

EXAM 6 – UNITED STATES, SPRING 2015

15. (4 points)

A primary insurance company enters into a 50% straight quota share reinsurance agreement with one authorized reinsurance company covering losses occurring during 2013. The reinsurance contract does not specify the date by which claims are to be paid by the reinsurer or when the primary insurer is required to notify the reinsurer of a covered loss. The primary insurer enters a paid loss recoverable into its financial accounts on the day the loss is paid. The primary insurer's known claim information for accident year 2013 as of December 31, 2013 is as follows (all figures are in thousands of dollars):

Claim Number	Accident Date	Date Primary Paid the Loss	Date Reinsurer Paid	Gross Paid Loss	Reinsurer Paid Loss
1	January 1	February 1	August 1	50	25
2	March 1	May 1	November 1	74	37
3	July 1	August 1	Not yet paid	110	0
4	August 1	September 1	Not yet paid	130	0
5	October 1	December 1	Not yet paid	120	0
6	November 1	December 15	Not yet paid	200	0

The reinsurer has also provided a \$100,000 letter of credit to secure the recoverables, and none of the reinsurance recoverables are in dispute.

a. (2.5 points)

Calculate the primary insurer's 2013 Schedule F provision for reinsurance.

b. (0.5 point)

Explain one way in which the primary insurer could modify the terms of the reinsurance agreement to reduce its provision for reinsurance.

c. (1 point)

Describe two differences between a statutory provision for reinsurance and an Appointed Actuary's discussion of reinsurance collectability in the Statement of Actuarial Opinion.

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SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 15	
TOTAL POINT VALUE: 4	LEARNING OBJECTIVE: C1
SAMPLE ANSWERS (BY PART, AS APPLICABLE)	
Part a: 2.5 points	
<p>Slow paying formula: $(\text{Recoverable over 90 days due}) / (\text{Total Recoverable} + \text{Paid in the last 90 days}) = 120 / (280 + 37) = 38\%$.</p> <p>Is the reinsurer slow paying? $38\% > 20\%$, yes slow paying.</p> <p>Provision = $\text{Max}(\text{Unsecured Recoveries}, \text{Recoverable over 90 days due}) \times 20\%$</p> <p>$\text{Max}(280 - 100, 120) \times 20\% = 180 \times 20\% = \mathbf{36}$.</p>	
Part b: 0.5 point	
<p>The following provide examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit; any one of the following received full credit:</p> <ul style="list-style-type: none"> • Change contract to say the reinsurer pays in specific number of days; Impact: some claims would no longer be overdue, and the reinsurer would no longer be considered slow paying • Require more collateral; impact: the unsecured reinsurance would be lower. • Reduce quota share %; impact: lowers reinsurance liability <ul style="list-style-type: none"> ○ Note: this answer got full credit because it is technically true, even though this was not really the intended answer. 	
Part c: 1 point	
<p>The following provide examples of responses having the necessary components to demonstrate knowledge of the topic and obtain full credit; any two of the following received full credit:</p> <ul style="list-style-type: none"> • The statutory provision is an arbitrary formula; the Statement of Actuarial Opinion (SAO) outlines qualitative risks and opportunities. • The formula used is arbitrary and may provide a false sense of security, but the SAO can better describe default risk. • Statutory provision does not account for contract specific nuances, whereas the SAO may add more color on this. • The statutory provision is strictly quantitative, but the SAO incorporates both qualitative and quantitative information. • The SAO takes into account outside information like insurer ratings and management's assessment of risks; the statutory provision is based on just schedule F data. • Statutory provision is retrospective, but the SAO factors in prospective information (such as management's input or financial ratings). • The Statutory provision does not take into account CAT loss risk for reinsurers, but the SAO can add more color on this topic. • The statutory provision is the minimum reinsurance provision, but the appointed actuary may believe the default/payment risk is greater and recommend a higher provision. • Statutory provision is prospective, because it assumes 20% of unsecured recoveries (or recoveries 90 days past due) are at risk for default in the future; the SAO may be based on past experience from the reinsurer and past default history. <ul style="list-style-type: none"> ○ See the examiner's report below. This response gets full credit only because a rationale is given. Had no explanation for why been given, this answer would not 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

get full credit.

- Statutory provision covers multiple years but the SAO can better address specific time periods.
- The Statutory provision only covers prospective reinsurance, but the SAO covers both prospective and retrospective reinsurance.

Note: full credit was given if the candidates mixed and matched the SAO vs. statutory provision comments in some of the bullet points above.

EXAMINER'S REPORT (BY PART, AS APPLICABLE)

Part a

Candidates generally did well on this question.

- The candidate was expected to know the formula for the slow paying test, how to interpret the results, and the formula for the provision for a slow paying insurer.
- The candidate needed to perform slow paying test correctly, arrive at the correct slow paying ratio, determine that the reinsurer is slow paying, and calculate the provision for reinsurance correctly, which includes writing down the correct formula (including MAX(unsecured, over 90 days due).
- Common errors include:
 - Not including the paid in the last 90 days in the denominator of the slow paying test.
 - Adding the unsecured recoverable claims to recoveries past due instead of taking the maximum.
 - Making the following math error: $20\% \times \text{MAX}(\$180, \$120) = \$90$

Part b

Candidates did satisfactory on this question, but many didn't elaborate enough.

- The candidate was expected to know enough about the statutory reinsurance provision to be able to suggest a change to the reinsurance contract to reduce the provision amount.
- The candidate needed to state a change to contract and explain why it would reduce the provision for reinsurance.
- Common errors include:
 - Not explaining why the change would reduce the provision for reinsurance.
 - Recommending a change that is not contractual.

Part c

Candidates generally did well on this.

- Common errors:
 - Stating the statutory provision is prospective and the SAO is retrospective with no explanation; if the candidate gave a compelling argument for why this is true, he or she did end up getting full credit. The text states that the statutory provision is for prospective reinsurance, not that the measure itself is prospective; by this logic, the SAO would also be prospective.
 - Some candidates provided only one difference between statutory provision and the SAO.