Institute of Actuaries of India

Subject CP3 – Communication Practice

December 2022 Examination

INDICATIVE SOLUTION

Introduction

The indicative solution has been written by the Examiners with the aim of helping candidates. The solutions given are only indicative. It is realized that there could be other points as valid answers and examiner have given credit for any alternative approach or interpretation which they consider to be reasonable.

Solution 1:

30th November 2022

From: Actuary@abc.com
To: CDO@abc.com

Sub: Clarification post CEO's meeting

Dear Mr. XYZ,

This email is about our discussion post the CEO's review meeting on how higher topline growth can sometimes be suboptimal situation for the Company.

The Company has achieved 20% higher than expected growth, which is good on the size and market share basis. However, there are other financial aspects of a Company which may dilute the overall benefit of increased growth; for example – Profitability or Solvency ratio, as explained below:

Here, I compare the expected financial position for period from April to September and the actual performance of the Company.

		Amount in 000s
Account Head	**Expected position**	**Actual Position**
Gross Premium	100,000	120,000
Reinsurance Premium	(40,000)	(48,000)
Net Premium	60,000	72,000
Excess of Loss Reinsurance Premium	(6,000)	(6,600)
Unearned Premium Reserve (UPR)	(18,000)	(24,420)
Net Earned Premium	36,000	40,980
UPR %	30%	34%

Reinsurance arrangement

The revenue booked by the Company is on a Gross basis i.e., without considering impact of any reinsurance arrangement. However, net result on Company financials is always net of reinsurance. So, INR 2 crore of increase Gross premium has only resulted to INR 1.2 crore of Net premium. Further, the Company has an Excess of Loss reinsurance arrangement i.e., the Company pays a lumpsum fee to the reinsurer to protect itself from large or catastrophic losses. This lumpsum varies marginally by the premium net of other reinsurance arrangements. So, impact of growth is further reduced by INR 6 million.

Earning of Premium

Now, this business is written in the last 6 months however, the claims may arise in upcoming months too. So, to ensure the Company has the capacity to pay claims in future, the regulator mandates the creation of Unearned Premium Reserve (UPR). This distributes benefit of premium growth over current and future years. As indicated in the table above, UPR as % of Net premium is higher than that expected.

Consider that a premium of INR 100 was booked in April-22 and INR 500 was booked in September-22. So, more than half business will be earned or given credit next year. ***Later the majority business gets booked, lesser is the growth credit in current year's financial performance.***

Claims & Commission impact

Amount in 000s

Account Head	Expected position	Actual Position
Gross Paid claims	(23,400)	(18,646)
IBNR	(3,000)	(2,391)
Total Gross claims	(26,400)	(21,036)
Reinsurance Claims	10,560	8,415
Net Claims	(15,840)	(12,622)
Loss Ratio	44%	31%
Gross Commission	(20,000)	(31,200)
Reinsurance Commission	2,000	2,400
Net Commission	(18,000)	(28,800)
Net Commission Ratio	30%	40%

The above table shows how the existing reinsurance arrangements help reduce the net impact of claims and commission on the financial performance. The figures above confirm that the increased business has been booked in lesser loss segments i.e., lesser loss ratio; however, this business has been booked at higher average commission i.e. higher commission ratio. This creates a timing mismatch in the financial statements

To recall, the above paragraph explained the earning (distribution) concept for premium and claims. However, the regulator does not permit this concept to be applied to commission payouts as this is a known and fixed expense. So, all commission expenses get booked on the day the policy is booked; whereas, benefit of low claim business gets spread over multiple years.

Hence, the strategy of saving at all overall lifetime of policy level is not helping the Company on a financial year basis.

Solvency

Another impact of increase in business can be on the "Solvency Ratio or position" of the Company. The regulator mandates each company to hold extra reserves for any unforeseen events like reinsurer default or investment market crash etc. This ratio is prescribed by the Regulator as a function of business booked and Net claims. In this formula, the more profitable business or lower loss ratio business that a Company books, the higher level of extra reserves the Company needs to hold. The below table demonstrates how this has worked against the Company in current situation:

Amount in 000s

Account Head	Expected position	Actual Position
Expenses	(2,500)	(2,500)
Investment Income	3,500	4,468
Profit Before Tax	3,160	1,527
Tax	(948)	(458)
Profit After Tax	2,212	1,069

Available assets for solvency	23,212	27,879
Solvency Ratio	3.02	3.01

The increase in available assets was not sufficient to cover for the increased requirement of extra reserves. So, the Solvency ratio i.e., Required/Available assets is lower. This ratio is a very critical parameter for measuring financial strength of the Company and is regularly published in public domain. Hence, it is important that this ratio remains constant or increases for any Company.

To conclude, having a higher profitable growth helps a Company in the long run; however, considering the financial regulations applicable to our Company, sometimes this can be an unfavorable phenomenon in the short run. Hence, while framing any strategy it is important to consider the short term and long-term impact on the business.

Hope the above description was helpful to solve your query!

Please feel free to discuss any further query that you may or write to me at Actuary@abc.com

Regards,
Actuary

[95 Marks]

Solution 2:

Jargons explained:

- UPR
- Excess of Loss
- Solvency

Jargons not explained:

- IBNR
- Investment income
- Formula of Solvency

[1/2 mark for each correct answer, total of **3 Marks]**

Solution 3:

Loss ratio is the proportion of premium that is used to pay claims (and not towards expenses). It helps track the profitability of business being booked.

[2 Marks]

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