Institute of Actuaries of India

Subject CP3 – Communication Practice

November 2019 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:

Dear Ms. A Bhat,

Thank you for your email. We understand that you may have concerns on these aspects and we have tried to address them.

Fund available at the end of the term

Your product had an option to invest in two funds one of which invests for the most part in stocks of companies and the other one which invests in government bonds and bonds of companies. You had chosen to invest 75% of your premiums in the equity fund and the balance 25% of your fund in debt.

It is not known at the outset what returns can be expected from these funds. We therefore need to make assumptions of what would be the future returns. In order to be objective and not create unrealistic expectations from customers the company has a policy on how to set these assumptions. For the debt fund the return expected to be earned is the interest rate that is applicable for government bonds. In general it is expected that investments in equity or the stock markets would be higher over a long term. Therefore the returns assumed on the equity funds are higher by 2% as compared to what we assume on the debt fund. Please note that in reality returns could be lower or higher and could vary considerably from time to time. In addition there is more certainty of returns in the debt fund as compared to equity fund.

The statement that we sent to you on 1st December 2019 has details of the fund value as on that date. For estimating what could be available at the end of the term we have used returns of 5.5% p.a. and 7.5% p.a. for the debt and equity funds respectively. This gave a fund at the end of the term of about Rs.6.26 million under the Life Stage option and of about Rs.6.61 million under the non- Life Stage option. We will explain what the two options mean in further sections.

The statement sent to you on March 1, 2020 allows for returns for the past three months and also the effect of the new assumptions of returns which have been lowered to 5% p.a. and 7%.p.a. The assumptions of returns are reviewed periodically and if interest rates are higher or lower for a sustained period of time the rates are revised accordingly. You may be aware that the economy is going through a tough phase and interest rates are expected to be lower. This has resulted in your expected fund at the end of the term to be lower. It is now Rs.6.12 million under the LifeStage option and Rs.6.37 million under the non Life Stage option.

Life Stage option

This options lets you move your funds to the debt fund and directs all your future premiums to this fund. The rationale for this is that equity funds are more volatile, meaning the returns could go from positives to negatives in a short span of time. It may be better that closer to retirement that the savings towards annuity are not exposed to this kind of risk. The debt fund earns more stable returns. Another advantage is that you save on the fund management charge. The disadvantage is that you will move from the funds with a potential for higher returns to a fund which will fetch lower returns. This decision to stay with the current fund options or to move to the Life Stage option needs to be taken by taking into account any other savings you may have.

Annuity prices

The company invests the annuity purchase price so that it maximizes the return with the constraint of minimizing the risk. The return the Company is expected to earn decides the annuity rate. Another key factor is the number of years for which annuitants are expected to live on an average. This average decides how long the fund is expected to last and this is reflected in the annuity rate quoted to the customer. These annuity rates are reviewed frequently for interest rate changes which determines the return that the Company can expect to earn from investing the annuity purchase price. Though other factors including the average life expectancy of annuitants are reviewed less frequently, one such review was carried out recently due to which annuity rates have dropped. We can assure you that there is no error in the fund statements or in the annuity rates.

Just to summarise, if you do buy an annuity now you would be locked into these rates and therefore you are protected against interest rates going down further. However, if interest rates go up then you would have lost out on an opportunity to have higher income in your retirement. In case you decide to wait for some time or till the end of the term, the fund will continue to be invested and therefore is expected to earn returns. In the Life Stage option it is unlikely that returns will be negative or very high. In the non Life Stage option the returns can be very high or very low or somewhere in between. It would be better if you could discuss these aspects with a financial planner if you have one before deciding.

Please do let us know if you need any other information. We would be happy to answer them.

Regards

Customer Service Executive **[90 Marks]**

Solution 2:

The way annuity pricing is done and the reasons for the repricing are not relevant from the customer point of view except to the extent that the customer is interested in movement of annuity prices. I did not explain what was the trigger for repricing annuity. While I or the company might have a view on the way interest rates and equity markets might move I realize that as a Company we cannot convey such views

In demonstrating the fund growth there is an implicit assumption that the equity returns are correlated with debt returns and there is an equity risk premium of 2%. This is a practical way to set assumptions of returns without too much of subjectivity.

I avoided jargon or explained words and phrases like "annuitant mortality", "fund earning rates", "experience of annuitant mortality", "volatility", "uncertainty of returns" and "projecting fund values". **[5 Marks]**

Solution 3:

The product is a unit linked product and the investment risk is completely borne by the customer. In addition a product like annuity is very sensitive to interest rates. At times of market volatility it may be advisable to switch out of equity. But returns could also be very high which could mean that the annuity available for life could be higher. These risks were highlighted. Similarly uncertainty around interest rates is an important factor which was also highlighted. **[5 Marks]**

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