

EXAMINERS' REPORT

October 2020 examinations

Subject F203 — *General Insurance* Fellowship Applications

INTRODUCTION

The attached report has been prepared by the subject's Principle Examiner. General comments are provided on the performance of candidates on each question. The solutions provided are an indication of the points sought by the examiners and should not be taken as model solutions.

Subject F203 — *General Insurance*

Specialist Applications **October 2020** **MEMORANDUM**

Overall

For essay-style questions, the marking schedules contains open ended marks for other sensible comments in some sections where they are deemed necessary. Overall, there are more than 100 marks available.

Performance on this paper was weak when compared to prior examination sessions.

- *Candidates answered calculation type questions very poorly showing a clear lack of planning and understanding the feedback required.*
- *Candidates continue to undermine themselves by providing generic or off-topic answers. Specific observations are provided by question throughout this report.*
- *Candidates also did not exhibit much higher order thinking and questions were generally poorly answered considering the number of marks that were available.*

Candidates should note that F203 is the key paper at which we test candidates' broader thinking. This is generally the final paper before qualifying as a professional, and we consider a capacity for broader thinking to be one of the best indicators of a candidate's suitability to act as a professional actuary. As such, we aim to design exam papers so that it is difficult to pass without displaying some capacity for independent, broad and commercial thinking.

Markers heavily reward instances where these skills are displayed. When reviewing past papers, candidates should assume that the marks available for generic points are substantially less than those awarded for the more challenging points that would be the mark of high-quality professional insight. Marks available for list items from bookwork are lower still.

As in prior sessions, candidates couldn't convince the examiners that they could apply higher order thinking to solve the problems posed. The majority of candidates answered the calculation questions poorly (especially question 1). Question 1 part iii required a bit of preparation as to how to approach the calculation but was still not considered to be difficult. Question 2 contained a lot of questions where an understanding of the theory would enable candidates to score sufficiently to pass the examination.

Candidates that planned their way through the exam did not appear under time pressure.

In conclusion, we would offer candidates two key pieces of advice – read the question properly and take the time to think about what is going on. Time spent making sure that you are answering the question that is asked is therefore more valuable than a panicked rush to put down as many points as possible / irrelevant calculations, regardless of whether they are relevant.

QUESTION 1

This question examined candidates' ability to evaluate the reasons for performing an experience analysis on claims and exposure as well as performing a simple premium increase calculation.

Candidates were also required to calculate the percentage contributions of the factors driving the premium increase as well as discussing additional information that would be required to further explain the drivers of the premium increase.

- i) *Section a of this question required candidates to describe the different purposes of performing an experience calculation on claims and exposure. This question was generally satisfactorily answered by most candidates.*

Section b of this question required candidates to calculate the premium increase required for the following year based on 2 years' worth of data. Candidates were also required to state all the assumptions that were made. Candidates performed poorly in a calculation that the examiners felt was quite straight forward. The performance seemed to indicate poor preparation and exam planning. Worryingly, the majority of candidates did not come to a proper conclusion as to the premium increase required to allow for the changes in the write off experience.

a) Describe the different purposes of performing an experience analysis on claims and exposure:

- Estimating the cost of outstanding claims to set reserves by analysing claim payment and estimation patterns and grouping data into homogeneous risk groups
- Monitoring the actual run-off of outstanding claims against estimated amounts to assess reserve adequacy and historic provisioning error - this can be used to assess reserve risk for capital calculations
- Monitoring the adequacy and use of reinsurance by considering the claim size distributions relative to sum insureds of risks on cover for risk XoL cover
- Monitoring concentrations of risk to ensure the company is not overly exposed to certain areas/ risks
- Comparing the relative profitability of various parts of the account by considering the claims cost relative to the premium collected for the risk
- Reviewing premium rates, and for pricing new or amended products by understanding the drivers of change in experience which may require a rate review
- Financial planning which may include budgets as well as capital requirement projections and capital adequacy assessments
- Monitoring the insurer's asset–liability position by considering the duration of liability cashflows and how well the assets may match these.
- Monitoring the insurer's liquidity requirements - making sure the assets are liquid enough for the liability profile
- Establishing the need for and values of an unexpired risk reserve by considering the expected future cost of servicing the unexpired exposure relative to unearned premium.
- Monitoring maximum sums insured to ensure these are within the company's risk appetite
- Determine which products/ classes are most profitable to inform which lines of business to focus on for growth, or where the business needs to improve their claim management. This analysis may also be useful for determining where anti-selection is occurring.

b) Calculate the premium increase required for 2020 stating all the assumptions that you have made.

Assumptions:

- Assume repair frequency to be the average of 2018 and 2019 or other sensible assumption
- Assume the 2020 write-off frequency to be the same as 2019 or other sensible assumption
- Assume average write-off claim to be flat from 2019 to 2020 or other sensible assumption
- Assume the target Loss Ratio is 75% - implied by question that 2019 is higher than target

Calculation:

Year	2018	2019	Change from 2018 to 2019	2020	Change from 2019 to 2020
Premium (R'm)	1,000	1,750			
Exposure (Risk Years)	15,000	25,000			
No Claims	3,850	6,465			
<i>Repairs</i>	3,500	5,665			
<i>Write-offs</i>	350	800			
Total Ultimate Claims (R'm)	750	1,400			
<i>Repairs</i>	500	850			
<i>Write-offs</i>	250	550			
Freq	25.7%	25.9%			
Repairs	23.3%	22.7%		23.0%	
Write-offs	2.3%	3.2%		3.2%	
Average amount per claim	194,805	216,551	11.2%		
Repairs	142,857	150,044	5.0%	157,593	5.0%
Write-offs	714,286	687,500	-3.8%	687,500	0%
Loss Ratio	75.0%	80.0%		75%	
Repairs	50.0%	48.6%			
Write-offs	25.0%	31.4%			
Risk Premium	50,000	56,000	12.0%	58,241	4.0%
Repairs	33,333	34,000	2.0%	36,241	6.6%
Write-offs	16,667	22,000	32.0%	22,000	0.0%
Average Premium Value	66,667	70,000	5.0%	77,655	10.9%

- ii) *Section ii required a simple explanation as to why the premium had increased by more than inflation. Majority of the candidates identified the “write off” as having worse experience but failed to properly explain this effect.*

Explain briefly why the premium has increased by more than inflation.:

- The premium increased more than inflation mainly due to premium not keeping up with the escalating claims cost
- The loss ratio deteriorated from 75% in 2018 to 80% in 2019 necessitating an above inflation increase to bring back the loss ratio to the target of 75%

- iii) *Candidates were required to calculate the contribution of each of the drivers of the R650m increase in Ultimate claims in part ib and explain whether any of the drivers should be raising concerns. Candidates answered this question extremely poorly with very few candidates normalizing for the increase in exposure and sufficiently breaking down the changes in frequency and severity between repairs and write-offs. Candidates also did not spend sufficient time to explain whether these drivers should be raising concerns.*

Overall, candidates performed poorly in a calculation that the examiners felt was quite straight forward. The performance indicated very poor exam planning and the majority of candidates did not come to a proper conclusion as to which factors had the main influences on the premium change.

Assumptions:

- You should first normalise for exposure to adjust for a growing book to be able to compare 2018 and 2019 experience
- The analysis can be split by repair and write-off to analyse respective contributions separately

Calculation

Method 1	Factor	Adjusted	Variance	Variance %
Total Ultimate Repair 2018		500		
Repair Exposure Adjustment	1.67	833	333	51.3%
Repair Frequency Adjustment	0.97	809	-24	-3.7%
Repair Claim Amount per Claim Adjustment	1.05	850	41	6.3%
Total Ultimate Write-off 2018		250		0.0%
Write-off Exposure Adjustment	1.67	417	167	25.6%
Write-off Frequency Adjustment	1.37	571	155	23.8%
Write-off Claim Amount per Claim Adjustment	0.96	550	-21	-3.3%
			650	100.0%
Method 2	Factor	Adjusted	Variance	Variance %
Total Ultimate Repair 2018		500		
Repair Exposure Adjustment	1.67	833	333	51.3%
Repair Claim Amount per Claim Adjustment	1.05	875	42	6.4%
Repair Frequency Adjustment	0.97	850	-25	-3.9%
Total Ultimate Write-off 2018		250		0.0%
Write-off Exposure Adjustment	1.67	417	167	25.6%
Write-off Claim Amount per Claim Adjustment	0.96	401	-16	-2.4%
Write-off Frequency Adjustment	1.37	550	149	22.9%
			650	100.0%

Concerns:

Exposure:

By far the majority of the increase (76.9%) in claims cost are driven by more exposure
As long as new business is written at profitable premiums this should not be a concern

However, premium is growing slower than exposure and the loss ratio has deteriorated from 75% to 80% which may suggest insufficient cross-subsidy between the in-force book and the new business portfolio

- By far the majority of the increase (76.9%) in claims cost are driven by more exposure
- As long as new business is written at profitable premiums this should not be a concern
- However, premium is growing slower than exposure
- and the loss ratio has deteriorated from 75% to 80% which may suggest insufficient cross-subsidy between the in-force book and the new business portfolio

Write off frequency

- Write-off frequency explains a further 23.8% of the increase in claims cost - the next biggest driver
- This should be concerning as the average cost of these claims are also quite large
- This may have strong correlation with the fast growing book
- Which in turn may suggest the fleets include risks that pose higher than expected risk

- It may also imply that the process to write-off a vehicle needs to be investigated. The salvage values may be overstated suggesting more write-off decisions than necessary.
- It may also suggest that inadequate reinsurance is in place for these larger claims
- It could also indicate that claims processes may have been changed to write off vehicles at lower damage levels as the result of improved salvage contracts

Average cost of repair

- The average cost of a repair explains another 6.3% of the increase in claims cost
- This should not be a concern as it is expected that repair cost will increase with inflation of vehicle parts and labour inflation"

Frequency of repair claims

- The frequency of repair claims had a negative contribution to claims cost of 3.7%
- This would clearly not be a concern
- unless it may suggest that more claims are being rejected due to a more strict application of policy wording terms and conditions which may lead to reputational risk.
- The lower frequency could also be a reflection of better underwriting
- Or market conditions if clients drive less – especially commercial fleets
- Or there could be a shift to writing off vehicles at lower damage levels

Average cost of write-off

- The average cost per vehicle write-off claim explained a negative contribution to claims cost of 3.3%
- This would mainly not be a concern
- As it may indicate better salvage rates on written-off vehicles
- However, it may also indicate that we are writing off more vehicles than we should which is bringing down the average claims cost.
- It may also be indicative that the sum insured of the portfolio has a lower value
- Or could also be that clients are keeping vehicles for longer due to economic climate and the depreciation is reflected in the average claim size

iv) *Section iv required candidates to list the other information you would need to explain possible drivers of escalating claims cost and explain why you would need that information. In general, this section was better answered than sections i and iii above.*

List the other information you would need to explain possible drivers of escalating claims cost and explain why you would need that information.

- Nil claims. Does the number of claims include all reported claims or settled claims? If rules changed around settlements, it may affect the analysis especially if the settlement ratio changed differently for repair / write-off
- Vehicle write-off rules. Changes in salvage successes may influence thresholds for when a vehicle can be written-off

- Policy wordings. Changes in cover over time may affect valid/invalid claims or average claim size
- Excess rules. Changes in excess structures may distort the analysis - especially if they are not adjusted in line with claims cost inflation
- Changes in processing of claims or administration systems, like on-boarding new brokers or claim administrators may impact the completeness of the 2019 data.
- Split between paid, system estimates, IBNER and IBNR. 2019 data may still be relatively under-developed which brings more uncertainty in terms of true ultimate claim – reserve adjustments may be over or understated which includes IBNR and reopened claims.
- Having visibility of the different components contributing to the net claims cost may help understand the drivers of changes in net cost. Could be that gross repairs are similar but that recoveries has changed albeit reinsurers, other party recoveries or salvage returns
- Individual large claims may distort the analysis considerably – especially for commercial vehicle insurance where some claim amounts could be very large.
- Geographical distribution of claims and incident dates. Claim concentrations may also distort the analysis e.g. if 2018 had a large catastrophe event, it may overstate frequency relative to 2019.
- More historic performance. We may need a longer history of experience to be able to identify trends in the data and project those trends effectively for 2020
- Having the underwriting year / period or duration of policies may aid to distinguish between new business and in-force experience if there exist some subsidy between new and existing business - It may be that a certain rate version or tranche of business is the cause of inflated claims cost
- Analysing the experience by type of claim (peril) may help to identify trends in causes of loss e.g. acts of nature claims
- Analysing the experience by other risk factors like Vehicle Make and Model, Age, etc.
- Exchange rates and claims cost linked to exchange rates e.g. certain vehicle parts that are being imported

QUESTION 2

Question 2 examined a range of actuarial topics related to contract boundaries and the implications of changes to contract boundaries proposed under a new accounting standard. The question also considered the principles of calculating a best estimate under SAM as well as the features of the risk margin under SAM. The candidates were also required to critically analyse the calculation of the risk margin under SAM

The question also required candidates to outline the questions that would need to be asked to determine whether risk margins could be aligned between SAM and the new accounting standard.

Finally, candidates were asked to describe how underwriting profits and losses are currently taxed in South Africa as well as how taxation regulations would need to be updated to be consistent with the new accounting standard as well as the proposed budget speech of only allowing 80% of losses to be offset against future profits.

- i) *The first part asked candidates specify how contract boundaries for insurance obligations are determined under SAM and to explain how this is relevant in the valuation of technical provisions. This question is bookwork and was generally satisfactorily answered.*

Specify how the contract boundary for determining insurance obligations is defined under SAM and briefly explain why this is relevant in the context of valuation of technical provisions.

- For the purpose of determining which insurance obligations arise in relation to an insurance contract, the boundary of the contract is currently defined by the Prudential Authority in the following manner:
 - (a) Where the insurer or reinsurer has:
 - i. a unilateral right to terminate the contract;
 - ii. a unilateral right to reject the premiums payable under the contract; or
 - iii. a unilateral right to amend the premiums or the benefits payable under the contract at a future date in such a way that the premiums fully reflect the risks
 - Any obligations which relate to insurance cover which might be provided by the insurer after that date do not belong to the existing contract, unless the insurer can compel the policyholder to pay the premium for those obligations.
 - This is a relevant consideration as future contracts do not need to be included in the valuation, and hence do not form part of the premium provision determination under SAM, effectively strengthening the SAM balance sheet and regulatory position
 - The contract boundary definition has limited impact on claims provisions as these are benefits to be paid, with no corresponding premium remaining.
 - In general, the contract boundary determines the end point and hence the period for which cashflows linked to a particular contract need to be considered for the purposes of determining the TP's.

- ii) *Part ii required candidates to explain the difference contract boundary definition between SAM and the proposed standard as well as the implications for the valuation of technical provisions. A lot of information was provided in the explanation of the standard which if used correctly would have made the question quite easy to answer. Candidates however answered the question poorly and exhibited a lack of understanding in the application of the contract boundary.*

Explain the differences in the contract boundary definition of SAM and the proposed accounting standards, identifying the implications for the consistent valuation of Greensure’s technical provisions between SAM and the proposed accounting standards

- The SAM contract boundary definition is more stringent, i.e. one would expect that the contract boundary determined under SAM would be shorter than under the new accounting regulation
- The accounting regulation does not refer to termination of contracts or rejection of premiums, but only to the ability to reprice a contract, which is similar to the third SAM clause
- The accounting regulation makes reference to both individual policies and portfolios, with different rules for both, whereas SAM applies a contract standard
- The accounting regulation also refers to non-overlapping periods of risk which SAM does not refer to, which again may lengthen the accounting regulation contract boundary
- Generally the implication would mean a longer contract boundary and hence a higher liability on contract inception (Need to highlight though - if the contract is profitable, then a longer contract boundary may result in a lower provision, however, if the contract is funded through a single premium, a longer contract boundary could result in more claims and thus the argument is valid)
- However, for the case of the mining rehabilitation contract, these may end up being similar because of the regulatory approval which is required, hence limiting the ability of terminating the contract early under SAM.
- There may also be a regulatory requirement to provide the insurance and hence an inability to reject premiums under SAM, again driving consistency
- As a result of the multi-year contract nature, the ability to charge an additional premium may make a difference, but only if this change cannot be effected at an individual policyholder

- iii) *This section required candidates to describe the principles for the best estimate valuation of technical provisions under SAM. This is a knowledge question and was generally satisfactorily answered by candidates who had prepared adequately.*

Describe the principles for the best estimate valuation of technical provisions under SAM

- Technical provisions are calculated using market consistent principles.
- The best-estimate liability is equal to the probability weighted average of future cash flows, taking account of the time value of money by discounting using a risk-free yield curve.
- Furthermore, best-estimate liabilities should be calculated gross of reinsurance, with reinsurance recoverables (net of best-estimate counterparty default risk) reflected explicitly as an asset in the balance sheet.
- Simplifications can be used when calculating technical provisions and reinsurance recoverables to ensure that actuarial and statistical methodologies applied are proportionate to the nature, scale and complexity of the underlying risks.
- The best-estimate liability is determined as the discounted value of projected cash flows under each policy up to the “contract boundary”, calculated on a policy-by-policy basis.
- The assumptions underlying the best-estimate liability should be best-estimate with no additional margins for prudence.
- The projections should allow for all expected decrements and policyholder actions, including lapses.
- Companies must take into account all relevant available data, both internal and external, when arriving at assumptions that best reflect the characteristics of the underlying insurance portfolio.
- The risk-free discount rate used in the calculation of the technical provisions shall in general be the government bond curve.
- The risk-free discount rate is prescribed and published by the PA on a monthly basis
- Only equivalent reinsurance may be taken into account in the reinsurance provision
- Claims provisions, premium provisions and other technical provisions must be calculated and reported on separately
- If, when valuing the premium provision, future income exceeds future outgo, then the provision should be negative and not capped at 0

- iv) *Part iv required candidates to describe the features of the risk margin under SAM as well as critically analyse the calculation of the risk margin under SAM.*

In general, part a requiring the candidates to describe the features of the risk margin was adequately answered. However, part b which required candidates to critically evaluate the calculation was very poorly answered with the majority of candidates merely explaining how the calculation works and the components thereof.

Part a: Describe in detail the features of the risk margin under SAM.

- The risk margin represents the premium over and above the best-estimate liabilities that one insurer would require to take on the obligations of another insurer.
- It represents the theoretical compensation for the risk of future experience being worse than that assumed in the calculation of the best-estimate liabilities, and the cost of having to hold regulatory capital against this risk.

- The risk margin should be calculated by determining the cost of providing an amount of eligible own funds equal to the SCR necessary to support the insurance obligations over the lifetime thereof, assuming that the business is transferred to a third party.
- The rate used in the determination of the cost of providing that amount of eligible own funds is called the cost of capital rate (prescribed at 6% above the risk free rate). This can be thought of as the frictional cost to a company of locking in the SCR instead of being able to invest it freely. The 6% cost of capital rate is taken from Solvency II and is a conservative estimate of market practice.
- The risk margin is therefore calculated as 6% of the projected SCR at each future year-end, discounted using risk-free rates of return.
- When projecting the SCR, approximate methods can be used, subject to proportionality and materiality.
- Although companies are required to calculate the risk margin per line of business, allowance can be made for diversification benefits between lines of business, and hence the risk margin must first be calculated for all lines of business together and then allocated to the underlying lines of business.
- FSI2.2 outlines the transfer scenario which is assumed to take place

Part b: Critically analyse the calculation of the risk margin under SAM.

- The risk margin is the margin an insurer will require to take over the liabilities – different insurers will have a different view of the uncertainty inherent in the liabilities themselves
- The risk margin is calibrated to the SCR, but an insurer may hold a higher (or different) amount of capital than the SCR.
- This may be because the SCR is targeted but a multiple of SCR is held to ensure that the regulatory capital level is not breached.
- The SCR is only one measure of the capital at this level (99.5%) and hence another estimate would result in a different risk margin.
- The insurer(s) may have different risk appetites and hold capital to a higher confidence level than the SCR and hence the risk margin is not appropriate for the capital profile.
- The underwriting risk (specifically reserve risk) on which the SCR is based is calibrated as uncertainty over one year (not to ultimate), and yet the risk margin is intended to be based on the capital to support the insurance obligations over the lifetime of the liabilities. Hence there is a disconnect of the calculation and the intended result
- Diversification is allowed between the lines of business but if one line of business is transferred then it can be expected that the risk margin will be insufficient for this line alone
- The Cost of Capital is fixed and is related to what is appropriate in the EU. The cost of capital would be expected to differ by company, based on the balance between debt and equity and the scale and operations of the insurer.
- The cost of capital in South Africa would be expected to be higher than the EU, as interest rates are generally higher in South Africa and risk is higher
- The risk -free rate as it relates to the cost of capital rate is also relevant, as a lower (fixed) CoC rate related to a higher risk free rate will result in a risk margin which is too low
- The unavoidable market risk is normally an assumption which is not matched in practice as longer-term liabilities are normally matched by longer term assets with some investment risk, which will not always be reflected in the SCR held

- v) *The section required candidates to outline a list of questions which would need to be investigated in determining the viability of the CFO's proposed approach, considering the implications arising if the risk margins were aligned. This question was generally very poorly answered with very few candidates considering confidence levels required and disclosure thereof as well as the fact that SCR related risk margins are meaningless under IFRS unless the alignment is explained in the disclosures.*

Outline a list of questions which would need to be investigated in determining the viability of the CFO's proposed approach, considering the implications arising if the risk margins were aligned.

- Methods which can be applied in the calculation of the risk margin
- CoC approach or other (percentile based approach). If CoC approach is used then there is room for more alignment between SAM and new accounting regime.
- What confidence level needs to be held, and whether this needs to be disclosed. If this does not need to be disclosed then there is scope to arbitrarily keep the risk margin the same.
- If the basis for calculation needs to be disclosed then this may reduce the ability to keep the risk adjustment the same.
- Definition of the risk margin is not the same as under SAM. Refers to uncertainty margin rather than the margin for transferring insurer. Is there scope to align these concepts?
- SCR has no meaning under the accounting regime, and hence it is unclear as to whether this can be used to determine the risk margin.
- Whether the risk margin is calculated gross or net (net of reinsurance only for SAM).
- Whether the definition of non-financial risk meets the same definition as the uncertainties for which the risk margin is held under SAM.
- The risk margin under SAM is held for the one year uncertainty, and under the accounting regime the uncertainty may be related more to the ultimate uncertainty in the reserves.
- IFRS4 does not specify whether a risk adjustment needs to be held, and to what confidence level. Hence a similar approach may mean scope for alignment between the two regimes.
- There will be other differences in measurement of assets and liabilities and hence will affect the eligible own funds definition (NAV under IFRS) and hence the capital required.
- A difference in the starting capital level will mean that a difference in the risk margin will be expected with the same calculation techniques
- Need to understand whether diversification is allowed under the new accounting regime, and whether there are any prescribed methods how this should be calculated (or limits)
- A percentile based approach may achieve the same absolute margin at a different percentile, which will change depending on the nature of the liabilities and the lines of business in each year.
- A disclosed confidence level would then be problematic as this would change over time to keep up with the SAM margin, hence introducing a variable risk appetite to shareholders.
- CoC rate is fixed under SAM. Why this would be acceptable to auditors is unclear. Also, the rate is based on a different situation (EU)

- Discount rates used may differ as this is the risk free rate and set based on regulation under SAM. Hence would expect a different set of values under the new accounting regime.
- Simplifications applied in the calculation of the risk margin under SAM may not be acceptable in the case where the calculation is scrutinised by auditors under IFRS
- Any differences in the best estimate (for example due to the contract boundary differences) will mean a natural difference will exist in the total including risk margins, even if the risk margins are the same
- A very low confidence level because of the differences in one year vs ultimate definitions of risk may introduce concern among investors who have just become used to the SAM definition of the 1 in 200 level of capital
- Effectively this means that as IFRS balance sheet strength will be compared, there will be competition among companies to indicate financial strength
- Differences would indeed be expected between solvency level of liabilities and hence derivation of the risk margin amount would be expected to be disclosed in the financials, which may indicate poor risk management if the risk margin is simply taken from SAM

vi) *The final question required candidates to describe how underwriting profits and losses are currently taxed in South Africa as well as how taxation regulations would need to be updated to be consistent with the new accounting standard as well as the proposed budget speech of only allowing 80% of losses to be offset against future profits.*

Part a of the question was knowledge based but was still not answered satisfactorily by the majority of candidates. Part b required a bit of higher order thinking but a number of candidates failed to use information that was provided in the paper such as losses would need to allowed for prospectively under the taxation regulations and that levels of discounting would need to be regulated.

Part a: Describe how underwriting profits or losses for a short-term insurer operating in South Africa are currently taxed.

- Short-term insurance companies are taxed in accordance with section 28 of the Income Tax Act No. 58 of 1962, read together with subsequent amendments made thereto from time to time (e.g. Taxation Laws Amendment Act 2018).
- Taxation in South Africa is resident based, meaning that insurance companies resident in South Africa are subject to tax on income received from local and foreign sources.
- The following expenses are deducted from the premium income received by or accrued to a short-term insurer in determining taxable income:
 - reinsurance premiums incurred
 - actual claims incurred net of claims recovered or recoverable under any contract of insurance, guarantee, security or indemnity
 - any other expenses incurred in the running of the business as are admissible in terms of the Income Tax Act.
- In addition to these expenses, Section 50(e) of the Taxation Laws Amendment Act 2018 allows a further deduction for the IFRS technical reserves as reported in the audited annual financial statements.
- Given IFRS 4 does not prescribe a specific liability valuation model, the IFRS technical reserves deductible under the tax basis are valued as per the Interim Measures calculation introduced through Board Notice 169 of 2011 or using an alternate method approved by the Head of Actuarial Function.

- As described in Section 32(1) (a) and (b) of the Short term Insurance Act No.53 of 1998, the following technical reserves are deductible under the tax basis
 - a. the amount which the short-term insurer estimates will become payable in respect of claims incurred under short-term insurance policies --
 - 1. and reported but not yet paid, reduced by the amount which it estimates will be paid in respect of those claims under approved reinsurance policies;
 - 2. but not reported, reduced by the amount which it estimates will be paid in respect of those claims under approved reinsurance policies,
 - b. an unearned premium provision
 - Other provisions, such as the unexpired risk provision, are not allowed as deductions for tax purposes. If an unexpired risk provision is considered to be necessary, the insurer shall determine the amount thereof in consultation with its auditor and Head of Actuarial Function.
 - Although this provision will be included in the regulatory and statutory accounts, the provision may not be included for tax purposes as an expense.
- The amount included in the taxable income calculation is the movement on the technical reserves from one financial period to the next.

Part a: Discuss how the taxation regulations in South Africa should be updated to be consistent with the new accounting standard, identifying the implications of changes on Greensure's profits in future.

- Current taxation regime does not allow for losses to be raised prospectively for taxation purposes. This would need to be updated.
- If not, there would be a large difference in the taxable amount and actual profits effectively meaning Greensure is liable for tax on profits not yet earned, or at least in advance of profits being made.
- Profits being deferred to a later point is already allowed for in the tax rules as the full UPR (at a combined ratio of 100%) is provisioned
- Would need to allow for rules around the risk margin. For example, how this is calculated – confidence level, consistency between year to year.
- Or alternatively only the best estimate liabilities can be allowed for in the tax calculation.
- Discounting and its application needs to be regulated.
- 80% of losses offset against profits in future will mean that the natural insurance cycles will be worse from the perspective of shareholders, as more tax will be paid in the long run
- The concept of approved reinsurance will need to fall away, as this is no longer relevant
- Interim measures definition of the IBNR will need to be updated to reflect the best estimate of the liabilities as per the accounting regulation
- Any aggressiveness in the tax rules (reverse conservatism) will mean that Greensure will pay too much tax in the near term in relation to the profits made.

END OF REPORT