100) = 839$

### **Part c:** 1 point

One of the following responses for an asset item:

- Reinsurance recoverable on paid loss & LAE
- Amount recoverable from reinsurers

The following three responses for a liability item:

- Reinsurance payable on paid loss
- Funds held by the company under its reinsurance agreements
- Provision for reinsurance

## SAMPLE ANSWERS AND EXAMINER'S REPORT

### EXAMINER'S REPORT

The candidate was expected to demonstrate knowledge of Reinsurance Accounting and Schedule F by calculating the provision for reinsurance under two collateral scenarios and providing the balance sheet asset and liabilities that are taken directly from Schedule F.

#### Part a

Candidates were expected to interpret the reinsurance recoverables provided and correctly categorize them for use in formulas required to calculate the provision for reinsurance. Candidates were expected to check whether the reinsurer is slow-paying and use that conclusion to apply the correct formula and calculate the provision for reinsurance.

Common errors included:

- Including an additional \$800,000 in the total amount recoverable from reinsurers (excluding dispute) in the slow-pay formula. It is unclear whether this \$800,000 came from the recoverables on known case loss & LAE reserves or from the claim with accident date November 29, 2018; the source may have varied by candidate. This resulted in the candidate calculating a ratio less than 0.2, thus identifying the reinsurer as non-slow-paying.
- Miscalculation of the total recoverables including dispute. Candidates commonly presented the total recoverables as being only the sum of the recoverables on known case and IBNR loss and LAE reserves without including the paid recoverables. Alternatively, many candidates did the opposite and used only the paid recoverables as total recoverables and neglected to include the case and IBNR recoverables.

#### Part b

Candidates were expected to know that collateral held in trust is not counted as offsetting security in the provision for reinsurance calculation, as these amounts are under the control of the reinsurer.

A common mistake was stating that all collateral is treated the same and there is no impact to the provision from the change in collateral type.

#### Part c

Candidates were expected to identify one asset and three liability items on an insurance company's balance sheet that come directly from Schedule F.

Common errors included:

- Confusing which party makes or receives a transaction. Examples of incorrect responses include:
  - amounts recoverable by reinsurer
  - ceded amount payable to reinsurer
  - incorrectly identifying the reinsurer as the holder of the collateral instead of the reinsured

## SAMPLE ANSWERS AND EXAMINER'S REPORT

- Vague responses, such as not identifying the purpose and/or holder of the collateral (e.g., saying “total collateral”)
- Noting that the transaction related to premiums rather than loss and LAE
- Mixing up the concepts of recoverable and payable

<b>FALL 2019 EXAM 6U, QUESTION 16</b>	
<b>TOTAL POINT VALUE: 2</b>	<b>LEARNING OBJECTIVES: C1, D1</b>
<b>SAMPLE ANSWERS</b>	
<b>Part a: 1 point</b>	
<p><u>Sample 1</u>            For Structured Settlements, contingent liability is <math>1,300/35,000=3.7\%</math> of Surplus which is high considering disclosure is 1% for each life insurer the annuity is from. This is a significant amount of credit risk.            For High Deductible, the total case reserve under the deductible is 15.8% of total reserves and 43% of policyholder surplus. This is a significant portion of reserves and poses a high credit risk to the Company.            Overall the Company is exposed to a significant amount of credit risk from high deductible policies and structured settlements.</p> <p><u>Sample 2</u>            Subject to credit risk from the life insurer, as Company is the owner of the annuity, and no release of the liability is signed. The outstanding payment is \$1.3 million from the life insurer. This is 3.7% of Policyholder Surplus, is material and requires disclosure on name of life insurer and outstanding payment if the annuity is purchased from only 1 life insurer.            Reserves under the deductible is \$15 million, which is 42.9% of PHS and 15.8% of total unpaid loss and LAE reserves. This is material and the Company may not be potentially able to receive this amount, so substantial credit risk exists.</p> <p><u>Sample 3</u>  <math>\% \text{ Structured Settlement} = 1.3/35 = 3.7\%</math>  <math>\% \text{ High Deductible} = 15/35 = 42\%</math>            There is credit risk from the Structured Settlement since the insurer did not get a signoff release. A 3.7% of surplus could be considered high if it comes from a single company/insured. There is a significant risk from the high deductible policy since it represents 42% of the PHS.</p>	
<b>Part b: 1 point</b>	
<p><u>Sample 1</u>            In the notes to the Financial Statements, uncollectibility is a retrospective look at what is written off. In the SAO, it is made after conversations with management and looking at reinsurance companies and structures.</p> <p><u>Sample 2</u></p>	