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Subject F202 — Life Insurance

Specialist Applications

EXAMINER'S REPORT

QUESTION 1

A South African life insurer is investigating the impact of the Solvency Assessment Management (SAM) framework on its required capital and the management actions that could be used to reduce it.

- i. Explain how management actions can be used to reduce the life insurer's SCR, and the practical limitations thereof.**

This question was answered surprisingly poorly. Many candidates discussed general actions that management could take while running the business (closing to new business, new reinsurance purchase etc.) as opposed to management actions in the context of particular shocks within a solvency calculation (altering risk rates, reducing bonus levels etc.).

A large portion of life assurance policies in South Africa allow the long-term insurer to adjust

- charges for risk benefits
- expense charges
- policy value bases (i.e. surrender or maturity values)
- bonus rate, and
- non-vested values

when adverse circumstances arise.

These adjustments are referred to as management actions or the “loss absorbency of technical provisions”.

In calculating the liabilities under the SCR for the various stress scenarios, it is appropriate to consider the management actions that are likely to be taken in the ‘adverse circumstances’ of the stress scenario.

The use of management actions therefore reduces the total liabilities under each SCR scenario, and therefore reduces the SCR.

Management actions can only be allowed for in the SCR calculation if they are allowed for in the policy contract.

Management actions must be consistent with the product PPFM (where applicable).

Management actions must take into account policyholder reasonable expectations that will have been formed by the PPFM and past actions by the company in similar circumstances.

The Management actions used in the SCR calculations must be approved by a management structure of the company (e.g. the Board).

The Board or other management structure must be satisfied that the management actions would be taken should the envisaged circumstances arise.

In practice this means considering the management actions that the company realistically feels it will take, and not just the maximum permitted by the policy conditions.

Management actions should be objective, realistic and verifiable – i.e. there should be evidence that the company has acted in the manner envisaged in the management actions when similar circumstances have arisen in the past.

However, not all of the stress scenarios envisaged in the SCR calculation would have occurred in the past so the discretion in management actions would not have been tested under severe scenarios in the past.

In calculating the effect of management actions allowance should be made for any changes to assumed policyholder behaviour as a result of the management action.

In calculating the effects of management actions, companies need to consider whether the shock is an industry-wide or company-specific event.

For a company-specific event, competitors will not be making similar changes, and hence competitive pressures may constrain the changes the insurer can make.

Furthermore an explicit adjustment is required within the Market Risk module to ensure that loss-absorbency is not double-counted by being taken into account in several sub-modules that give a larger effect than would be allowed under a combined scenario.

ii. **Discuss the possible management actions, and potential shareholder actions, that the insurer could utilise to deal with adverse experience for the following types of products**

- **Pure Risk Products**
- **Discretionary Participation Investment Products**
- **Universal Life Products**
- **Annuities**

Due to the poor understanding of the management action concept in (i) this question was answered similarly poorly. In some instances the correct actions were raised but candidates spent too much time going through actions that were not relevant.

Pure Risk Products

Premiums can be increased at the end of the guarantee term.

Alternatively cover or the rate of increase cover (if applicable) could be reduced at the end of the guarantee term.

The ability to do this will depend on competitive pressures.

In particular, where the adverse experience is company specific rather than industry-wide, the company may find it difficult to implement the increases.

A company would probably find it difficult to justify increasing premiums because of an adverse expense experience.

Discretionary Participation Investment products

Discretionary participating policies give the company discretion in declaring bonuses.

Management actions are an assumption of how the discretion in the bonus rules will most likely be exercised in the stress scenarios.

At least some of the SAM stress scenario should result in significantly low funding levels for these products.

The first management action available is to declare low bonuses (possibly zero) to improve the funding level.

For products that declare a monthly bonus, this change can be implemented quickly.

For products that declare bonuses less often (e.g. annually), there will usually be an interim bonus that can be reduced until the next bonus declaration.

For reversionary bonus (or conventional with profits products) terminal bonus can be reduced.

Reducing the regular reversionary bonus rate would not be something a company would undertake lightly because of the potential reputational risk.

If reducing future bonuses does not increase the funding level to meet statutory or internal requirements then additional actions can be implemented.

Shareholders could grant an interest-free loan to the portfolio to meet statutory requirements.

Such a loan would be repayable at the next bonus declaration, and the cost to shareholders is the interest on the loan.

The loan should be ignored when calculating market value adjusters for surrender values.

In a scenario where markets recover relatively quickly the interest subsidy would help the portfolio to get to a fully funded position.

Non-vested bonuses could be cancelled.

Cancelling non-vested bonuses carries a reputational risk though, and the company would want to avoid this where possible.

However, should some of the extreme SAM scenarios occur then it would seem a reasonable course of action.

An injection of cash from shareholders to restore (or partially restore) the funding level.

A cash injection is a direct (and potentially large) expense for the shareholders, and it would probably only be considered after a specified number of bonus declarations for which the portfolio has been underfunded.

The injection need not restore the funding level to 100%, but rather to a level from which the portfolio could be expected to recover to 100% in the normal course of events.

A combination of the cancellation of non-vested bonus and capital injections can also be considered.

The application of a market value adjuster to the surrender value when the funding level is less than 100% is also a form of management action, but one that is widely used.

Universal Life

Universal Life policies have an investment fund against which charges for expenses and risk benefits are levied.

If the policy conditions allow, then expense charges can be increased in the case of an expense overrun.

Risk charges can be increased after the expiry of the guarantee term without increasing the overall premium.

For policies that have high levels of cover compared to the savings element, there is a danger that the risk charges could exhaust the savings account, and that the policy will end up with a negative value.

Management actions in the case of a policy that is approaching this scenario could range from increasing the overall premium of the policy and/or reducing the cover amount.

Many Universal Life policies are invested in discretionary participation investment products, in which case the management actions discussed in the previous section would apply.

Annuities

There is no scope to apply management actions to a conventional non-participating annuity since the benefits are guaranteed.

For with-profit or participating annuities, pension increases (or bonuses) are discretionary.

The funding level of a with-profits annuity portfolio can be adversely affected by

- Poor investment experience
- Lower than expected mortality of annuitants
- Expense overruns

Management actions in the form of lower bonuses could be applied to improve funding level.

There is considerable reputational risk in providing low pension increases, however.

Actions such as a loan or capital injection from shareholders, as discussed in the Discretionary Participation section, can also be implemented.

iii. Explain the effect that Required Capital (and the Cost of Required Capital (CoRC)) has on a company's return from Operational EV earnings.

Candidates that had a good understanding of EV scored reasonably well on this question.

APN107 sets out guidance related to EV calculations and reporting.

Total EV = VIF + ANW – Cost of Required Capital (CoRC)

RC and CoRC therefore form part of the starting total EV value by which Earnings items are divided to get the return.

Embedded value Earnings are the change in Embedded value for the period after adjustment for any capital movements such as dividends paid, capital injections and the cost of treasury shares acquired or disposed of for the period.

Operational Embedded Value earnings are the EV earnings excluding Investment variances on in-force business and ANW, the effect of economic assumption changes and Exceptional items.

The RC and CoRC contribution to the Operational EV earnings, and therefore the Operational EV return are

- The CoRC in the value of new business
- The expected unwinding of the present value of capital releases
- The effect of operating experience variances on CoRC
- The expected return on RC

Changes in the overall level of RC (and cost of RC) may be shown as an Operational Experience variances, in which case they would affect the Return from Operational EV earnings, or as an Exceptional item, in which case they would be excluded from the Return from Operational EV earnings, but still included in the Return from Total EV earnings.

It is preferable to treat such changes consistently from one reporting period to the next.

Question 2

A large South African conglomerate listed on the JSE operates in a number of different sectors. These include asset management, provision of loans to individuals and small corporate clients, and private healthcare services.

For many years one of the businesses wholly owned by the conglomerate has been a small subsidiary life insurance company. The subsidiary has sold low volumes of individual term assurance contracts, keyman insurance and regular premium unit linked savings products. These products have primarily been sold to clients of the conglomerate's other businesses through the use of mailshots, internet offers and a small direct salesforce.

A new chief executive of the conglomerate has recently been appointed and is considering a number of possible courses of action.

The potential courses of action include :

- closing the life insurance company to new business and allowing the existing book to run off over time;**
 - selling the life insurance company or;**
 - investing in the life insurance company to achieve growth of new business premium income.**
- i) Discuss the factors to consider in closing the life insurance company to new business and allowing the existing book to run off over time.**

(Do not discuss why the company might have come to the decision to close for new business)

Discuss:

- General factors to consider when closing the life insurance company to new business**
- The impact of closure to new business on the statutory solvency position of the company**
- The impact of closure to new business on the investment policy of the company**
- The impact of closure to new business on the unit-linked funds in which policyholders invest**

A wide range of results were provided for this question. Better candidates simply provided a better breadth and depth to their answers. The better attempts covered a broad range of issues that needed to be considered and provided some detail for these issues that were relevant to the context.

The conglomerate will want to take the course of action where it earns the highest rate of return on capital employed, for a given acceptable level of risk.

However, the conglomerate will also take into account a large number of other factors, such as strategic considerations. It should also consider potential future changes in the regulatory environment.

General factors to consider when closing the life insurance company to new business

The length of time that it will take for the existing book to run off.

During this time period, the company is going to have to employ at least a minimal infrastructure (systems, customer services, actuarial support etc.) to manage that book of business. Alternatively it could employ an outsourcing company.

The company will have to decide whether to allow renewals and/or increments.

The costs involved in managing the book during the run-off period.

This will include taking into consideration the dis-economies of scale that will arise over time, particularly if kept in-house. For example, management and premises overheads will far outweigh the incremental per policy servicing costs.

In addition, in-force business will have to take the full burden of overheads normally attributed to new business.

An organisation that is not actively seeking new business might deliberately reduce its service standards to existing customers to reduce costs.

Although if they go too far and additional complaints are generated, dealing with these could offset the cost savings.

Hence, the unit cost per policy will increase over time as the book runs off. Outsourcing the administration may mitigate this, but also incurs an extra cost.

Increased lapses and surrenders following closure to new business will exacerbate this problem. These may occur for example as a result of policyholder concerns regarding the security of the company.

The one-off costs associated with closing the company to new business. For example: redundancy costs associated with making the sales force redundant, plus the staff involved in the production of quotes and administering new business.

The practical issues that the subsidiary might face as a result of making a large proportion of its staff redundant.

For example, the ability to retain the remaining staff needed to service the in-force book as it runs-off, and the need to move to smaller premises (or sub-let part of the existing premises) as its need for office space diminishes.

Some staff might be transferable to fill gaps elsewhere in the conglomerate

The company will take all factors into account and will project the cash flows of the business during run off. This will allow the conglomerate to calculate the capital support that may be required at each future point in time, the expected transfers each year to the shareholders, and hence the value of the company to the shareholders if the business is allowed to run-off.

This will be compared to the financial projections carried out for the other options that the chief executive is considering.

The company would need to consider the tax position of the company, which could change over time.

It could be XSE currently, then move to XSI in the absence of further new business expenses, but eventually return to XSE as the funds under management reduce.

How is the stock market expected to react to the closure of the life insurance subsidiary?

Is the share price likely to go up or down?

Is there likely to be any knock-on impact on the amount of business sold by the other businesses within the group?

For example, will customers who have taken loans from the loan and credit subsidiary choose to place their loan business with another provider, who can also provide the term assurance required to repay the loan in the event of the customer's death? (i.e. the customer may like the one-stop-shop option of being able to get the loan and term assurance cover from one organisation).

Is there likely to be any other impact on the other businesses in the group? E.g. is staff retention in the other businesses likely to be a problem as a result of the closure and redundancies?

The impact of closure to new business on the statutory solvency position of the company

The company will have to recognise all of the costs associated with the closure.

However, it will be able to release any expense provision held to cover the cost of closure to new business.

It will also have to allow in the valuation basis for the increase in unit costs over time due to the diseconomies of scale mentioned above, which is likely to worsen its solvency position.

The company may be able to pass on some of these costs to the unit linked policyholders, but only if expense charges are not guaranteed.

In practice, the extent of the increases may be limited by policyholder's reasonable expectations.

In addition, charge increases may lead to a significant increase in the lapse and surrender rates for the unit-linked business. This may not be in the subsidiary's best interests.

Claims volatility is likely to increase as the business runs off, which could increase the margins required in reserves. Therefore, reduce solvency.

Alternatively, reinsurance could be increased, but at a cost.

Depending on the free asset ratio prior to the closure, the subsidiary may require an injection of capital from its parent company to ensure that the subsidiary remains solvent.

However, it can take into account the fact that it will no longer require free assets to support new business strain.

The required capital will also trend downwards over time which will match some of the reduction in free assets.

The impact of closure to new business on the investment policy of the company

This could be minimal, because it would be usual for the company to match its term assurance and keyman insurance liabilities through investment in fixed interest assets.

Any non-unit reserves (e.g. required to match guarantees on the unit linked business) are also likely to be invested in fixed interest securities.

The unit fund liabilities would be exactly matched through investment in the chosen unit linked funds.

The level of free assets is likely to be low, since the company has only written without profits business in the past, and the subsidiary is 100% owned.

The conglomerate is likely to have withdrawn the profits from this business and invested these profits elsewhere, unless they were needed to support a desired free asset ratio, or leaving them in the subsidiary's insurance fund was chosen as the shareholders believed this would maximise the return on their capital.

This means that the free assets are likely to have been invested fairly cautiously, e.g. maybe in corporate bonds and a small proportion in equities.

If the free assets are substantial then a more aggressive stance may have been taken, and a larger proportion of the assets will be invested in equities, therefore will have to review this strategy going forwards.

The impact of closure to new business on the unit-linked funds in which policyholders invest

We are told that the conglomerate has an asset management company and hence it is likely that the unit funds offered to the policyholders are managed by that company.

It is also likely that these funds are offered to more clients than just this subsidiary, i.e. the asset management company has other insurance companies as clients.

If that is the case, and the policyholders of the subsidiary company only hold a small proportion of the units in the unit linked funds, then the impact on the funds will be minimal.

If, however, the subsidiary's policyholders are the only holders of units in the unit-linked funds, then the costs of selling assets to meet withdrawals from the fund may get disproportionately large as the fund decreases in size.

In addition, it may be difficult to manage certain funds once they fall below a certain size (e.g. a property fund), since the assets are illiquid and a single property may be large in value.

The withdrawal of units from such a fund over time would force the sale of assets, possibly when the asset class is depressed in value.

Some unit-linked funds might need to be combined as they decrease in size.

Unit pricing will move to a bid(or sell) basis.

ii) Discuss the factors to consider in whether or not to sell the life insurance company.

(Do not consider any quantitative assessments to determine the selling price and do not repeat factors discussed in part i.)

This question was reasonably answered. Poorer candidates tended to miss the points related to a willing buyer and the price that would be negotiated. This includes how future business and the brand would be valued as well as the costs (incurred and saved) of this option relative to the other options.

The availability of a buyer who is willing to purchase the life insurance subsidiary at an acceptable price.

The conglomerate is unlikely to get any goodwill value for the brand name, since the volumes of business it has sold are low and it has sold to customers within the group.

This means that the brand may not be particularly well known in the life insurance market and therefore not worth anything in terms of attracting future volumes of new business.

However, it may be that if the potential for selling products to the client base is there, this may have value to another company e.g. to sell non-life products or even non-financial service products.

The costs associated with selling the subsidiary would be taken into account, including the costs of hiring external consultants to broker the deal and provide legal and actuarial advice.

The sale would have to comply with regulations regarding the transfer of business and be approved by the courts.

The shareholders will want to satisfy themselves that the price negotiated for the company is comparable with the net asset value plus what they believe to be the present value of future profits (PVFP) from the existing (and expected future) book of business.

The shareholders would naturally be looking to maximise this value. They would also place value on the brand, even though a purchaser may not.

If there is any outstanding litigation, this could significantly reduce the attractiveness of the subsidiary and the price.

The conglomerate might have to give warranties or indemnities to the purchaser, which it might not want to do as it will still have contingent liabilities.

This balance of interests between the two parties (buyer and seller) would lead to the final negotiated price for the company.

The conglomerate would have to consider whether the negotiated price is sufficient.

In deciding this it would take into account not only the PVFP of the existing and future expected business, but also the costs avoided under option (i) (e.g. the redundancy costs, the costs of managing a business that is reducing in size year on year).

The conglomerate might decide that in order to achieve the optimal sale value, it should split the company and sell each element separately, rather than as whole.

Would selling this subsidiary lead to the expectation of the sale of other subsidiaries in the group?

Would retention of staff in the other businesses become an issue if other subsidiaries felt at risk from being sold? The company may want to sell it as a going concern from the point of view of its staff maintaining their jobs.

However, it may be attractive to investor (e.g. private equity fund) which may well close the company to new business and manage the portfolio to maximise emerging profits.

In this scenario, expense levels are important and it is likely that many staff would be made redundant in the process.

Some staff may not be wholly employed in the insurance subsidiary but instead in group support functions, and their future would need to be considered.

The conglomerate should take into account policyholder reactions to the proposal, since they are mainly clients of ABC's other businesses.

If the shareholders are unwilling to continue to underwrite insurance business risk, then this would be the best option.

iii) Discuss the factors to consider in investing in the life insurance company to achieve growth of new business premium income (measured as annual premium plus 10% of single premium) from its current level of R200m to R1 600m in three years (i.e. doubling the previous year's new business premiums each year).

Discuss:

- **the business plan and capital implications,**
- **product and distribution strategy,**
- **re-insurance strategy, staff impact and asset management.**

This question was reasonably well answered. Again, better candidates covered more relevant points. Some candidates missed the obvious points around the capital required to fund this option (and associated solvency points) and where this would come from.

Business plan and capital implications

Firstly, the conglomerate would have to decide how best to focus the investment in order to meet the proposed targets, and should develop a plan.

The conglomerate should also consider the feasibility of the target, i.e. whether it is realistic.

It should investigate market capacity, and take into account the potential actions of competitors.

The company should note that there is little point in increasing the volume of new business premiums written if the overall profit contribution is reduced due to a significant decrease in margins in order to secure the additional sales.

Detailed financial projections, showing all of the expected policy cash flows at each future point in time will be required.

These projections should take into account the benefits obtained from spreading overheads over a larger number of in-force policies, and any development and investment costs.

They should also take into account any impact on the life office's tax position.

The projections will also determine the statutory liabilities and the free assets at each future point in time and the timing and size of capital injections required from the conglomerate.

To determine whether this option is to be favoured, the return on capital employed will be considered.

But the company also must assess the risks inherent in investing further in the life insurance subsidiary. The risks may be assessed by carrying out sensitivity and scenario testing to look at the impact of assumptions varying from the central rate.

In particular the impact on the solvency position of the company and the need (and likelihood) of further injections of capital at future points in time should be investigated.

The risk of new business falling well short of the projected figures should certainly be analysed.

The conglomerate should assess whether there are other areas within the conglomerate that would generate higher returns from this level of investment, at an appropriate level of risk.

It needs to consider where it might obtain the capital from in order to support the life insurance company in this way. Successful growth might have a positive impact on other parts of the group.

The conglomerate would have to consider the capital that would have to be employed to support the new business growth. In particular to meet:

- the costs of investment in the company's infrastructure (IT systems etc.) to support the rapid expansion plans.
- the costs of meeting the development costs associated with launching new products (staff costs, marketing materials etc).
- the new business strain created as a result of writing large volumes of new business, to meet the acquisition costs and to set up the required reserves.

The company will to some extent want to minimise the amount of capital it needs to invest in the company, and this will influence the products that the company chooses to launch.

For example, in order to minimise the new business strain it may need to sell a significant volume of unit linked products that are designed to be capital efficient.

Product and distribution strategy

Products

The conglomerate would have to determine the products that the subsidiary should sell in order to achieve the growth target.

It may be that the existing products need to be repriced to make them more attractive, or additional features included.

Term assurance is a very price sensitive product and to achieve high volume sales in the insurance intermediary market a very keenly priced product is required.

Keyman insurance is a specialist product and is usually placed through the insurance intermediary market hence a review of the subsidiary's keyman product to make it suitable for the insurance intermediary market may have a significant impact on the volumes sold.

However, this is a fairly small specialised market and the company may want to consider whether it would be better investing its time and effort into products that are likely to lead to high volume sales.

Distribution

It would also have to determine the distribution strategy for the sales of these products. The subsidiary could consider building on the back of its previous distribution channel, i.e. through direct marketing, internet/cellphone apps and a direct salesforce to clients within the ABC group.

This could be done by launching new products that might be attractive to the clients of the conglomerate's other businesses, or by offering products that are complementary to the conglomerate's other businesses.

For example, the subsidiary could consider offering individual income protection and critical illness products.

It could use the services offered by the private healthcare subsidiary to manage the income protection and critical illness claims.

Similarly, the life insurance subsidiary could consider introducing a range of single premium bond products for investment in funds offered by the asset management company in the group.

Alternative distribution channels to be used by the subsidiary should also be considered, for example, selling through the insurance intermediary channel and internet/cellphone apps. This is likely to require changes to be made to the products to make them attractive, for example increased commission.

Reinsurance and investment strategy, staff impact

Reinsurance

The conglomerate will need to consider the extent to which it would need to purchase reinsurance in order to mitigate the risks inherent within the new business.

The conglomerate may also feel that it has to reinsure some business due to the lack of expertise within the subsidiary in writing the new lines of business.

The subsidiary is likely to need external help in pricing the products, putting in place improved underwriting procedures and in designing and implementing adequate systems.

It could also use reinsurance to alleviate the capital strain.

Investments

The company will need to consider its investment policy and asset allocation/switching strategy as a result of the new business.

In particular, it will need to consider whether it will use the expertise of the asset management company within the group to manage assets on its behalf (and negotiate a deal for this) or whether to have its own investment team and manage its own assets.

Staff

The conglomerate will need to consider the staff required to develop, market, sell and administer the new products.

It needs to be sure that it can recruit the necessary staff at a reasonable cost in its chosen location.

QUESTION 3

A South African life insurer is considering a quota share reinsurance arrangement on its range of risk-only products. It is also considering including a financial reinsurance transaction on this business. The quota share reinsurance would apply to the in-force book and new policies. The financial reinsurance transaction would apply to the in-force book at the date of the transaction only. One of the impacts of this decision being considered is the impact on the company's embedded value (EV).

- i. Discuss the potential impact on the EV through reinsuring the risk-only products on a 50% quota share basis and describe the changes to the cash flows that would be used in the EV calculation.**

This question was reasonably answered. Better candidates provided a fuller discussion around the various ways in which the cash flows could be impacted, decided which were more likely and provided an indication of the likely EV movement.

APN107 sets out guidance related to EV calculations and reporting.

APN107 states that reinsurance arrangements relating to covered business, projected reserves and cash flows should be net of outward reinsurance.

$$EV = ANW + VIF - CoRC$$

ANW = free surplus attributed to shareholders and the required capital to support the business.

The quota share arrangement would impact each of the three components.

VIF

The VIF of a block of business is the present value of the future shareholder cash flows projected to emerge from that block of business.

This would involve best estimates of future cash flows. These would include, for example, projected premium income, projected benefit outgo, projected expenses, projected commission, and projected investment return.

Under the quota share reinsurance arrangement the following would occur:

- The projected reinsurance premiums would become a new outgo to be included in the cash flows.
- The projected reinsurance claims would be included as an inflow.

- The projected reinsurance claims would be half of the projected benefit outgo.

If the reinsurers expected claims cost is the same as the company's then the reinsurance premium would be less than 50% of the gross premiums received. The insurance company will still be incurring all the administrative expenses and the reinsurer needs to acknowledge this in the reinsurance premium.

If the reinsurer's views on the expected claims is similar to the company's then the VIF is likely to reduce by the present value of the future profits that the reinsurer has priced into the reinsurance.

If the reinsurer's views of the expected claims cost is lower then the VIF could in fact increase. The company will be removing half the expected benefit outgo from the cash flows but the reinsurance premiums added could be less than this. (reinsurer is estimating more favorable experience than the insurer).

The reinsurer could also have a worse view of the future claims than the insurer. In this case the VIF would reduce significantly and the deal would probably not be made. The insurer would need to investigate why the reinsurer's views of the future experience is worse than theirs.

The shape of the reinsurance premium patterns would also have an impact on the VIF. If the reinsurance premium pattern is different to the expected claims cost pattern then there could be policy durations where the reinsurance cost is less than expected claims cost and vice versa.

VIF reduction is the most likely scenario.

ANW and CoRC

The reinsurance should result in lower required capital through a lower CAR (or SCR under SAM). This would result from shocks only being applied to the lower amount of retained risk (amongst other impacts).

The insurer could always choose to hold a higher amount of capital but the reinsurance should allow for a reduction.

Impact on ANW would depend on where the reduction in required capital goes, if it just flows to free surplus then no change in ANW.

With the lower required capital the absolute cost of this capital would also reduce.

The reinsurer's estimate of the claims cost should not be too different to that of the company and as such the EV should reduce through a VIF reduction and partially offsetting reduction in the CoRC.

The financial reinsurance transaction involves the reinsurer providing a payment of R250m on the transaction date to the life insurer. In return the life insurer will pay an additional 5% of the reinsurance rates (for the quota share arrangement) on all policies in-force at the transaction date.

ii. Describe the additional impact on the EV resulting from this transaction.

This question was either answered either well or poorly. The better candidates arrived at the point that the company would be roughly EV neutral given that it is an immediate asset increase and a reduction in VIF. The poorer candidates were confused by the impact on liabilities.

When the transaction takes place the ANW of the company would increase by R250m.

The payment would increase the free surplus or be used to fund required capital (if that was the purpose of the deal) or a combination of both.

No explicit liability would need to be set up as the financing can be seen as a contingent liability. The repayment only occurs for as long as the policies are in-force.

The VIF would decrease due to the extra 5% that would be applied to the expected reinsurance premium outgo.

If the insurer and reinsurer used the exact same assumptions to value the additional 5% payments (predominantly lapse and discount rates) then the VIF reduction should be the same as the up-front payment.

In this case the impact on EV would be negligible. The insurer has just capitalized a future expected income stream.

The financing deal is only on policies in force at the transaction date. Future policies will be reinsured on the quota share basis but will not attract the extra 5% charge. Company will need to be able to distinguish between the policies.

Any additional impact on required capital and CoRC would be negligible.

END OF MARKING SCHEDULE