

EXAMINER'S REPORT

May 2026

**Subject F202 — Life Insurance
Specialist Applications**

QUESTION 1

An established life insurance company that writes risk and annuity business has a deferred tax asset (DTA) in its individual policyholder fund (IPF). This DTA is because of historic losses in the IPF.

The company is considering launching a without profit five-year single premium individual endowment assurance product.

- i. Discuss the tax-based possible reasons for launching this product as well as the general product design factors that the company would need to.**

[11]

Part (i) tested the candidate's ability to apply tax knowledge (particularly I-E taxation) to product design, including linking the utilisation of deferred tax assets to product competitiveness and the trade-off between policyholder and shareholder benefits. Performance was mixed: weaker candidates relied on generic points or confused key tax concepts, while stronger candidates demonstrated detailed, scenario-specific understanding, correctly applying legislation and linking tax benefits to product design and marketability.

Tax based Rationale

- The new product launched will be in the IPF, since it is an individual investment product
- The company will use their tax credits to reduce the tax payable on investments income generated by the policyholder assets backing these liabilities
- This will ultimately result in more value for the policyholders and make the product more marketable (if the company passes this on to the policyholders via lowering the tax rate used to determine the policyholder benefit/maturity value).
- The policyholder will be able to receive a higher maturity value compared to a company that follows a similar investment strategy but does not have the tax credits.
- The company might also be able to benefit from this, by charging a higher fee (or crediting the policyholder with a slightly higher tax rate, but still lower than the marginal tax rate the policyholder would have paid otherwise).
- The company would need to ensure that it has sufficient tax credits for the volume of business it intends to sell because it is a single premium product where sales can be quickly switched off once the excess losses have been used up.
- The company would need to consider changes to tax laws, whereby companies are no longer able to avoid paying full tax on investment income generated – companies will have to pay tax on 20% of investment income generated.

Marketability

- The product will need to be marketable to be sold. Given that the policyholders can receive a higher maturity value, than could be provided by companies without tax losses, this product is likely to be quite marketable.
- The product is unlikely to be sold by companies that do not have tax losses. Hence the market differentiation is how much of the value of the losses used is given to the policy holder and how much is retained by the company.

Distribution Method

- The company should consider the distribution method. This is likely to be sold through brokers and hence the company would consider the commission requirements.

Profitability

- The company would need to ensure that the products meet the required profit criterion. The company is likely to make a high margin on this product given the utilisation of the DTA.
- The company should also profit test in the case the DTA is utilised quicker than expected or if markets change significantly.

Financing

- The company will be required to provide capital to fund this product and must be acceptable to the shareholders and should not threaten the viability of the insurance company.
- The company will likely require upfront costs to develop and distribute this product. However, this will be mitigated to some extent by the fact that the product is single premium. The level of new business strain will therefore also be impacted by the reserving requirements under IFRS 9.

Administration

- The company would need to develop its admin system to handle the new product.
- The endowment might be significantly different from the annuities and risk policies. The company would need to ensure that the admin function has the capability to manage the product.

Regulation

- The company would need to adhere to all relevant regulations. This includes the long-term insurance act and the income tax act.

Following consultation, the company decides to launch the product. It is further agreed that the company will provide a surrender benefit less a surrender penalty to cover commission and admin related expenses, as well as extracting a small profit. The investment strategy the company plans to implement will use fixed interest local corporate bonds of a high quality to back these liabilities.

ii. Discuss the suitability of this investment strategy.

[6]

Part (ii) tested the candidate's understanding of asset-liability matching, focusing on the suitability of bond-backed strategies and associated risks. Performance was generally strong; however, weaker candidates lost marks by overlooking key issues such as liquidity risk and surrender-driven mismatches, while stronger candidates provided a more balanced assessment of asset suitability, explicitly addressing liquidity, matching, and practical considerations beyond capital impacts.

- Matching the maturity values by bonds of a similar duration, would be appropriate for these liabilities.
- As these bonds mature, the benefits can then be paid to the policyholders.
- The assets would therefore match the liabilities by currency, term and nature.
- The use of corporate bonds would likely imply a maturity value that is higher than inflation over the period, which policyholders would likely appreciate.
- There will, however, be some mismatch to the extent that lapses are allowed for.
- The company would have assumed lapse rates – if the lapses are more than expected, that could place a cashflow strain on the company.
- This might also result in the company being forced to sell bonds at an inopportune time and cause liquidity pressure for the company.
- Depending on how the surrender value is calculated, there might also be a risk of losses on surrender (if the surrender value is not linked to the market value of the underlying assets).
- The risk will be much greater if the surrender value basis is guaranteed.
- The company might consider some extra cash to maintain liquidity and to provide a buffer against having to sell bonds when rates are high.

iii. Outline how the market value of the liabilities would be calculated on the SAM balance sheet.

[5]

Part (iii) tested the candidate's understanding of supervisory valuation under SAM, particularly the components of the Best Estimate Liability (BEL) and risk margin. Performance was generally strong, with better candidates clearly applying theory to the scenario by identifying the benefits included in the BEL and recognising the non-hedgeable risks underpinning the risk margin, while weaker candidates provided more generic descriptions with limited application to the product described.

- The market value of liabilities on SAM is the BEL plus the RM
- The BEL would be calculated using a discounted cashflow model
- The best estimate maturity and surrender benefits together with expenses would be discounted to the valuation date.
- The prescribed risk-free PA yield curve would be used to discount the cashflows
- The lapse and expense assumptions will be best estimate.
- The RM would be calculated using the cost of capital approach and allowance made for non-hedgeable risk
- The risks to allow for would be lapses, expenses and operational risk
- The SCR projected at each future point in time, will be multiplied by the cost of capital of 6%.

- The cost of capital will be discounted to the valuation date using the same PA yield curve.
- The company will allow for the diversification of risk for this product within the whole book.

iv. Discuss which market risks would apply to this product and how this may impact capital requirements.

[6]

Part (iv) tested the candidate's understanding of SAM market risk capital requirements. Performance was varied: stronger candidates effectively linked the product features to the relevant market risks and capital impacts, whereas weaker candidates failed to recognise the focus on market risk capital, often demonstrating limited understanding of key risks such as interest rate risk and providing insufficiently targeted responses.

Interest rate risk

- The company will be exposed to interest rate risk. The liabilities are valued using the PA yield curve.
- This return is likely different to the return achieved on the underlying assets, which would be above risk free (risk free plus a credit risk premium).
- The moves in assets might be different to the move in liabilities under the various yield curve shocks, causing either mismatch of profits or losses.
- The company will take the impact of the shock that results in a loss.
- It will be important to test this at total level. The company has annuities and risk products as well, so these impacts should also be considered to determine at an overall level which yield curve shock bites.

Spread and Default Risk

- The company would be exposed to spread and default risk. However, this would be limited to the extent that the company invests in high quality corporate bonds.
- The relatively short duration also limits default risk.

Concentration Risk

- If the company has a high total of investments with a single counterparty, the company might be subject to concentration risk depending on the concentration risk threshold.

Equity Risk, Property risk and currency risk would not be applicable as the investment strategy does not invest in these asset groups and the liabilities are in the local country.

QUESTION 2

A South African life insurance company sells unitized smooth bonus and market-linked investment products to both individual and group clients.

- i. Explain why a Market Value Adjuster (MVA) is used for smooth bonus savings policies and how its use can differ between individual and group policies.**

[5]

Part (i) tested understanding of MVAs and their application to individual versus group policies. Performance was generally strong: stronger candidates clearly distinguished between the application in individual and group contexts and demonstrated sound conceptual understanding. Weaker candidates showed some confusion between MVAs and surrender penalties, limiting their ability to fully develop higher-scoring points.

- When a member makes a voluntary withdrawal, they are paid the lower of book value or market value/asset share. The reduction in book value is the MVA.
- The purpose of a MVA is to prevent selection by the departing policyholder against the remaining policy holders and/or company.
- This prevents them from receiving a benefit in excess of the asset share, which would be to the detriment of the remaining policyholders.
- For individual business, a MVA is applied on surrender, but not on maturity or death, since maturity and death do not offer an opportunity for selection.
- For group business an MVA is not normally applied for an individual member withdrawal, since (before Two-Pot) the member would have to resign in order to access their benefit, which is felt provides sufficient protection against selection.
- However, in group business MVAs are applied when
 - a whole scheme terminates,
 - or an individual member switches their investment choice to another option.
- Positive MVAs (i.e. paying out a value higher than the book value when the asset share is greater than the book value) are the same as terminal bonuses.
 - They would normally be applied on death and maturity to ensure the policyholder receives asset share/market value.

South Africa's Two-Pot retirement system, introduced in 2024, divided retirement savings into two distinct "pots". The first pot is the "retirement pot" which is locked until the individual reaches' retirement age. The second is the "savings pot" which allows for withdrawals before retirement.

ii. Discuss changes that could be made to the MVA considering the introduction of Two-Pot retirement system.

[6]

Part (ii) tested the ability to apply MVA concepts in the context of the Two-Pot system and assess implications for both individual and group business. Performance was weaker overall: stronger candidates considered changes in selection risk and differentiated appropriately between individual and group impacts, while weaker candidates provided generic answers, failed to carry through the group context, and often confused MVAs with surrender charges or introduced irrelevant considerations (e.g. TCF arguments unrelated to the question).

- The Two-Pot changes do not affect individual savings business in the IPF tax fund, so no changes would be made to those products.
- For individual retirement savings business (RAs), Two-Pot is a substantial change. Previously members were not allowed to withdraw from an RA, although transfers were allowed.
- The company would need to ensure that the same MVA that applied to transfers applies to withdrawals by members.
- New contracts would have to specify the MVA that applies on partial withdrawal.
- The administration system would need to be updated to cater for the partial withdrawal on both the remaining book value and market value.
- Would need to ensure that in the case of multiple applications of an MVA for withdrawals over the lifetime of the policy that no under- or over- deduction is applied, and that equity between policyholders is maintained.
- For Group business, policyholders now have the opportunity to select against the fund by making a withdrawal without having to resign.
- Initially the restrictions on the amount that can be withdrawn (R30 000) limit the potential for selection against the fund.
- The withdrawal benefit is also taxed at the member's marginal tax rate, which could counteract the "benefit" of selecting against the fund.
- It can be argued from the above two points that the selection risk is not that high, and that therefore the need to change the company's policy to apply an MVA on a Two-Pot withdrawal is minimal, and can be ignored.
- However, since theoretically 1/3 of all retirement funds accumulated after the introduction of Two-Pot will become available on withdrawal, future amounts could be substantial, and the potential selection effect significant.
- The company may therefore wish to introduce MVAs on Two-Pot withdrawals immediately in order to avoid setting precedents.
- From a marketing and client relationship perspective, it would be far easier to remove an MVA from Two-Pot withdrawals in the future than to introduce it.
- It may be guided by what its competitors are doing.

iii. Discuss the factors to consider when deciding how the investment strategy for retirement savings business should change considering the introduction of Two-Pot retirement system.

[8]

Part (iii) tested the application of asset-liability management principles to evolving retirement product structures. Performance was mixed: stronger candidates identified liquidity needs (particularly for the savings pot) and provided more detailed, product-specific analysis of investment strategy changes, including the needs of different portfolios. Weaker candidates tended to focus only on high-level liquidity points or provided generic discussions on retirement investment strategies, without adequately addressing the specific changes required for individual and group business.

- The investment strategy for retirement savings business will have the overall goal of achieving inflation beating returns taking into account the risk appetite of the clients.
- The introduction of Two-Pot should not alter this overall goal.
- However, the prospect of partial withdrawals of the investment funds over the lifetime of the policy introduces additional liquidity risks, that should be addressed by the investment strategy.
- A key decision is whether different investment strategies will be pursued for the retirement pot and the savings pot.
- There may be compromises between an investment strategy that targets long-term investment growth, and one that targets short-to-medium term liquidity.
- Policyholders who never withdraw from their savings should not have their final retirement benefit undermined by an investment strategy that caters to those who do.
- The greater the choice of investments that policyholders have, the less important a “one-size fits all” strategy becomes.
- Policyholders who are confident that they will not touch the savings pot before retirement can select assets with higher growth potential but with short-term risk.
- However, it is important that policyholders are provided appropriate advice when making these decisions
- The company may be more geared towards providing this advice to Individual members than Group retirement fund members.
- Even if the Group retirement fund does offer members a wide range of investment choices, the investment strategy for default options will need to be carefully considered.
- It may be more appropriate to have separate strategies for the retirement pot and the savings pot in the case of the default option.
- Before Two-Pot there was already a liquidity risk for Group business,
 - because during an economic downturn there may be more withdrawals from retirement savings
 - as a result of retrenchments, etc.
 - at a time where market values may be depressed.
- This liquidity risk reduces for Group business because now only the savings pot can be withdrawn, but it is a new risk for Individual business.
- For smoothed bonus policies, whether or not a MVA will be applied to withdrawals will affect the investment strategy, as without an MVA the need for liquid assets such as cash is greater in order to protect the benefits of remaining policyholders.
- A further consideration for the investment strategy of smoothed bonus products would be how the vesting/non-vesting bonuses (if applicable) will be treated when there is a partial withdrawal.

QUESTION 3

A large South African life insurance company sells predominantly whole of life level-premium fully underwritten risk products as well as credit life and funeral products sold through distribution partners predominately in the clothing retail segment.

Following several years of low inflation, the South African Reserve Bank (SARB) decreased the repo rate from 6.75% at the start of 2019 and continued to lower the repo rate until it reached 3.5% in August 2020. However, due to predominately external factors, inflation exceeded the upper inflation target range in May 2022 and remained so for just over a year. The SARB proceeded to increase the repo rate until it reached 8.25% in June 2023. In October 2024, the SARB started lowering the repo rate and was expecting the economic environment to stabilise with inflation rates reverting to the lower end of the SARB target range.

Discuss the effects that the macro-economic environment between 2019 and 2025 would have had on the experience of the products that the insurer offers.

[Total 13]

Q3 tested the candidate's ability to analyse the impact of changing macroeconomic conditions across multiple time periods and link these to product experience. Performance was mixed: stronger candidates structured their responses clearly by time period, product type, and experience drivers, and demonstrated a holistic understanding of how economic phases affect different business lines. Weaker candidates tended to provide poorly structured or narrow responses, often focusing only on interest rate changes or balance sheet impacts, with limited product-specific insight. Many also showed weak product understanding, introducing irrelevant points (e.g. unrelated product types or overstating fraud risk), and failed to consistently apply the scenario across the different economic periods.

- The low inflation for successive years is likely due to an initial slow-down in the economy (and hence lower inflation) which would have resulted in the SARB decreasing interest rates which would have led to higher consumer spending and higher inflation.
- During the period of increased consumer spending and lower inflation, the insurer is likely to have benefited significantly from higher Credit Life sales within the clothing retail segment in particular as policyholders would have had more disposable income and interest rates on credit cards, home loans etc. would have been lower which would have likely resulted in an increased spending pattern.
- In addition, during this period consumers were likely under less pressure in terms of their affordability, and hence new sales of level-premium fully underwritten risk products would have likely exceeded longer-term trends, since these policies have a larger starting premium than their age-rated or level-increasing equivalents and hence initial affordability is a key criteria for future policyholders.
- Given the policyholder was under less strain from an affordability perspective, this might have resulted in less lapses across the credit life, funeral and fully underwritten products.
 - For the funeral and credit life books, this is expected to result in higher expected profits to the insurer.
 - However, for the level-premium risk products, lower lapses rates would have differing effects on policies in a negative rand reserve and positive rand reserve (since they are past their pre-funding phase) and hence the net effect on expected profit would depend on the mix of business of the book.

- Given the market conditions, the insurer might have been able to price their various products at lower margins to increase new business sales volumes and take advantage of the market conditions.
- Furthermore, lower interest rates would have allowed the insurer to borrow at cheaper rates which could have been allowed for in their hurdle rates and required returns for new products.
- However, once inflation started to increase and exceed the SARBs target ranges, interest rate increases would have been implemented aggressively to ensure that inflation was going to remain under control in order to avoid destroying too much economic growth.
- The fact that inflation persisted at higher levels for numerous years means that these interest rate increases were possibly not as effective as expected due to external factors (e.g. cost push inflation where the cost of production is increased due to higher input costs potentially from higher oil prices and/or weaker rand causing imports to be more expensive).
- During this phase of persistent high inflation and higher interest rates, the policyholder and customers would have experienced significant affordability challenges which would have impacted their disposable income and ability to afford insurance premiums.
- This would have led to significant pressure on new business sales volumes as well lapse experience across all books (which as mentioned above, depending on the level of positive or negative rand reserves on the level-premium risk product might have a positive or negative effect on expected earnings).
- Lower sales volumes would have likely also put the insurers distribution channels under pressure as they'll be earning less commission and/or sharing in lower expected profits.
- The insurer itself would have also been under cost-pressure and may have reduced marketing budgets, hiring freezes which might have affected its ability to service existing policyholders as it implements measures to manage its expense basis and expense inflation.
- The insurer would also likely come under strain from CPI linked benefits e.g. Income Protection benefits and/or increasing sum assured on risk products as the CPI linked benefits are expected to increase by higher inflation levels than was likely included within the pricing.
- Income disability experience is also high susceptible to the economic cycle, and hence the insurer might see an increase in claims and/or lower recovery rates on their disability and income protection policies.
- To the extent that the insurer has significant reinsurance on the books of business, the reinsurance premiums might be reviewed following the experience on the book which would then mean that the underlying insurer would have to factor any potential reinsurance premium changes into their new business and in-force policies (depending on guaranteed premium terms offered).
- With the macro-environment stabilising, inflation decreasing, the SARB would likely be looking to decrease interest rates again from their elevated levels in order to manage the future expectations for inflation and hence the insurer would likely find itself in a more conducive macro-economic environment going-forward.

QUESTION 4

A South African life insurance company sells predominantly whole of life level-premium fully underwritten risk products as well as credit life and funeral products.

The Prudential Authority (PA) publishes their yield curves for the period at which the insurer is required to produce their published reporting (IFR7) and prudential reporting (SAM). Due to the expected forward-looking macro-economic environment, the PA yield curve is expected to increase significantly in the short to medium term of the curve whilst decreasing significantly in the long end of the yield curve compared to prior valuations.

- i. Discuss how the published reporting of the insurer is expected to be affected given the movement in the PA yield curve.

[15]

Part (i) tested the candidate's ability to apply IFRS 17 measurement principles to yield curve movements. Performance was generally weaker: while many candidates demonstrated sound theoretical knowledge of IFRS 17 components, stronger candidates distinguished themselves by applying the yield curve movements to the scenario, correctly identifying directional impacts on liabilities (including the treatment of negative liabilities and long-term BEL effects). Weaker candidates focused too heavily on generic bookwork or irrelevant topics (e.g. curve construction or asset impacts), misunderstood key relationships, and failed to translate theory into application.

IFR7

- BEL
 - The effect on the IFRS BEL will depend on whether the insurer is using the PA curve to determine its BEL or if it is not, the similarities between its internally derived curve and the PA curve. Assume it is using the PA curve.
 - The contract boundary for the credit life and funeral business will determine the measurements model under which they are measured and different measurement models would have different impacts.
 - If the credit life and funeral business is short-boundary and measured under PAA then there might not be any discounting involved and hence there won't be an impact due to the discount.
 - However, if the credit life and funeral business is measured under GMM then there will be an impact.
 - Generally credit life and funeral business has lower DMTs and hence will be impacted more by the short-medium end of the curve.
 - Since credit life and funeral business premium generally cover the expected outgo in each period, it is expected that the BEL on this business would be negative (since PV outgo – PV income < 0)
 - Therefore, significant increases in the yield curve are likely to increase the BEL since the positive net cashflows are being discounted at higher rates and therefore are lower in present value terms.
 - The level premium fully underwritten are going to be long-boundary and in particular, they are likely to have high long-term tail exposure since it is a pre-funded premium pattern.

- This means that early on in the policy duration, premiums are expected to exceed net cash outflows and hence the net cashflows are expected to be positive.
 - However, at a point in the policies duration the level premium is going to be insufficient to cover the expected outgo on the policy and hence the net cashflows are expected to be negative.
 - Therefore, the BEL on the level premium policies is going to be a mix of positives (where they are past the pre-funding point) and negative (where the policy duration is still early).
 - The change in the yield curve is going to result in the net positive cashflows at early durations being discounted at higher rates and therefore these cashflows will be lower in PV terms i.e. higher or less negative BEL.
 - In addition, the decrease in the yield curve at later durations is going to result in the net negative cashflows being discounted at lower rates and therefore these cashflows will be higher in PV terms i.e. higher or more positive BEL.
 - There may be some second order impacts of the macro-economic environment too that the insurer will need to consider such as its expense assumption, expense inflation.
 - The insurer might need to revise its best-estimate assumptions for morality, morbidity, lapses etc. to account for its future expected experience given the macro-economic environment.
 - Under IFR7, these basis changes are expected to be absorbed by the CSM to the extent that there is CSM available to absorb.
 - Overall, the BEL is expected to increase from the different products that the insurer sells.
- **RA**
 - The impact on the Risk Adjustment will depend on the approach selected for the Risk Adjustment since IFR7 does not specify which method is required.
 - If the insurer is using a Cost of Capital approach, then the impact on the Risk Adjustment will depend on the impact of the change in yield curve on the capital requirements of the insurer
 - The PV of the Capital is likely to increase since the large tail-exposure from the level-premium policies is being discounted at lower rates. However, this would be somewhat offset by a lower PV of Capital from discounting the credit life, funeral and early duration capital requirements by higher rates.
 - The effect of an additions of margins approach or Value at Risk approach is uncertain and would depend on a lot of the mix of business and profile of the policies in-force.
 - **CSM**
 - Since the policies sold by the insurer are measured under the GMM approach, the CSM will not be able to absorb changes in the BEL or RA for changes in the yield curves.
 - If the insurer revises its non-economic best-estimate assumptions (non-economic) these basis changes are expected to be absorbed by the CSM to the extent that there is CSM available to absorb. However, this will be determined at 'locked-in' interest rates.
 - The CSM for new business policies will also be determined using the yield curves applicable to the business sold in this year and hence all else being equal, the CSM for new business policies sold is expected to be lower than other years due to the yield curve having an adverse effect on the expected cashflow underlined in the BEL above.
 - **Insurance Revenue**

- The components of Insurance Revenue for in-force business are generally not expected to be affected since they are largely based on expected cashflows, release of Risk Adjustment and Release of CSM.
 - However, to the extent that there are second order impact from yield curve movements e.g. changes in non-economic basis which lead to the carrying value of the BEL, RA and CSM being adjusted, then the release of the RA and CSM might be different.
 - Since the CSM for new business policies is likely to be lower, the release of CSM from new business policies is also likely to be lower.
- **Insurance Service Expenses**
 - The components of Insurance Service Expenses are likely related to actual cash outflows. The movements in the yield curve would not have a direct impact on these cashflows.
 - However, to the extent that there are changes to the macro-economic environment, the insurer might find that it is paying out more claims (e.g. higher Income Protection, Retrenchment claims) and it might be incurring higher expenses due to higher-than-expected inflationary pressures.
 - If the insurer makes losses and these are larger than the carrying balance of the CSM, then the CSM will be written down to 0 and the additional amount over and above the CSM will be raised as a loss-component and taken to PnL through insurance service expenses.
- **Insurance Finance Income and Expenses (IFIE)**
 - This change in interest rates relates only to insurance finance activities, and so the impact of the change needs to be separated from the insurance service results and allocated to the insurance finance result.
 - The unwinding of the discount rate on the BEL, RA and CSM is not expected to be impacted since this would have been based off the yield curves at the start of the reporting period or the locked-in rates.
 - However, the impact on the BEL and RA due to changes in the economic assumptions which are not absorbed by the CSM will be shown and disclosed separately in IFIE.
- The other elements of the income statement/balance sheet which are expected to be affected are:
 - The investment returns of the assets that the insurer holds will be disclosed under Investment Returns.
 - To the extent that the insurer elected the OCI options then the effect of changes in the yield curve would get reflected in OCI as opposed to IFIE.

- ii. **Discuss how the prudential reporting of the insurer is expected to be affected given the movement in the PA yield curve.**

[12]

Part (ii) tested the candidate's understanding of SAM valuation impacts under yield curve movements. Performance was below average: stronger candidates focused on the most material products and clearly articulated the direction of impacts, while weaker candidates produced unfocused, overly broad answers, often repeating theory without application, mis-stating liability movements, or failing to state key impacts. Many candidates spent excessive time analysing all balance sheet components rather than prioritising the most relevant drivers.

SAM

- **Own funds**
 - **Assets**
 - The extent of the change in assets will depend on the insurers underlying exposure to various instruments.
 - If the insurer is well matched and has long duration bond exposure to offset the long-tail risk in the level-premium policies, then the carrying value of the bonds would increase to offset the insurance the BEL to ensure that the insurer is hedged and that the impact of curve changes is mitigated.
 - **Technical Provisions**
 - Assuming the yield curve used for IFRS and SAM move in materially the same way and there are not large differences between the contract boundaries, then the impact on the BEL will be in line with the impact described above under IFRS i.e. a significant increase in BEL and hence a reduction in Own Funds.
 - The Risk Margin is determined based on a Cost of Capital approach and hence it will be impacted by the change in the capital requirement for the insurer (discussed below)
 - The PV of the Capital is likely to increase since the large tail-exposure from the level-premium policies is being discounted at lower rates. However, this would be somewhat offset by a lower PV of Capital from discounting the credit life, funeral and early duration capital requirements by higher rates.
 - **Other**
 - The insurer would need to consider the impact on any deferred tax assets, deferred tax liabilities due to the impact on IFRS earnings and changes to the difference between the IFRS NAV and SAM Own Funds following the changes to the yield curve.
- **SCR**
 - **Insurance risk**
 - Overall, the BEL for the insurer is expected to increase (discussed above). In particular,
 - PV of premiums is expected to be lower (since the more material PV of premium exposure is at short durations and this is now being discounted at higher rates)

- PV of claims is expected to be higher (since the more material claims exposure is at longer durations and this is being discounted at lower rates)
 - PV of expenses will have offsetting impacts at varying durations.
 - Therefore, mortality and morbidity risks are expected to increase significantly since these are largely a function of the PV of their respective claim outgo.
 - Life Lapse risk will depend on whether it is lapse up or lapse down biting at an overall level which is a function of the durations of policies in force and whether the insurer is holding a net positive or negative BEL, particularly for the level-premium policies.
 - On policies where the BEL was positive and now becomes more positive, then lapse risk (lapse down) is expected to increase overall
 - On policies where the BEL was negative and has now become less negative or slightly positive then lapse risk is expected to decrease overall.
 - Expense risk will depend on the effect of the yield curve change on the PV of expenses.
- **Market risk**
- The impact on equity, property and currency risk should be minimal, if any.
 - Spread and counterpart default risk as well as concentration risk will be impacted depending on the underlying assets that the insurer holds and whether or not the Credit Ratings and/or exposures to those counterparties is materially different to before the changes in the yield curves.
 - The impact on interest rate risk will depend on the net effect on the movements in assets and liabilities under the various interest rates stresses and whether yield curve up or yield curve down bites.
 - For the liabilities in particular, higher BELs and in particular higher net cash outflows in the longer durations will likely mean that interest rate risk goes up driven by higher interest rate risk for nominal down shocks.
 - Within market risk, the correlation between interest rate risk and equity risk differs depending on whether it is nominal up or nominal down that is currently biting for the insurer.
 - If it was previously nominal up that was biting, but now it is nominal down, then the correlation between interest rate and equity risk would change and this would result in less diversification within the market risk module.
- **BSCR**
- The change in the BSCR will be driven by the change in the market risk and life underwriting risk and the correlations and diversification benefits between them depending on how they move respectively. Overall, it's expected that the BSCR will go up.

- **Other**
 - Operational risk is expected to remain relatively unchanged
 - LACDT will change depending on how the SCR changes and IFRS DTA/DTL changes
- **SCR cover ratio**
 - The overall effect on the SCR cover ratio will depend on the relative movement in the insurers Own Funds and SCR.
 - The net effect will depend largely on the insurers ALM policy, objectives and accuracy of its implementation of its policy.
 - For example, if the insurer does not hedge or aims to hedge its IFRS earnings then it is likely that its SCR cover ratio will decrease due to the increase in technical provisions and increase in SCR not being offset by a sufficient change in its assets following the change in yield curve.

The Head of Actuarial Function has recommended that the insurer review their asset-liability management (ALM) policy in light of the macro-economic environment and introduction of IFR7. Board members have also noted that the yield curve movements has had a materially different impact on the company's earnings and SCR cover ratio.

- iii. **Outline the various strategies the insurer could adopt in setting the ALM policy.**

[5]

Part (iii) tested the candidate's ability to propose appropriate asset-liability management strategies. Performance was mixed to weak: stronger candidates linked ALM strategies to clear objectives such as SCR coverage and earnings stability and tailored responses to the scenario, while weaker candidates provided generic, high-level strategies with limited relevance or depth.

- Since the impact of yield curves is quite different on the IFRS and SAM basis, it means that the insurer is likely using different curves between the basis or that there are some differences in the way the Best-Estimate liabilities (different expense assumption, contract boundaries) and Risk Adjustment/Risk Margin are determined. In addition, since the policies the insurer sells are measured under GMM there will be different treatments due to the locked-in rate in the CSM.
- The insurer needs to clarify what is the key objective of the process or the desired output from the ALM programme e.g. duration matching, liquidity management, regulatory compliance, reporting requirements or risk management requirements.
- Generally, this can either be focused on ensuring some level of earnings stability, SCR cover ratio stability and/or ensuring stable dividend paying capacity depending on what the key driver was for their dividend policy.
- However, it would be quite difficult to achieve all of these given the underlying differences in the IFR7 and SAM balance sheets.
- Furthermore, the insurer needs to determine the likely costs to hedge and whether the cost vs. benefit is worth it for them.
- Should the costs of implementing a full hedge be too onerous, then the insurer could consider a partial hedge of sorts, either by hedging a % of their liability or focusing their hedging programme on particular exposures e.g. long-tail exposures which are likely to exist given the insurers level-premium risk product.

iv. **Discuss how you would go about reviewing the insurer's ALM policy.**

[7]

Part (iv) tested the candidate's ability to critically assess and review ALM policy. Performance was generally weak: stronger candidates focused on practical review considerations and application to the scenario, whereas weaker candidates defaulted to generic discussions of governance, risk appetite, or HAF responsibilities, without addressing the specific requirements of reviewing the ALM framework in the context provided.

- In order to determine what an appropriate ALM policy would be, the insurer is likely going to need to test the impact on IFRS earnings and SAM SCR cover ratio under a number of different hedging options (no hedging, partial hedging of IFRS earnings and SCR cover as well as full hedging of IFRS earnings and SCR cover)
- An analysis will need to be performed based on how different investment strategies based on varying asset allocations will impact the results.
- In addition, the insurer will need to do scenario testing of the above combinations to allow for different macro-economic environments (low interest rates, high interest rates) to ascertain the sensitivity to different economic environments.
- This may exclude some reverse stress testing e.g. if we do not hedge, what movements in interest rates would cause our SCR cover to drop below 1.0x.
- When assessing the structure to use for the hedge, considerations need to be given to the discount rates used in the relevant basis e.g. SAM might be using the PA bond curve, IFRS could be aligned, or it may use different internally derived bond or swap curves.
- If the insurer decides to not hedge at all, it will need to factor in that all the products it sells are measured under the GMM approach under IFR7 and hence all interest rate volatility will go through Profit and Loss (unless they elect the OCI option).
- However, the insurer could normalise for these interest rates movements within their internal management accounts used for management reporting and performance management.
- Although, on a SAM basis for Regulatory reporting, there is not the option to "normalise" for interest rates movements and hence the insurer will be exposed to adverse interest rate movements.
- The insurer will need to ensure that they regularly monitor the effectiveness and appropriateness of the hedge in terms of meeting its key objectives.
- Furthermore, the insurer will need to consider how frequent it will rebalance its hedge which will depend on the associate costs and risks of running a mismatched position.