

EXAM 6 – UNITED STATES, FALL 2012

19. (5.75 points)

Using the following information for an insurance company as of December 31, 2011 (all figures are in thousands of dollars):

	Reinsurer #1	Reinsurer #2
Status	Authorized	Unauthorized
Recoverables, Total	120	150
Letters of Credit	0	60
Recoverables on Paid Loss Over 90 Days Overdue, Not in Dispute	25	10
Recoverables on Paid Loss Over 120 Days Overdue, Not in Dispute	15	0
Recoverables on Paid Loss, Total	95	30
Amounts in Dispute (included in line above)	1	7
Amounts Received from Reinsurer in Last 90 Days of Statement Year	35	0

a. (2.75 points)

Calculate the company's Schedule F provision for reinsurance.

b. (1 point)

Explain why the company's Schedule F provision for reinsurance is used for statutory accounting and why management's best estimate of uncollectible reinsurance is used for GAAP accounting.

c. (1 point)

At year-end 2010, the company's Schedule F provision for reinsurance was equal to management's best estimate of uncollectible reinsurance. At year-end 2011, the company's Schedule F provision for reinsurance increased while management's best estimate of uncollectible reinsurance remained the same.

Explain two reasons why the divergence in these two measures of reinsurance collectability may not indicate a worsening in the company's reinsurance position.

d. (1 point)

Discuss two major limitations of using the provision for reinsurance as a tool for monitoring the company's solvency.

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19) Sample Answer

Part a

Reinsurer #1 (Authorized, so test for slow-paying)

$$\begin{aligned}\text{Test Ratio} &= (\text{Paid Loss Recoverables} > 90 \text{ Days Overdue Not in Dispute}) / (\text{Total Paid Loss Recoverables Not in Dispute} + \text{Amounts Received in Last 90 Days}) \\ &= 25 / (95 - 1 + 35) = 19.37\%\end{aligned}$$

19.37% < 20%, therefore not a slow payer

$$\begin{aligned}\text{Provision} &= 20\% (\text{Amount} > 90 \text{ Days Overdue}) + 20\% (\text{Amount in Dispute}) \\ &= 0.20 \times 25 + 0.20 \times 1 = 5.2\end{aligned}$$

[If an assumption that no amounts in dispute were more than 90 days overdue is explicitly stated, the 0.20 x 1 could be omitted.]

[If an explicit assumption is stated that the “over 120 days overdue” amount is not included in the “over 90 days overdue” amount, then the test ratio becomes $(25+15) / (95-1+35) = 31.01\%$ and the slow-pay formula must be used:

$$\begin{aligned}\text{Provision} &= 20\% \text{ of Max (Total Unsecured Recoverables (including amount in dispute), Loss Recoverables} > 90 \text{ days due}) \\ &= 0.2 \times \text{Max}(120 - 0, 25 + 15) = 0.2 \times 120 = 24\end{aligned}$$

Reinsurer #2 (Unauthorized, so test for slow-paying is not needed)

$$\begin{aligned}\text{Provision} &= \text{Total Recoverables} - \text{Collateral} + \text{Min} (20\% \text{ Amount} > 90 \text{ Days Overdue, Not in Dispute} \\ &+ 20\% \text{ Amount in Dispute, Collateral}) \\ &= 150 - 60 + \text{Min}(0.20 \times 10 + 0.20 \times 7, 60) = 93.4\end{aligned}$$

Total Provision

$$= \text{Sum of provision of 2 reinsurers} = 5.2 + 93.4 = 98.6$$

Part b

Best Answer:

The Schedule F provision is used for statutory accounting because regulators, who are concerned with the potential insolvency of companies, prefer a conservative estimate of assets. In this view, a fixed formula is better than the opinion of company management, which may have an incentive to overstate assets or understate liabilities.

Management's best estimate is used for GAAP accounting, which focuses on current and potential investor's interest in the company as a going-concern and its future profitability. Investors want unbiased estimates (not conservative estimates or optimistic estimates) which the firm's management is best qualified to provide.

Acceptable Answer:

Statutory accounting is for regulators monitoring potential insolvency/liquidity issues; they use a conservative fixed formula to avoid management's potential understatement of uncollectability.

GAAP accounting is for current/potential investors interested in future profitability or company as a going concern; management is best qualified to give an unbiased estimate.

Part c

Best Answers (2 needed):

1. Increase in provision could be caused by a shift to unauthorized reinsurers, but management may believe that these reinsurers are just as reliable, i.e., the risk of uncollectability is unchanged.
2. The slow-pay test ratio for an authorized reinsurer could have increased slightly, but crossed the (arbitrary) 20% threshold, i.e. an increase from 19.4% to 20.1% does not represent a truly significant change in collectability risk, but increases the provision.
3. The management of the company may have lowered the collateral required from a reinsurer(s), e.g. due to good prior experience or improved credit rating, and believes that collectability risk has not changed.

Acceptable Answers (2 needed):

1. Shift from authorized to unauthorized reinsurers, but management believes they are just as reliable.
2. The slow-pay test ratio for an authorized reinsurer (e.g. Reinsurer #1) just barely crosses the 20% threshold, which is arbitrary.
3. Lowered or eliminated collateral requirement for reinsurer(s) that management believes are reliable.

Part d

Best Answers (2 needed):

1. The provision doesn't measure the most serious and controllable risk: inadequate reinsurance or poor reinsurance arrangements.
2. The provision ignores major indicators of potential uncollectability, including the capital structure of the reinsurer, or the extent of reinsurance liabilities in an adverse scenario.

Acceptable Answers (2 needed):

1. Discourages use of unauthorized reinsurers that may be cheaper **and** just as reliable.
2. Provision can be manipulated by company (specific example must be included)
3. *(if not mentioned in part c)* The 20% slow-pay threshold is arbitrary; a reinsurer can cross the line a little bit without a significant change in reliability.
4. *(if not mentioned in part c)* Encourages use of collateral, which will increase expenses to the company.

Examiner's Report

Common Mistakes on Question 19

19 a)

- Failing to test authorized (and/or testing unauthorized) reinsurer for slow-pay status
- Neglecting to subtract the disputed amount from paid loss recoverables in the test ratio
- Not including 20% of the amount in dispute (unless an explicit assumption was stated)
- Failing to add the two parts of the provision to get a final answer
- Calculation errors

19 b)

- No mention of the audience for each accounting method (statutory: regulators; GAAP: investors)
- No mention of the focus of each accounting method (statutory: solvency; GAAP: going concern or future profitability)
- Not mentioning the need for conservatism or a fixed formula when evaluating solvency
- Not mentioning that management can provide an unbiased estimate for GAAP

19 c)

- Answering the more general question of why the provision might differ from the management estimate, rather than addressing the specific situation where the provision increases relative to the management estimate
- Talking in general about the shortcomings of the provision (i.e. answering part d)
- Describing a scenario that changes the provision without explaining why the management estimate doesn't change
- Describing situations where the management estimate arguably should also increase (e.g. more disputed amounts)
- Dividing a single concept into two parts, i.e. both answers are variations of the same idea
- Simply describing a reinsurer(s) as "better" rather than describing greater reliability, lower credit risk, etc.

19 d)

- Dividing a single concept into two parts, i.e. both answers are variations of the same idea (e.g. provision encourages use of collateral and discourages use of unauthorized reinsurers)
- Restating answers that were more appropriate for part c
- High-level answers without examples or sufficient explanation
- Simply describing a reinsurer(s) as “better” rather than describing greater reliability, lower credit risk, etc.