EXAMINERS' REPORT

June 2015 examinations

Subject F103 — *General Insurance*
Fellowship Principles

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.

QUESTION 1

i. Profit commission is commission paid by a reinsurer to a cedant.
The commission is dependent upon the profitability or claims experience of the total business ceded during each accounting period.

This is most likely to be used for:

- Proportional reinsurance (i.e. quota share and surplus); or
- Low excess layers of XL reinsurance (i.e. working layers).

ii. A risks-attaching basis is the basis under which reinsurance is provided for claims arising from policies commencing during the period to which the reinsurance relates, irrespective of when the claims are incurred or reported.
This is also known as a policies-incepting basis, and corresponds to an underwriting period cohort.
This is the natural arrangement for proportional reinsurance.

iii. a. The maximum retention on the surplus cover is: 600m/20 lines = R30m.
To retain as much of the risk as possible the EML would thus be split between A, B and Z in the following ratio:

90 (30%) : 180 (60%) : 30 (10%)

The recovery from Co. B is thus:

$(180/300) \times 60m = R36m$

(This implies a retention of 10% of the original risk.)

b. To retain as little as possible of the risk all of the available lines of cover should be used.
However, this would imply a split of the EML between A, B and Z as follows:

$90 : 210 \times 20/21 = 200 : 210 \times (1/21) = 10$

Since this would mean retaining less than the minimum permitted, it is necessary to use a split of:

90 : 198 : 12

The recovery from Co. B is thus:

$(198/300) \times 60m = R39.6m$

(This implies a retention of 4% of the original risk.)

c. To limit the maximum net claim to R25m this implies retaining 6.25% of the risk (as the Sum Insured is R400m).
This falls between the maximum and minimum shown above, and so is an acceptable split.
Hence Co. B reinsures: 100% - 30% - 6.25% = 63.75%.
Thus the recovery from Co. B is: $63.75\% \times 60m = R38.25m$.

Parts (i) and (ii) were bookwork, and were fairly well answered by the majority of candidates.

Part (iii) was answered poorly by most candidates. Many candidates showed they had little understanding of how maximum and minimum retentions operate, and few checked whether their answers satisfied these criteria. Several candidates did not seem to know the difference

between a maximum net claim and a maximum retention (based on EML), nor between the operation of surplus and excess of loss reinsurance. Some candidates also omitted currency and units from their answers.

QUESTION 2

The potential problems associated with the use of the Lloyd's market data include:

- The data Lloyd's collects from its members will contain the information from a number of syndicates writing similar business in the market and may thus not be directly relevant to the business in question.
- There may be differences in mix of business by country / territory.
  - Thus there may be differences in perils and exposures to different environments.
  - E.g. exposures to different kinds/levels of catastrophes; or
  - E.g. different levels of theft risk, etc.
- The policies could have important differences, e.g.
  - Policy conditions; or
  - Limits/deductibles, exclusions, etc.
- The Lloyd's members could have different approaches to premium collection, case reserving, claim payments, etc.
  - This could produce distortions in the development patterns used in projections, and hence
  - The projected ultimate loss ratio.
- Historic data may also be distorted by large or unusual claim events which may not be easy to isolate from combined market data.
- The data might also contain errors.
- Also, the market loss ratio will consist of the combined profitability of all participants.
  - Some members would have underperformed and some performed better.
- Information will be dependent on the quality of underwriters and claims handlers of each organisation.
- There may also be random variations to account for.

The underwriter's expectations may have the following limitations:

- The view of rate change will be based on an estimate of future premium movements which may not be appropriate.
- Even if appropriate under current conditions, rate changes for this class of business can suddenly change after a large claim event/catastrophe.

As with any portfolio, the past might not be a good indicator to the future, and without a detailed understanding of the changes in the market environment, the syndicate might not derive an accurate estimate of profitability.

Candidates who fully answered the question, i.e. describing the limitations, uncertainties and pitfalls did fairly well. Most candidates, however, did not give enough points or detail.

QUESTION 3

i. The *pure risk premium* is the premium required to cover the expected claim amount only. No allowance is made for expenses or profit. We may express it as a nominal amount, but it is usually expressed as a rate per unit of exposure.

Deriving the expected claims cost is often the major part of the work in deriving the risk premium. In establishing the overall level of claims costs, we would use an estimation or modelling process such as those used for reserving purposes.

Basically the approach involves assessing the ratio of claims to exposure in earlier periods and, based on this, estimating what this ratio will be in the future, recognizing that this ratio may differ for different risk groups.

The steps involved are:

- Collect relevant data, including past exposure data and claims arising from that exposure.
- Adjust the data to make them more relevant, for example if policy conditions have changed.
- Group data into risk groups (if there are significant differences between groups).
- Select the most appropriate rating model or estimation process for the specific case.
- Analyse the data (e.g. to pick up trends in ratio of claims to exposure over time).
- Set the assumptions required by the model or process.
- Test the assumptions for goodness of fit or likelihood probability.
- Run the model or process to arrive at an estimate of future claims costs.
- Perform sensitivity and scenario testing, or apply other methods, to check the validity of the estimate.

A variety of statistical approaches can be used to derive a risk premium. For example: simple burning cost approach to premium rating, using aggregate claims data; frequency-severity approach, where statistical distributions are fitted to the frequency and severity of claims separately and combined to give risk premium; multivariate models, including Generalised Linear Models (GLMs); and the "original loss curve" approach to premium rating.

ii. The burning cost method is an experience based method that takes the actual cost of claims during a past period of years, expressed as an annual rate per unit of exposure. This could apply to a single risk or to a portfolio of similar risks. The technique may be purely based on past claims without adjustment, although an improvement would be to adjust past claims for trends and develop the claims to ultimate, but often this is not done in practice. If trending is applied to claims, exposure should also be adjusted. The burning cost approach is commonly applied to aggregate claims, but may also be applied to frequency and severity separately.

The burning cost method is most suitable when there are lots of credible data. When the data are not credible, the burning cost premium should be combined with book rates using credibility techniques to obtain a more accurate premium.

Original loss curves are an exposure based rating method. The main principle of exposure rating is to not use historic claims experience at all, but instead to base premium rates on the amount of risk (ie exposure) that policies bring to the portfolio. In exposure rating, we use a benchmark to represent a market severity distribution for the line of business and territory being covered. The benchmark may even be directly derived from the market severity distribution.

Original loss curves (exposure curves or ILF curves) are used to estimate the cost to the layer based on the exposure and premium information provided by the cedant rather than the actual cost and past exposure.

In particular, we commonly use original loss curves in excess of loss insurance pricing to infer prices for layers at which the data are too sparse to derive a credible experience rate. So for example we might use them in place of a burning cost approach (which requires lots of credible data) when calculating the risk premium net of a layer of reinsurance with a high excess point, or perhaps even calculating the risk premium for the layer of reinsurance (from the reinsurer's perspective).

Part (i) was bookwork, and was generally answered well.

Part (ii) was poorly answered. Most candidates did not identify that the main difference between the burning cost approach and original loss curves approach is that one is an experience rating method and the other an exposure rating method. Most candidates also did not highlight that the burning cost method is more appropriate when there are lots of credible data, and that original loss curves are more appropriate when the data are too sparse to derive credible experience.

QUESTION 4

i. This insurance provides a fixed amount in the event that the insured party suffers the loss of one or more limbs or other specified injury, or accidental death.

Such cover is usually included in:

- Comprehensive motor vehicle insurance.
- Household (contents) insurance.
- Employers liability.
- Marine and aviation liability.

ii. The characteristics of the claims are as follows:

- Claims are usually reported quickly, as the incidence of an event is usually very clear. However with accidental death claims the insured's dependants may not always know the policy exists and may discover their entitlement after an extended period, resulting in a reporting delay.
- The claims may be settled quickly, although if a claim is for permanent total disability it may be necessary to wait several months or years for a claimant's condition to stabilise.
- The claim frequency tends to be reasonably stable.
- Claims can be large: cover of millions of rands per person is not uncommon.
- Benefits are fixed in monetary amount, and not exposed to inflation.
- The currency of the liabilities will be local.

Matching assets will probably comprise:

- Cash / Money market instruments:
  - These are highly liquid and can be used to pay claims and other expenses.
  - Capital values are stable, which makes them suitable for short-tailed claims, as there is no risk that assets will be sold at depressed market values.
- Short-dated (<3-year) bonds:
  - These also tend to be very liquid (although not as much as cash), so can be easily sold if claims need to be settled.
  - As they provide a return that is fixed in nature, they provide a good match to fixed benefits.
  - They can be used to match claims of slightly longer tail (e.g. where the insurer is waiting for a condition to stabilise).
  - They should provide a slighter higher expected return compared to cash.

The insurer may decide not to match its liabilities. Factors that impact on whether to mismatch liabilities include:

- The size of current free reserves: Greater free reserves allow the company to mismatch assets and liabilities.
- Business plans: if the company experiences rapid growth and declining free reserves in future years, the scope for mismatching will reduce over time. Excess free assets are more likely to be used to fund business growth rather than be used as a buffer for mismatch risks.
- The extent to which the insurer can rely on premium income to meet short-term expenses and claims may allow it to mismatch; there is likely to be a high degree of uncertainty for a new insurer, and hence a need for close matching.
- Need for diversification to reduce specific risks from overexposure to a particular asset or asset class.
- The extent to which liabilities have been reinsured may increase investment freedom.
- The company's attitude to risk and access to parent company resources may influence investment freedom.
- The outlook for returns for various asset classes may lead to short term tactical decisions leading to mismatching.
- Any regulatory requirements, including admissibility rules, may force the insurer to mismatch.

iii. The main differences could include:

- Premium growth will be much more certain for a bigger company. Hence greater ability to rely on cash from future premiums and scope to mismatch by term, so the resulting duration of assets may be longer for the larger company This should lead to a higher proportion of longer-dated bonds.
- If shareholder funds have been invested in property or equity, the larger company will have a greater ability to invest directly A smaller insurer is more likely to use indirect investment vehicles (e.g. property unit trusts).
- A new company is likely to utilise excess free assets to fund business growth rather than be available as a buffer for mismatch risks. A large well-established company may have less need to fund business growth. Even with excess free assets a new company may decide not to mismatch, while a large company may be more likely to mismatch in order to diversify and maximise investment returns.

There was a wide range of marks for this question.

Part (i) was a basic bookwork question, yet it was very surprising to see the number of candidates that did not know what benefits are provided by Personal Accident cover. A number of candidates thought that this is a liability type of cover, where the size of the claim is linked to loss of earnings, medical costs etc.

Part (ii) was generally done well by those candidates that knew what Personal Accident cover was.

For part (iii) the weaker candidates were those that made unjustified assumptions, the most common being that the larger insurer must have larger free reserves and therefore greater investment freedom. Firstly, it is not always true that a larger insurer will have greater investment freedom, and secondly, investment freedom is determined by the free reserves relative to the statutory requirements, not by the absolute value of the free reserves.

QUESTION 5

i. Possible regulations and checks:

Regulation:

- Maximum claim settlement duration.

Justification:

- Increase value of insurance and increase trust in insurers. The low-income market will need prompt settlements as cash flow may be a problem for them.

Check/test:

- Require company to file a report of claims settlement times, including aggregate figures such as average settlement time and details of individual claims that went over the settlement limit, with comments on why this was the case.

Regulation:

- Consumer education before product sold is accurate and provides enough information for the consumer to make a well-informed decision. This may require that sales agents explain the product.

Justification:

- Customers in the low-income market are likely to have low levels of financial literacy and not be in a position to make wise decisions.
- If not regulated, this opens up such customers to mis-selling. This is not desirable for the insurance industry in the long-run as policyholders in this market will lose trust in insurers.

Check/test:

- Check the clarity of all marketing material and policy document wording.
- Require all agents to pass certain tests that qualify them to explain insurance products to low-income earners.

Regulation:

- Simplicity of product e.g. standard terms and conditions.

Justification:

- This allows customers to compare insurers' products more easily, without surprises.
- It also reduces the possibility for insurer to exploit customers' lack of financial knowledge by introducing larger excesses or exclusions to offer seemingly similar products at lower cost.

Check/test:

- Require products offered to low-income earners to go through the regulator for approval.

Regulation:

- Insurers to help policyholders to accurately assess sum insured on household contents.

Justification:

- Helps to avoid over-insurance, as policyholders will not be paid out more than the value of their property.
- Helps to avoid under-insurance, where insurers only pay a percentage of the claim, ultimately leading to less trust in the insurance industry.

Check/test:

- Spot checks on individual policies to test whether the actual value of contents is consistent with the insured value.

Regulation:

- Impose limits on premium level.

Justification:

- Low-income market may be unable to afford high premiums, and are also not as able to discern whether premiums are fair or not.
- Ultimately in the interest of building trust and confidence in the insurance industry.

Check/test:

- Require approval of premium rates by regulator.
- Check loss ratios.

Regulation:

- Limit on commission to sales agents.

Justification:

- Keeps premiums low (as above).
- Also reduces adverse incentives leading to mis-selling.

Check/test:

- Insurers could submit report of broker/agent salaries and commissions.

Regulation:

- Flexible premium arrangements for policyholders who fall behind.

Justification:

- It is common for low-income earners to have irregular income. This may result in periods of not being covered, making insurance less useful. A 'grace period', where policyholders are allowed to fall say two or three months behind will overcome this problem.

Check/test:

- Check that claims are not being repudiated due to policyholders falling behind on premiums.

Regulation:

- Requirement to hold capital aside and guidance on how to determine capital requirement, including allowance for accumulation of risk.

Justification:

- Ensure that money is available should an event lead to a very large aggregate loss e.g. fire that spreads throughout informal settlement.

Check/test:

- Check balance sheet to establish level of capital.
- Require disclosure as part of regular report to regulator.

ii. Disadvantages of introducing regulation in scenario:

- Extra costs of enforcing regulation ultimately leads to increased premiums as costs need to be recovered, which leads to fewer individuals being able to afford insurance (a disadvantage to prospective policyholders and society as a whole as individuals are then less able to withstand risk) and lower recovery of fixed expenses for the insurer, possibly leading to further premium increases to recoup expenses (a cycle).

- Since adhering to regulation increases expenses, it may act as a barrier to entry, hence reducing competition. This could lead to lower levels of innovation, (ultimately disadvantaging policyholders) and higher premiums, although both of these may be limited by regulation already.

- Certain regulations may discourage desirable behaviour e.g. limited commissions results in lower incentive for brokers and sales agents to sell products, thus limited volumes are sold and more difficult to achieve economies of scale.

- Limits on premium rates and product design features may make products less attractive to insurers due to lower profit (premium rate limits) and possibly higher risk (e.g. if the insurer is unable to exclude an uninsurable risk). This may result in the product not being sold, resulting in a need not being met.

In part (i) many candidates failed to provide the three things required for each item, viz.: 1. suggest a regulatory requirement; 2. justify why the suggested regulation would encourage the fair treatment of policyholders; and 3. suggest a way of checking that the regulation was being adhered to. Better candidates answered all three parts for each suggested regulation.

Part (ii) was generally answered better than part (i), although a number of candidates made no effort to tailor their answers to the scenario in the question and merely gave disadvantages of regulation in general. A number of candidates were too brief in their answers to this "outline" question.

QUESTION 6

i. IBNR: A reserve to provide for claims in respect of claim events that have occurred before the valuation date but have not yet been reported to the insurer at the valuation date.

   IBNER: A reserve reflecting expected changes in estimates for reported claims only.

   UPR: The amount set aside from premiums written before the valuation date to cover risks incurred after that date.

   URR: The reserve required to cover claims and expenses that are expected to emerge from unexpired periods of cover.

   Catastrophe reserve: A reserve built up over periods between catastrophes to smooth the reported results over a number of years. The purpose of the catastrophe reserve is smoothing, not solvency..

   Other technical reserves are also acceptable.

ii. Key issues:

   - Surplus/deficit in reserves: The level of surplus or deficit in the outstanding claims reserve will directly impact the valuation of the target and so have a direct impact on the offer price.

- Technical reserves provided by target: There may be a tendency for the target to provide optimistic reserves as this will increase the value of the company and increase the price paid.
- Chain ladder and BF: These are universally accepted actuarial methods, however, it is important to understand whether the assumptions underlying these methods are met.
- Conservative policy setting case estimates: This will mean that there is likely to be surplus within the case estimate reserves. However, this may be offset by a negative IBNER in the IBNR reserves.
- Trend in loss ratios: It is important to understand whether the increasing trend in the motor loss ratio has been incorporated in the reserves provided by the target. Since the property loss ratios are stable this is less of an issue for the property reserves.
- Need for an AURR reserve: Soft market and increasing loss ratio may mean that an AURR should be included if not already included in the target's reserves.
- Ban of gender as a rating factor: This may impact the mix of business taken on by the target which may invalidate chain ladder assumptions.
- Increase in whiplash claims: The increase in whiplash claims in recent years may mean that historic development patterns are not appropriate for the most recent accident years. It is important to understand whether allowance for whiplash is included in the reserves provided by the company.
- Impact of reinsurer default on net position: An allowance for the known default of one of the target's reinsurers should be made in the estimation of the net of reinsurance reserves.
- Consider the possibility of other reinsurers defaulting and how this will impact the target's net of reinsurance reserves and consequent impact on price.
- Uncertainty in the technical reserves, since technical reserves are just estimates with actual experience likely to differ from what is assumed in the reserving basis.
- Limited internal data are available to the target to calculate its technical reserves (given it is a new insurer). This increases uncertainty and may invalidate actuarial methods used.
- Limited data are available in due diligence, i.e. only a high level summary of technical reserves by class is provided, which makes checking the target's technical reserves more difficult.
- You should consider your audience in your report i.e. that the report is addressed to the board which may have limited understanding of actuarial principles.

iii. It is important to consider whether the source from which the benchmarks are derived has characteristics that are appropriate to the business for which the reserves are being derived.

For example:

- Similar claim reserving philosophy;
- Similar underlying nature and mix of business;
- Whether benchmark is up to date;

- Benchmark may be based on more data than the target's and hence exhibit less volatility.

iv. Possible benchmarks include:

- Age to age development factors
- Ultimate to paid
- Ultimate to incurred factors
- Ultimate loss ratios
- IBNR as a percentage of paid,
- IBNR as a percentage of outstanding reserves
- IBNR as a percentage of premium
- Average claim cost and frequency
- Survival ratios
- Incurred loss ratios
- IBNR as a percentage of total technical reserves

Part (i) was book work and was generally well answered. The question allowed candidates to choose which technical reserve to define, and thus any actuarially accepted component of the technical reserves was allowed. Almost all candidates were able to identify four technical reserves, however a surprising number of candidates were not able to adequately define the Unearned Premium Reserve, which is a key component of short-term insurers' technical reserves.

Part (ii) was well answered considering that it was an application question which required the candidates to apply their knowledge to a perhaps unfamiliar situation. To score well candidates needed to give a suitably broad answer focusing on the technical reserves and how these could impact the price of the acquisition, highlighting any areas of uncertainty which should be brought to the board's attention. The report was intended for the board of directors who presumably were not all actuaries and who were probably not looking for a significant amount of technical detail, being more focused on the big picture. Consequently limited marks were awarded for candidates delving into the technical detail surrounding the chain ladder method.

Part (iii) was surprisingly poorly answered, given that it was a book work question. No candidate scored full marks for the first part of the question, which required an explanation of one important consideration when applying benchmarks. Saying that the benchmark was not appropriate did not gain full marks for this part. Candidates generally performed slightly better when providing examples in the second part.

In part (iv) candidates generally performed well. The question specifically referred to industry benchmark ratios / quantities that could be used to assess the level of IBNR, and so the listed ratios / quantities needed to be relevant to assessing IBNR to gain marks. For example, the ratio "outstanding reported claims reserves/paid claims" did not gain marks.
No marks were given for stating:

- *"Loss ratio" as this is too vague. Marks were given if the loss ratio was appropriately defined e.g. "ultimate loss ratio" or "incurred loss" ratio.*

- *The "change in IBNR" or the ratio of "net IBNR to gross IBNR" as this is considered too specific to the company, and so it is not appropriate to measure these quantities with benchmarks.*

QUESTION 7

i. Potential causes of the sharp decrease in market share:

- More competitors:
  - More insurers may have entered the market.
  - Such companies may have attractive products and aggressive marketing.
- High premiums:
  - The company's premiums may be out of line with those of competitors.
  - This could be due to reasons such as poor recent claims experience, lack of control of expenses, etc.
- Poor benefits:
  - The company may not have kept pace with new benefits being introduced by competitors.
  - The company's policy conditions may also be uncompetitive.
- No telematics product:
  - The company may be losing market share as policyholders are attracted to other companies' "sexy" telematics products.
  - Such products may, in addition, be targeting lower-risk policyholders whose good driving is not being recognised by traditional rating factors.
- Strategic change of focus by the company:
  - The company may have taken a decision to reduce new business volumes in traditional motor insurance in order to focus on other classes.
  - This may be unlikely, though, since the motor insurance market is very competitive and the insurer would not want to lose any competitive advantage.
  - The company may also have commenced moving away from traditional motor insurance in preparation for launching a telematics product.
  - The company may have capital constraints, forcing a reduction in new business.
- Reduced marketing:
  - The company may have spent less money on marketing in the last year.
  - Alternatively, it may be that competitors are spending relatively more on marketing, e.g. in respect of their new products.
- Bad publicity/image:
  - The company may have experienced bad press following a particular incident, e.g. mis-management resulting in lower new business and higher lapse rates.
  - The company may have tightened up on claims underwriting, creating an image of being unwilling to pay claims.

- Distribution channels:
  - Commission structures may have fallen behind competitors', resulting in brokers being less keen to sell the company's products.
  - The insurer may have lost a large tranche of business from a particular source, e.g. a large broker that took its business to another insurer.

ii. Potential benefits of introducing telematics product:

- Telematics readings will allow more accurate information to be obtained about the riskiness of each driver. This can be used to refine premium rates. More better-risk drivers will be attracted because their premium rates will be lower than average, while poorer risks will likely leave due to higher premiums (or at least be charged a higher premium if they choose to stay). This will benefit the insurer as its business could become more profitable.
- Policyholders will benefit by lower premiums if they drive more safely.
- If customers decide not to choose the telematics option, this may indicate that they are riskier drivers, since we could infer that they do not want to "disclose" their risky driving behaviour. Thus, rates could be refined for the traditional motor insurance book simply by having the option of telematics insurance available.
- Telematics products may seem attractive to clients wishing to reduce their premiums. Even if the clients turn out not to be better risks, the idea of being more in control of ones own insurance premium may be more attractive. This could lead to higher business volumes and better spreading of fixed expenses.
- An extension of the above point is that the insurer may be able to cross-sell products to individuals who have taken out a telematics product, increasing the value derived from each customer.
- If more individuals on the roads are driving carefully to reduce their insurance premiums, this will make the roads safer for all concerned (drivers, pedestrians, cyclists, etc.).
- Since telematics devices can detect location, this may increase recovery rates on stolen vehicles, reducing theft costs for the insured and allowing policyholders to get their vehicles back.

iii. Steps in implementing new telematics product

- Research the topic e.g. academic papers and industry reports. The following will need to be researched before offering a trial product:
  - Product design.
  - Rates (based on industry loss ratios compared to standard motor insurance).
  - There may be other clever ways to obtain data, for example, a competition for the "best driver" that uses an app on smart phones to generate driver scores.
- Introduce a trial product.
  - The idea is to offer the product on a small scale initially to limit exposure to loss if the product design exposes the company to unknown risks or if premium rates are too low.

- Would need to establish a supplier of devices, negotiate costs and installation arrangements.
  - Also need to decide who pays for the telematics device, the insurer or the policyholder. If the policyholder, may offer them a premium discount. If the insurer, may have a clawback clause should the policyholder cancel their policy within a short period.
- Initial rates prudent in case incorrect to limit loss.
  - Although the small number of policies sold in a trial product will limit any loss if rates turn out to be too low.
- Representative/balanced sample: select individuals from different risk classes to understand whether telematics affects different drivers differently.
- The trial product will provide some data specific to the target market, country, etc. which can be used to refine rates based on industry data.
- Analyse and interpret experience and refine product design until all major issues have been ironed out.
- Use data from the trial product to refine rates.

- Offer on a larger scale once the big issues have been ironed out:
  - A marketing campaign will be required to make the public aware of the new product.
  - Prepare for large scale distribution:
    - Train brokers, direct sales staff;
    - Update systems, etc.
- Continue to analyse experience and refine (even though the biggest changes are likely to be during the trial phase, there may be some large changes required that are only realised when offering product in larger scale).
- Other considerations.
  - More reinsurance in earlier stages.
  - Pay special attention to analysing experience at **regular** intervals to detect any problems or detect opportunities.
  - May be worth having a dedicated team to work on product innovation in this market as it is becoming increasingly competitive and novel ideas may give the company a competitive advantage.

iv. Key risks of implementing the product, and possible mitigation:

Incorrect pricing based on telematics readings, especially in early stages, resulting in losses:
Possible mitigations:

- Offer a trial product in order to detect incorrect rates and allow refining of rates prior to full launch.
- Prudent premium rates initially while gathering experience.
- Seek advice from reinsurers, which may result in large cessions initially.

Low up-take, resulting in fixed costs not being recovered.
Possible mitigations:

- Implement a strong marketing campaign.
- Incentivise brokers through higher commissions.

- Research into attractive product design features.

Bad publicity if product is perceived to be unfair, e.g. policyholders perceive themselves to be better drivers than what the readings suggest, or because rates take account of driving behaviour in an inaccurate way.
Possible mitigations:

- Regular and clear communication with policyholders about how they can improve their driving, so they understand why their premium rates are high and have a clear way to try to improve their premium rates.
- Good consumer documentation up-front, giving examples of the type of driving behaviour that affects premium rates.

Expenses higher than expected, e.g. the cost of installing devices.
Possible mitigations:

- Negotiate contracts with suppliers to keep rates at a specified level for a certain length of time.
- Attempt to negotiate a maximum increase in supply costs relative to inflation.
- Negotiate bulk discounts by using a small number of suppliers and forcing policyholders to use these suppliers.

In part (i) most candidates managed to identify five potential causes as required. The better candidates made it clear how their reasons resulted in a change in the most recent year, rather than just a gradual reduction in market share over time.

In part (ii) credit was given for identifying a range of stakeholders, but marks were lost by candidates who failed to focus on the main stakeholders (i.e. the insurer and the policyholders).

Part (iii) required a coherent and logically presented answer. A common mistake was to give insufficient detail for the "outline", giving answers that were more like a "list". Several candidates focussed too much on the pricing part of the process at the expense of a holistic process. Better candidates realised that it would take time for the insurer to collect and interpret data and factored this into their proposed project plan.

In part (iv) a number of candidates eluded to the risks, but did not make it clear what the risks were (where something turns out worse than expected, resulting in objectives not being met). The question asked for potential mitigations (plural) for each risk. Many candidates only outlined one mitigation per risk.

END OF EXAMINERS' REPORT

