**2011 S2**

**Q1** a) *The difference in the key responsibility btw an Appointed Actuary and Board of Directors:*

* The Appointed Actuary is an adviser to the Board of Directors.
* The Board of Directors ultimately takes responsibility for decisions concerning the company.

1b) *To communicate effectively to the Directors via FCR:*

* The report should be well structured and subdivided into various sections.
* Include a contents page.
* At the start of the report, there should be an executive summary focusing on the key issues and recommendations.
* The report must comply with PS200 by covering all the topics and requirements of the standard.
* The technical details should be shown in the Appendices.
* As the directors are from a non-actuarial background, one would avoid the use of actuarial jargon.
* One would need to explain complex actuarial concepts in simple terms.
* The use of graphs and table to present actuarial results would greatly assist the directors in comprehending the messages that the Appointed Actuary is trying to convey.
* Should link experience variation and effect of change in assumptions to a concept that the directors would understand such as impact on profit, solvency or capital adequacy.
* Include a dictionary of technical and insurance terms in one of the appendices.

1c) *Issues that may arise with actions to resolve them include:*

|  |  |
| --- | --- |
| Issue | Actions to Resolve the Issue |
| **Assumption Setting**  By 30/9/2012, Online life would have only been operating for 6 months. It won’t have enough experience to form assumptions for policy liability calculations. | It will likely revert to the assumptions used in pricing. Alternatively the solution would be to use industry experience studies, reinsurers’ advice or seek advice from actuarial consultants. |
| **Data Integrity**  In the FCR, the Appointed Actuary must comment on data integrity issues.  As the company is new, actuarial extracts will be required for the first policy liability valuation and there could be issues with the data integrity of actuarial extracts. | Data will need appropriate checks such as reasonableness checks on data fields (age, duration, sum assured, annual premium etc). |
| **Expense Apportionment**  As a new company, there would not be enough data (including historical data) to determine appropriate drivers to split unallocated expenses between the two products appropriately. | Seek advice from actuarial consultants who may have experience with similar online insurance products. |
| **Lack of knowledge**  The actuarial team except for the Appointed Actuary lacks the knowledge, experience and skill in performing the policy liability valuation and other actuarial tasks required for the FCR. | Use training/education sessions and use experienced outside consultants. |
| **Risk Framework**  As part of the FCR, the Appointed Actuary must comment on the business risks and the risk framework.  As the company is new, a risk framework probably has not been set up yet. | Assist management in setting up a risk framework by identifying risks and actions to take if risks occur. |
| **Amount of Work Required**  As there is only six months to go before the 30 September 2012 policy liability valuation is due, there is a substantial amount of work required and limited actuarial resources. | Develop an action plan.  Recruit outside consultants. |
| **Company Administration Systems are Working as Intended**  As we have a new company, with new products with a new distribution channel and with possibly inexperienced staff, there is great possibility for the products to be administered incorrectly (not according to policy documentation). | Audit of administration systems by independent people. |
| **Conflict of Interest**  This concerns the Appointed Actuary’s role and his/her position as an employee of company.  The Appointed Actuary is responsible for the protection of the policyholders, where the company is acting for the interest of the shareholders. Thus when the Appointed Actuary is an employee of the company, he may come under pressure from senior management to change his recommendations. | When conflicts arise discuss with peers or have a mentor inside or outside the company. |

1d)

|  |  |
| --- | --- |
| *i) Reason* | *ii) Explain if it is absolutely critical that no dividend be paid* |
| In the first year the company may be making a loss because of the set up costs. Hence no dividend can be paid. | If there is a loss, there is no profit and hence it is impossible to pay a dividend. |
| Paying a dividend could breach the Solvency Requirement. | It is critical that no dividend be paid in this situation as it brings on all the consequences of a run off situation. |
| Paying a dividend could breach the Capital Adequacy Requirement. | It is critical that no dividend be paid in this situation as it brings on all the consequences of a full review by APRA and restrictions in running the business. |
| *\*The concepts of Capital Solvency Requirement and Capital Adequacy Requirement are replaced by PCR after 2013.* | |
| Paying a dividend could breach the Target Surplus policy. | It is not critical that no dividend be paid. A dividend can be paid but it means it is more likely that the Capital Adequacy Requirement will be breached in the future. |
| Rather than paying a dividend from the next three years’ profits, the company will have sufficient retained profits to fund the capital requirements of new business over the next three years. | It is not critical that no dividend be paid. A dividend can be paid, but it means a reduction in future dividends or an injection of capital may be required to fund new business. |

1e) *Actions you could take if the Directors ignore your recommendation and decide to pay a dividend to shareholders are:*

**Compulsory Point:**

* As a last resort, if the dividend paid meant the company breached the Solvency Requirement or the Capital Adequacy Requirement, use the whistle blowing powers of the Appointed Actuary under the Life Act and inform APRA immediately.

**Non-Compulsory Point:**

* Before it gets to this drastic stage, arrange a meeting as soon as possible with the Directors to discuss the issue and the consequences if a dividend is paid.

**Q2** a) Components of the Change in Policy Liabilities:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | **Actual** | **Expected** | **A - E** |
| **Policy Liability @ 30/6/2011** | | -238,500 | -238,500 |  |
|  | | | | |
| **Change in Policy Liability from:** | | | | |
| Change in IBNR: | 600  *=16,900 – 16,300* | | 900  *= 17,200 – 16,300* | -300 |
| Lapses of policies inforce at 30/6/2011: | 17,000  *= -237,800 – (-254,800)* | | 14,400  *= -240,400 – (-254,800)* | 2,600 |
| New Business inforce at 30/6/2012: | -19,900 | | -17,500 | -2,400 |
| Change in RDR assumption from 5.5% to 5%: | -7,400  *= -245,200 – (-237,800)* | |  |  |
| **Total change in Policy Liability** | -9,700 | | -2,200 |  |
|  |  | |  |  |
| **Policy Liability @ 30/6/2012** | -248,200 | | -240,700 |  |

*Each component of the change in policy liability needs to be allocated to the appropriate cashflow item as follows:*

**Gross Claims Experience Profit**

= Gross Claims Payments Experience Profit with interest (-4,314)

+ IBNR Experience Profit (= 300 from above)

= -4,014

Reinsurance can be handled a number of ways.

**Cost of Reinsurance Experience Profit**

* *Actual Cost of Reinsurance = Actual Reinsurance Premiums - Actual Reinsurance Claims*

*= -10,800 + 4300 = -6,500*

* *Expected Cost of Reinsurance = Expected Reinsurance Premiums - Expected Reinsurance Claims*

*= -10,700 + 7500 = -3,200*

* *Cost of Reinsurance Experience Profit = Actual Cost of Reinsurance – Expected Cost of Reinsurance = (Actual Re Premiums - Expected Re Premiums) – (Actual Re Claims - Expected Re Claims)*

From the information given in the question, this can be expressed as:

* *Reinsurance Premiums Experience Profit - Reinsurance Claims Experience Profit*

= – 103 – 3,287 = - 3,390

**Lapse Experience Profit**

There are no surrender payments on lapses.

= **–** (Policy Liability released on actual lapses–Policy Liability released on expected lapses)

= – (17,000 –14,400) = -2,600 (from above)

**New Business Experience Profit**

= Acquisition expenses experience profit with interest–New Business Policy Liability Experience Profit

= -2,465 + 2,400 (from above) = -65

**Change in RDR assumption**

= – Change in Policy Liability from change in RDR assumption

= +7,400 (from above)

**Calculate Total Explained Experience Profit**

|  |  |
| --- | --- |
| Investment Experience Profit | 0 |
| Gross Claims Experience Profit | -4,014 |
| Cost of Reinsurance Experience Profit | -3,390 |
| Renewal Expenses Experience Profit | -4,211 |
| Lapse Experience Profit | -2,600 |
| New Business Experience Profit | -65 |
| Change in RDR assumption | +7,400 |
| **Total Explained Experience Profit** | **-6,880** |

**Unexplained Experience Profit**

= Total Experience Profit – Total Explained Experience Profit = -6,900 – (-6,880)= -20

As the unexplained is a small -20, we have covered all the experience items.

2b) & 2c) *Comment on each experience item, whether or not there is a potential issue:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Experience Item** | **Profit Impact ($m)** | **Comments** | **Investigations** |
| Investment Income | 0 | * No issue as actual equals the expected investment earning rate. |  |
| Gross Claims | -4.0 | * An issue that needs to be investigated as there is a significant impact on profit with claim payments contributing -$4.3m. * No issue with Change in IBNR as has a small +$0.3m positive impact. | * First question is whether the **actual claims figure is correct**. One would check the actual claims paid against another source, possibly the experience study, although this may not be up to date. * Investigate the actual claims to see if there are **any large claims** which may have caused the claims experience loss. * Further investigation is required to **understand the nature of the claims**, whether the experience is a statistical deviation or the result of a rise in claim rates. * Analysis of claims experience **by number of claims and sum assured** would provide a credible indication of the level of claims incidence experience versus expected. * The large loss in YRT could be caused by poor underwriting. In this case, your investigation would show that extra deaths had occurred at the early duration. In this case, this is a risk management issue, so need to **review the underwriting process**. * **Compare against industry experience** such as recent IAA mortality experience. * Compare against **experience studies that the reinsurer has conducted**. |
| Cost of Reinsurance | -3.4 | * An issue that needs to be investigated as there is a significant impact on profit. Normally there is a small loss on reinsurance, reflecting the reinsurer’s profit margins. * No issue with reinsurance premium as experience profit is a small -$0.1m. * The issue is with the reinsurance claims where there is a $3.3m loss, with actual reinsurance recoveries 57% of expected reinsurance recoveries. * You might expect that there would be an increase in reinsurance claims to offset the adverse gross claims experience. | * If there are a few large claims causing the adverse gross claims experience, investigate whether the low reinsurance recoveries are **a timing issue**. The reinsurer may have yet to pay the reinsurance claim because there is usually a delay between the company paying the gross claim and the reinsurer paying the company in respect of this claim. * Review the accounts to check if the provision for accrual of reinsurance recoveries is working correctly. A provision for a reinsurance recovery should be raised in the accounts whenever a large claim (which is covered by reinsurance) has already been paid out. |
| Renewal Expenses | -4.2 | * An issue that needs to be investigated as it is a very large item in terms of impact on profit. | * Check whether this relates to a direct expense (such as renewal commission) or to indirect expenses, where expenses need to be apportioned. * **Review expense allocation by product**. Check to see if there is an offsetting expense experience profit on other products, which might indicate an error in the expense allocation process. * Check expense allocation between acquisition and maintenance expenses. Perhaps there is an error (or change of allocation methodology) with too many expenses allocated to maintenance rather than acquisition expenses. * Check actual expenses against budgeted expenses, by product and type of expense. * Gain information on **any special one off costs** that may have occurred. * Check the expense apportionment from the current year and compare to previous years. This will identify if any business areas have changed their split up of expenses and this has resulted in more being attributed to this product than there should be. * Check modelled expenses in the valuation system, used to derive projected expected expenses for the year ending 30/6/2012. It is a requirement under LPS1.04 that the best estimate expense assumption set at 30/6/2011 must reflect the expected level in the year following the valuation date. |
| Lapses | -2.6 | * Not an issue as an 11% actual lapse rate is within 2 standard deviations (2 x 1%) of a 10% expected lapse rate. This is within the range for statistical fluctuations. |  |
| New Business | -0.1 | * No issue as a small negative impact. Higher sales have meant acquisition expenses have increased, but this has been offset by the increase in new business policy liability. |  |
| Change in RDR assumption | +7.4 | * An issue that needs to be investigated as this is the most significant item in absolute terms. Although a positive impact, it needs to be confirmed. | Confirm this by:   * **Checking the change in RDR assumption is consistent with the change in a benchmark yield over the year**, such as the 10 year. * Check size of impact by looking at the amount policy liabilities change by for a 1% change in RDR assumption (Source: 30/6/2011 financial statements). |

**Q3** a) i.

VIF = PV of future distributable profits

= Σt=1( Premiumst + Investment Incomet – Expensest – Commissiont – Claimst –

[PCR end of year t – PCR start of year t] ) x vt @ 8%

ii. *Step 1: The formula in i) can be re-expressed as:*

= Σt=1 (Premiumst + Investment Income on Policy Liabilities start of year and Net CF (t) – Expensest – Commissiont – Claimst

– [PL end of year (t) – PL start of year (t)]

– [(PCR end of year (t) – PL end of year (t)) – (PCR start of year (t) – PL start of year (t))]

+ Investment income on {PCR start of year (t) – PL start of year (t)}) x vt @ 8%

*Step 2:* which can be expressed as:

= Σt=1 (Premiumst + Investment Income on Policy Liabilities start of year and Net CF (t) – Expensest – Commissiont – Claimst

– [PL end of year (t) – PL start of year (t)] x vt @ 8%

*plus*

Σt=1 Investment income on {PCR start of year (t) – PL start of year (t)}

+ [{PCR start of year (t) – PL start of year (t)} – {PCR end of year (t) – PL end of year (t)} ] x vt @ 8%

*Step 3: which is:*

= PV of future MOS Profits for all Inforce Business

+ Value of Capital (**where Capital equals PCR(0) – Policy Liabilities(0)** ) @8%

*Step 4:*

= PV of future MOS Profits for all Inforce Business

+ (PCR(0) –Policy Liabilities(0) / 100) x Value of $100 of Capital

iii. So, VIF = 1200 + [100–(-200)] / 100 \* 70

= 1200 + 210 = 1410

3c) Adjusted Net Worth = Total Assets – Capital Adequacy Requirement - Other Liabilities

Appraisal Value = Adjusted Net Worth + Value Inforce + Value New Business

3d) ii. *Factors to be considered in setting the risk discount rate for an Appraisal include:*

* The part of the Appraisal Value that is being calculated, VIF or VNB. VNB may have a higher risk discount rate than the VIF, as there is greater risk and uncertainty associated with new business.
* The greater the uncertainty and riskiness of the YRT cashflows, the higher the risk discount rate.
* The assumed investment earning rate in the AV calculation, as the risk discount rate should be consistent with this.
* Tax rate and imputation credits.
* The published risk discount rates of the other life companies in the market.

**Q4** a) **i. Principle:**

In accordance with LPS1.04, there is a gradual release of profit margins in line with the later of:

* the service being provided to the policyholder under the insurance contract and
* the receipt of income relating to this service.

**ii. Service provided:**

For a disability income product, the service provided is income protection insurance where for premiums paid the insurer will pay the policyholder a regular income through claim payments whilst the policyholder is temporarily disabled and cannot earn his/her normal income.

**iii. Actual claims are more appropriate than actual premiums as a profit carrier:**

For a disability income product, actual claims occur later than premiums. Hence actual claims are more appropriate as a profit carrier than actual premiums, as it is more in line with the principle of LPS1.04 above.

**iv. Expected claims (adjusted for premium volumes) are more appropriate than actual claims as a profit carrier:**

If actual claims are used as a profit carrier, the wrong message is being sent regarding profits. If actual claims are high, then this makes planned profits higher, but this is counter intuitive. If claims are low, then this makes profit lower which is also counter intuitive.

Expected claims (adjusted for actual premium volumes) makes more sense as a profit carrier as it relates to the service being provided and gives the correct message about profit. If actual premiums are higher, then expected claims (adjusted for premium volumes) are higher, leading to higher profits, which is more sensible.

4b) i. *Economic assumption changes that may have contributed to profit volatility are:*

**Change in the risk discount rate assumption for active lives:**

* Under the accounting standards, the risk discount rate for the active lives policy liability must be calculated as the risk free rate of a matching replicating portfolio (typically 10 year commonwealth bonds or 10 year inter-bank swap rates).
* The impact of the change in the risk discount rate must be capitalised as it cannot be spread through profit margins.
* As the active lives policy liability is a large negative policy liability (i.e. an asset), there is no matching asset to offset the change in policy liability. Hence a change in the risk discount rate can cause a large change in the policy liability with a significant impact on profit.
* For example, a modest 0.5% increase in the risk discount rate increases the active lives policy liability by $30m (=$600m x 0.5% x 10) and thus generates a $30m loss.

**Change in the risk discount rate assumption for DLR:**

* Under the accounting standards, the risk discount rate for the DLR must be calculated as the risk free rate of a matching replicating portfolio (such as commonwealth government bonds or inter-bank swap rates).
* Even though the DLR is matched by suitable assets, profit volatility can arise as the change in the risk discount rate for the DLR may not be the same as the change in the market yield of the assets. Hence, the change in DLR does not match the change in the market value of the assets.

ii. *Non-economic assumption changes that may have contributed to profit volatility include:*

**Change in assumptions causing loss recognition:**

* If loss recognition occurs, profit volatility can arise from the capitalisation of changes in key assumptions (lapses, maintenance expenses, incidence rates and termination rates) that impact the active lives policy liability.

**Changes in IBNR assumptions:**

* Profit volatility can arise from changes to the IBNR assumptions (risk claims ratio and average delay period), as the impacts are immediately capitalised and flows directly into profit.

**Changes in RBNA assumptions:**

* Profit volatility can arise from changes to the RBNA assumptions (risk claims ratio and average delay period), as the impacts are immediately capitalised and flows directly into profit.

iii. *Experience items that may have contributed to profit volatility include:*

**Retained Earnings:**

* Of the $900m Retained Earnings, $600m relates to the negative policy liability which will unwind at the risk discount rate. This leaves a large $300m in physical assets, which will earn a significant amount of interest (as part of the IORE) and hence will be a large component of the profit. Hence any variation in actual investment earning rates will have a volatile impact on profit.

**Lapse Experience:**

* Although no surrender value is paid when a policy lapses, there is a loss as the negative policy liability is released with loss of future premiums to recover the acquisition costs.
* As the active lives policy liability is a large negative policy liability (i.e. an asset), a small variation in the actual lapse rate from the expected lapse rate can cause a large change in the policy liability with a significant impact on profit.

**Incidence Experience:**

* The incidence rate experience impacts on the number of new claims and the size of the DLR for these new claims and thus can have a significant impact on profit.

**Termination Experience:**

* Given the size of the DLR, the variation in the termination experience rate from the expected termination rate can significantly change the DLR, either increasing or decreasing the DLR. Thus it can have a significant impact on profit.
* Even if the overall termination experience matches the assumption, the termination experience in the shorter durations can be different to the experience for the longer durations. If the shorter duration claims are recovering more than expected, but the longer duration claims are not recovering as expected, the DLR will increase from the longer duration claims and will reduce profit. Whereas if the reverse happens, the DLR will decrease and profit will increase.

4c) *Actions that can be taken to overcome profit volatility include:*

**Change Commission Structure:**

* For future new business, change the commission structure of the product from high upfront commission to lower upfront commission and higher renewal commission. The negative policy liability for new business will decrease as upfront commission, the major contribution to the high acquisition costs, is reduced.
* This results in a decrease in the size of the negative policy liability, as the run off of old business with higher negative policy liability is replaced by a smaller negative policy liability from new business.
* A smaller overall negative positive policy liability means the impact of changes in economic assumptions and lapse experience will have a less volatile impact on profit.
* Even better would be to pay advisers level commission in respect of new business, with positive rather than negative policy liabilities for new business. This may be hard to achieve as advisers must be persuaded to receive level commission each year rather than high initial commission and lower renewal commission.

**Reinsurance:**

* Use quota share reinsurance (where the reinsurer pays a fixed proportion of each disability claim) or surplus reinsurance (where the retention limit is set on a policy basis, but is set at a fixed $ amount). This reduces the DLR reserve the company needs to hold, and makes the profit less sensitive to changes in termination rate assumptions, incidence and termination experience. The greater the proportion the reinsurer pays, the greater the reduction in profit volatility. However, reinsurance costs will reduce profits.
* Use excess of loss reinsurance whereby the reinsurer pays say 90% of claims, once the cumulative claim payments reach a specified level for each policy. This reduces the DLR the company has to hold at the longer duration claims. As these are the larger DLRs and the most sensitive to termination experience, profit volatility is dampened.

**Diversification:**

* Having a wider product range which diversifies the type of risks the company is exposed to and which profit is sensitive to.
* The risks associated with the other products need to be different to the risks with the disability income product. Examples of different type of risk include lump sum term products (mortality, TPD and trauma risks), annuities (longevity risk) and investment linked products (no protection risk).
* Diversify target market, by selling new business across various geographic regions. This reduces the risks associated with local fluctuations.
* Diversify distribution methods by using different distribution channels. This reduces the risk with fluctuations associated with particular distribution channels.

**Other:**

* Change the product features for new business by restricting the benefit period to 1 and 2 years. This reduces the number of longer duration claims and hence reduces the size of the DLR, where the DLR is most impacted by termination rate assumption changes and termination rate experience.
* If necessary, employ more experienced claim managers who can focus on the shorter duration in payment policies. By adopting strategies that encourage recovery at the shorter durations, you prevent these claims becoming longer duration claims with subsequently larger DLR.
* Commute future claims payments to a lump sum, for the longer duration claims in payment. This also reduces the number of longer duration claims and hence reduces the size of the DLR.

**Q5** a) [Not relevant] *The following explains what is meant by the Capital Adequacy Liability and describes how it is calculated:*

* The Capital Adequacy Liability is the PV of future outgo less present value of future inflows using conservative assumptions.
* The starting point for the calculation should be the best estimate liability, with margins for prudency added to the best estimate assumptions.
* Appropriate ranges for margins to assumptions are prescribed in LPS3.04, and the Appointed Actuary has scope to choose a point estimate within these ranges.
* Assumptions cover servicing expenses, mortality and lapses.
* The calculation needs to be done at the RPG level of granularity.

5b) The New Business Reserve may be zero because by paying no dividends over the next three years, the profits generated when added to existing retained profits and capital are sufficient to fund the capital requirements of new business over the next three years.

5c) i. A FITB arises when the market value of an asset falls below its purchase price, thus generating an unrealised loss.

A FITB can only be used to the extent that there are unrealised capital gains on other assets, generating a deferred tax expense.

ii. [Not relevant]

* The Solvency Standard considers the capital position of a company in a run off situation.
* Assets (including those with unrealised capital gains) may need to be sold quickly and at a value much less than their purchase price.
* This means there are no unrealised gains generating a deferred tax expense that the FITB can be offset against. Hence the reason why a FITB is an inadmissible asset.
* The Capital Adequacy Standard considers the context of an active and viable ongoing concern.
* This means there will be a range of assets which may either have unrealised gains or unrealised losses from the change in market value over the normal course of business over time.
* Under this scenario, it is more likely that FITB generated from unrealised losses will be able to offset deferred tax expense from unrealised gains. This is why a FITB can be an admissible asset.

5d) *Points to raise in response to the CFO:*

* The capital adequacy margin is broadly intended to represent a 1 in 400 year event. Even if best estimate mortality is improving, this does not say anything about the variability of mortality. i.e. the points in the tail of the distribution of future mortality outcomes.
* To change an existing margin one would generally need some form of new analysis that suggests the existing mortality assumption margin is no longer appropriate.
* It would be useful to understand how the 40% was derived, before assessing whether there is justification for a lower margin.
* It may be worthwhile looking at company’s mortality experience over all available years to assess the variability of mortality for the company. However, if there are only a few years of credible mortality experience this may not provide appropriate justification for changing the margin.
* It may be worthwhile examining the company’s underwriting approach and whether there have been any changes to this approach in recent years. Generally speaking, a more stringent underwriting approach would give the Appointed Actuary more confidence to apply a lower prudency margin.
* Given the company is not large, it is possible that it is not well diversified with respect to mortality risks in terms of target market, distribution channel and geographic regions, which may warrant a higher estimate.
* I must comply with the Capital Adequacy Standard LPS3.04, which requires me to set the capital adequacy mortality margin reflecting the company’s current risk factors relating to mortality. If the company is still exposed to these risk factors, I cannot reduce the capital adequacy margin as this would lead to non-compliance with the standard which would put me at risk of professional negligence.

5e) Memo to CFO

From: Appointed Actuary

Subject: Capital Injection in Excess of $20m is Required

**Introduction**

The purpose of memo is to explain the reasons why a capital injection in excess of the $20m amount is required, including the specific risks the company faces.

**Target Surplus Requirement**

* Company may wish to hold an amount of target surplus above the Capital Adequacy requirement.
* General reasons for doing so include:
* So as to have a buffer above any regulatory capital breach as opposed to being right on the limit.
* It is strongly recommended by APRA.
* So as to understand threats to the capital adequacy position before they materialise.
* To satisfy a credit rating.

**Specific Company Risks**

Reasons specific to the company include:

* The company continues to grow quickly. To the extent that YRT new business exceeds SPT new business, this will imply a capital strain which means that a New Business Reserve will be required to be established. This will increase the capital adequacy requirement.
* For the single premium term business, there is a mismatch between the cash assets and the capital adequacy liability (present value of future death claims). The company may be exposed adversely to a greater change in yields than allowed for under the Capital Adequacy Requirement.
* The company may potentially incur an operational risk style event which is not allowed for under LPS3.04.
* A very adverse year of claims (or a pandemic type event) will also mean the company will have a shortfall in meeting its capital adequacy requirement.
* A very adverse year of additional expenses incurred will also mean the company will have a shortfall in meeting its capital adequacy requirement.
* A possible reinsurer default could mean the capital adequacy requirement may be breached.

Yours Sincerely, Appointed Actuary