Subject F203 — General Insurance
Specialist Applications
26 May 2014
MEMORANDUM

QUESTION 1

(i) Most cyber liability policies provide cover against both first and third party risks

- First party risks:
  - Corruption of own data
  - Virus transmission
  - Loss of own data
  - Costs of data recovery
  - Theft of own data
  - Business interruption as a result of cyber risks
  - Data breach/privacy crisis management
  - Investigation expenses
  - Breach remediation expenses
  - Legal and court attendance costs
  - Other professional fees, eg auditors, industry expert consultations
  - Extortion, losses and professional fees to deal with extortion
  - Financial losses from electronic transactions / Fraud
- Third party risks
  - Defacement of website
  - Intellectual property rights / Copyright/ Trademark infringement
  - Media liability – electronically disseminated information / reputation
  - Regulatory fines
  - Loss of third-party data
- Cyber liability cover is usually very unique to the needs of each individual client

(ii) Typical clients will include:

Credit was given for specific examples e.g. "Banks" instead of a more generic list as below.

- Owners of websites / email service providers / on-line client access
- Business\Individuals that are active on social media
- Business in possession of third party data, eg credit card details
- Individuals that often carry portable devices with valuable data
- Business\Individuals with large electronic assets
- Businesses\Institutions\Individuals with secure networks
- Businesses\Institutions\Individuals in possession of confidential/ sensitive information
- Companies that would like to mitigate risk of digital fraud?

(iii)

In a question like this it is much better to set out advantages and disadvantages of each option separately. It is very difficult to allocate marks otherwise. If points are mentioned in one long list the examiner can't assume whether a particular point is a positive or negative unless it is made very clear from the context of the answer.

From the information given we do not really know what the cost aspects of the two options are relative to each other.

Insure through Lloyd's Syndicate

Advantages

It was clear that many students did not understand how Lloyd's work. Although it was not directly examined, one needs to understand the Lloyd's market to interpret the question correctly.

Note: No credit was given for services/other advantages that an insurer could obtain from a "traditional" reinsurer

- The company will benefit from syndicate's expertise and guidance as it will have no skills in-house
- The syndicate will design the product, terms and conditions on behalf of the company
- The syndicate will take a view on how to rate this product
- after it had completed **p**roper underwriting investigations
- The syndicate's support can enhance the attractiveness of the product offering
- Retrocession will be placed by the syndicate – less time and cost for the company to source and place reinsurance
- Syndicate might also find cheaper retrocession cover through existing relationships with reinsurers or
- The company need not take any risk at first
- Can receive a fixed fee for administering the product on behalf of the Syndicate in the local market
- With the opportunity to potentially underwrite this product later on
- Alternatively, the company can enter into a non-proportional coinsurance arrangement, accept, for example, cover the first R20 million on each risk
- or underwrite a minority of the risk on a quota share basis and earn reinsurance commission
- either way, potentially sharing underwriting profits, but also in losses (see below) / share in profit commission
- With little or no risk retention there will be little or no impact on the company's technical provisions
- Easier to discontinue this line of business
- With little or no adjustments that need to be made to the company's internal model or reinsurance structure

- Quicker to put arrangement in place
- Could get other services from Lloyd's as well e.g. legal expertise in the event of a dispute on a claim (because this business hasn't been written in the SA market for a long period of time)
- Company's focus can therefore be to:
  - administer the product –people systems processes
  - marketing the product – create awareness and interest
  - selling –building relationships with brokers/UMAs

Disadvantages

- Insurer has no control over claims and underwriting, which might make it more difficult to manage the relationships with brokers, UMAs and clients
- Uncertainty about future development of the relationship with the syndicate unless agreed in writing, eg if the insurer accepts no risk at first but plans to do so at a later stage
- A lack of physical presence in South Africa and shared focus by the syndicate might hamper the development of the product and to gain a better understanding of risk exposure in South Africa (local conditions)
- More challenging and costly to communicate with syndicate as opposed to having all stakeholders in-house
- Business support offered might not be relevant to the local market
- The commission received by the insurer might not be sufficient to cover all expenses relating to launch and grow this product line effectively, unless coinsurance takes place
- Syndicate might not be very flexible on certain requirements, eg reporting, that might be onerous on the insurer to implement and execute
- Risk of no reinsurance if business not renewed (by Lloyd's) in future
- The syndicate might already be active in South Africa or might have approached other insurers already, need to set up exclusivity agreement

Underwrite in-house

Advantages (Remember, the insurer can still reinsure the business through a local or foreign reinsurer)

- Specialised focus by appointed underwriter to develop, launch, grow and maintain a product for the South African market
- Larger potential income through underwriting profits, although higher risk as well (can make underwriting losses), given that competition and expected loss ratios are low
- Leading to potential higher returns on capital if market is attractive
- Quicker and less costly communications with stakeholders

- More flexibility on designing, marketing and managing the product operationally
- More flexibility on how much risk the company wishes to underwrite, retain and reinsure, within reinsurance and capital constraints
- Reinsurance available and negotiable with the underwriter's expertise on board
- Added diversification to the company's overall risk exposure
- Allow for knowledge sharing within company (i.e. local underwriters learn the necessary skills)
- Underwriter will have a vested interest in the success of the business

Disadvantages

- Large upfront investment to appoint underwriter
- Underwriter has limited knowledge of local circumstances (move from UK to SA)
- More costly to build systems and support structures
- Will need to appoint additional staff or more underwriters to offer support in various areas
- Underwriter might have limited knowledge about other aspects of launching the product, eg marketing and selling.
- Can take longer to launch the product without syndicate's upfront support
- Higher risk involved – potential underwriting losses. Variable P&Ls and balance sheets, eg due to claims and technical provisions variability / No data available for initial pricing
- More onerous and costly capital requirements, eg higher MCR
- Capital availability and high costs might restrict capacity to underwrite
- Can be a long time before profits are shown on the book
- Even though it might be likely to find reinsurance;
    - reinsurance appetite is uncertain
    - reinsurance might be relatively more costly than through syndicate
- Key person exposure and risk of underwriter leaving, difficult to replace
- More difficult to discontinue the product line

(iv) Opinion/Proposal

- The better option (i.e. business model) would be to partner with the syndicate

Reasoning:

- The company could use external assistance in the beginning to lay the foundation and gain sufficient experience to run the product internally
- Using a syndicate will give them continuity of expertise whilst they will have some key man risk if an underwriter is appointed
- Using the syndicate might give them access to other services as well

(The examiners considered a different opinion with valid reasoning.)

(v)

The question did not ask for the impact of increasing rates on the business. It also did not ask for the impact on assets or capital requirements.

Technical provisions

- Impact would be a massive spike in reserves, showing a tremendous negative result for this new product – beyond the initial launch costs
- OCR will be raised equal to the initial estimate of R95 million
- A reinsurance recovery reserve will be raised at R65 million.
- The potential Ultimate Net Liability (UNL) on this claim needs to be considered
- IBNR not affected by this claim, likely to follow Interim Measures formula for calculation
- UPP held on the 365ths method, not affected by claim
- Possibility of holding an AURR if analysis reveal increased risk exposure
- ALAE need to be adjusted for claims handling expenses
- ULAE would increase as it is calculated as a percentage of IBNR and OCR
- Reinstatement premium accruals would realise
- Need to allow for claims handling expenses?
- IBNR – difficult to assess with chain-ladder method with one claim only, could consider using loss ratio method instead. (This is applicable to IFRS reserves that may differ from the regulatory reserves.)

Suggestion to increase rates

- The fact that a large claim has occurred does not necessarily mean that rates need to be adjusted
- Because this is a new and specialised product it will be important to investigate whether:
    - the claim is valid and within policy terms and conditions
    - that policy terms and conditions (design) are water-tight and don't expose the company to moral hazard or anti-selection
    - the underwriting process is rigorous and effective
    - and achieves to attract the target market
    - the underwriting basis is in line with market practice and that stakeholders understand the implications thereof, e.g. claims made versus losses occurring:
        - claims made basis can reduce uncertainty in IBNR but requires in-depth and detailed investigations and underwriting on the client's history before inception (if retrospective date is not limited)
        - losses occurring will not require as much research into past exposure but claims can be reported after policy expiry
    - there is a likelihood of similar claims occurring, e.g. triggering, and what frequency can be expected. Alternatively, was this a once-off claim?

- An analysis on the occurrence of similar claims in the local and international markets is required and the occurrence of this claim should be measured against the background of this information
- Claim amount may be overstated – liability claims take a longer time to settle and due to uncertainty over the first claim the final settlement amount may be less
- Annual policies cannot be altered until renewal, company can consider switching to monthly policies
- Reinsurers and reinsurance brokers should also be asked for additional information
- that may include likelihood of occurrence in the context of current trends, the quality of underwriting, risk management and remedial measures if necessary
- Rates increase can be justified if investigations and analysis brought alight new or additional information that changed the company's view on the underlying risk of the product
- However, need to keep an eye on marketability and viability of premiums under current market conditions

QUESTION 2

i) *Candidates did not give a lot of information on the impact on the company in the context of the question (i.e. sales, costs, effect on existing book etc.) The answer needs to have more than just various other distribution options available because the essence of the question is how to increase market share. Candidates gave disappointingly little information on regulatory requirements of the various options (which is bookwork) and regulatory requirements did not mean the impact on reserves and capital.*

Alternative distribution channels:

- Underwriting Management Agency (UMA)
- Direct selling
- Tied Agents

Underwriting Management Agency (UMA)

Impact:

- Increased cost leads to increased premium (and potential for less new business). Increased cost can occur due to changes to financial systems (UMA receives remuneration in a form other than commission e.g. fees and/or profit share) training of staff, etc.
  Systems costs, risk mitigation costs and time demands involved in receiving, combining, auditing different sets of data from different UMAs might be high, either leading to higher premiums or absorption of the costs involved.
  (Only one mark allocated for cost implications leading to higher premiums)
- Could enter into an agreement with the UMA to do part of the underwriting and administration duties – possibly less administration to Springbok.
- Transfer of administration to UMA could be cost-effective, depending on the fee paid to the UMA compared to the cost of doing administration in-house.
- Insurer runs the risk of UMA acting outside its mandate – insurer will have to implement audit processes that it might not have had before (cost implication too)
- UMAs usually an expert in their field – in personal lines they will have to look for UMAs that target specific products (e.g. vintage cars) or target market (e.g. professional people) which Springbok haven't had access to before.
- If Springbok gets access to new markets, without impacting current brokers, they will be increasing their potential to increase market share
- Therefore some brokers (in current distribution network) may be affected and others may not – impact on market share difficult to determine without more information
- If increased cost (or if book was taken on at existing premiums) lead to larger than expected premium increases on renewal (for existing policies) it may cause higher lapses.
- On the other hand, the UMA's expertise may lead to more appropriate premiums (which might be lower than what Springbok would have asked without the specific expertise) leading to increase in new business.
- If agreements with UMAs cover the same target market and/or segments than what is provided by existing brokers, some brokers might have direct competition. (Can cause reputational damage amongst brokers and policyholders, impeding broker business.)

- In this case Springbok needs to make sure that the premium (to the policyholder) stays approximately the same, to avoid losing business from either channel. Therefore Springbok needs to carefully manage the underwriting process and scrutiny conducted by the UMA.
- Depending on the underlying cost structure to service the UMAs and brokers, a change in mix of business may have a direct impact on Springbok's bottom line.
- Negotiation with the UMA will influence the final premium payable. This may increase/decrease the profit of Springbok – they may want to settle for a lower premium to improve economies of scale
- Existing UMA might have a book of business that it can transfer to Springbok (or renew with Springbok as underwriter) which will have an immediate effect on new business, economies of scale etc.
- As an additional party stands between the policyholder and the insurer, brokers and policyholders might become removed from the insurer. This might frustrate policyholders and make it more challenging for the insurer to manage the needs and expectations of policyholders
- On the other hand, a UMA can offer clients additional services or offer better treatment, strengthen relationships and improve reputation
- Expanding a UMA network might be much more difficult, costly and time-consuming than expanding a broker network...
- … but a single relationship with a UMA could add a number of new brokers to Springbok's sales network.
- Consideration to the ownership of UMAs is important and may drive both the ease of accessing new broker networks as well as exercising control over cost and expertise management. E.g., owned by competitor, acquired by the insurer or owned by a third party.

Regulatory requirements:

- Fee must be reasonably commensurate with actual costs incurred by binder holder
- May not be remunerated twice for the same/similar service
- There may be no cross ownership in a broker
- UMA cannot deal directly with the public, therefore a broker will still be necessary. (This may increase the cost)
- If there is a profit-sharing agreement, the insurer can't pass underwriting losses to UMA but can carry forward the losses to future years' profit calculations
- May be a binder holder for another insurer in respect of the same class (if all insurers agree in writing)
- When agreement terminates, insurer has certain reporting requirements to the regulator
- If a function is outsourced (i.e. pricing), Springbok will need to notify the registrar prior to entering the outsourcing arrangement as well as on material developments (e.g. termination or non-performance)
- Need an IGF to be able to accept premiums on the insurer's behalf

Direct selling:
Can create a division/subsidiary that devotes itself to direct sales via telephone/post/internet

Impact:

- Different distribution channels (broker vs direct) have shown different client behavior patterns, requiring new differentiated rating structures
  or

Need to align interest of sales people via appropriate incentives

- If reduced costs, this can be transferred to policyholders – lower premium may lead to increased sales and new business
- If policyholders buy directly they might buy the wrong cover leading to problems at claim stage – for example increased complaints at ombudsman OR Higher Lapses (insurer will be deemed to give advice)
- Need to set up call centre with trained staff (this can be in-house or outsourced)
- Likely to require a large upfront investment if done in-house – staff, head office space telephony and other technology, training. This puts more pressure on the insurer to recoup costs.
- Can use an aggregator website to sell via the internet – this will need substantial system changes if none is in place currently
- Introducing a direct selling portal might upset relationships with brokers causing them to take their business elsewhere (i.e. less new business and less renewals)
- Brokers might be impacted if the direct selling targets the same clients
- Impact of losing business from brokers might be aggravated if brokers move their "best" business elsewhere leaving the "bad" business with Springbok
- If direct selling targets a completely different market (i.e. different benefits or part of population) the impact on existing brokers might be negligible – potential to increase market share
- If no advice is given the products need to be simplified
- Need to differentiate yourself from other (very competitive) players in the market to attract business
- More flexibility in terms of rating/underwriting since brokers' systems do not have to be changed
- Premiums are paid directly to the insurer therefore decreasing outstanding balances, and the money is received immediately
- Control over own data (compared to limited information received via bordereaus)
- The insurer needs to do functions that brokers often did on their behalf e.g. certain administration, comparison of rates etc.
- Insurer has more control over premiums charged (in the case where brokers had a binder agreement to alter premiums within agreed parameters)

Regulatory requirements:

- Springbok needs to be registered as an FSP (Financial services provider) as the call centre agents will be "representatives" who are providing advice and intermediary services on Springbok's behalf
- Need to make a substantial FAIS compliance investment (i.e. cost implication)
  - to structure its business processes to ensure that they are compliant with FAIS market conduct rules
  - to monitor the representatives' ongoing compliance with FAIS; and
  - to train the representatives to the appropriate "fit and proper" standards

- if call centre is outsourced, Springbok needs to have an outsourcing agreement (and an outsourcing policy)

- outsourcing doesn't relieve Springbok from its original responsibilities (i.e. Springbok is still responsible and needs to make sure that the call centre agents are complying with the law)
- Remuneration for outsourcing is required to be reasonable and commensurate with the activity outsourced. (It should not result in double payment and should not encourage unreasonable treatment)
- If the call centre is outsourced, Springbok will need to notify the registrar prior to entering the outsourcing arrangement as well as on material developments (e.g. termination or non-performance)

Tied Agents:

Impact:
- Same commission applies as for brokers – no direct impact on cost
- Dedicated team – may market products to specific target market better than what brokers can do (e.g. if brokers target higher income market and direct sales force the middle/lower income market) leading to increased new business
- Brokers might be impacted if the agency force targets the same clients

Regulatory requirements:
- As for direct marketing, Springbok needs to be registered as an FSP (Financial services provider)
  as the agents will be "representatives" who are providing advice and intermediary services on Springbok's behalf
- Same FAIS compliance investment required as for direct selling
- Agents need to be paid the same regulated commission as for brokers

ii) *The answer needed to take the context of the question into account, i.e. the main theme is a change in the commission structure. Too many comments were made on other reasons why the insurer's market share is not improving.*

Debate the statement of the Financial Director

- Need to look at what the rest of the market (i.e. competitors) is doing. If Springbok is the first (or only insurer) to implement this, brokers may move their business elsewhere. Most brokers still charge maximum commission by default
- It is more likely that Springbok will lose market share as a result
- Market share is not the most important factor to consider – it is better to write less business that is profitable, than more business that is unprofitable
- Likely not enough to only introduce negotiable commission. To improve market share Springbok can consider removing any "fat" that may exist in the risk premium – that way the premium can reduce (without losing too much profit) with the broker still getting the same percentage commission (absolute commission will still be lower),i.e. introduce a discounting mandate. / Pricing may already be competitive
- If such a system works well Springbok is likely to experience a higher closings rate, however such flexibility might be open to abuse as brokers are incentivized on volume and not quality
- A parallel reward system needs to be run that rewards brokers based on the performance of their books
- If brokers move their business elsewhere, the effect can be exacerbated if brokers leave their unprofitable business (which might be difficult to move for a better price) at Springbok and take their profitable business elsewhere.
- Springbok could implement the variable commission structure with certain brokers only – therefore managing the types of risks that it wants to keep. This may lead to a change in mix of business that is more beneficial to Springbok.
- Compare the possible impact of this decision with Springbok's risk appetite
- Springbok could combine this with a large marketing campaign (to show that they want to treat their customers fairly). This should target potential policyholders to contact brokers who will negotiate commission. If this works Springbok can be a market leader - this could lead to improved reputation in the market and increased volume of business.
- Investigate areas where business is being lost. This will indicate if Springbok is uncompetitive in certain segments / areas
- The structure will need to give more certainty or protection over the negotiating power of the policyholders. Not all brokers will react similarly towards the negotiating a better premium and this can be seen as unfair towards policyholders
- This model has mixed success in developed markets (like UK) where the consumer is educated and understands their purchases.
- Commoditised (packaged, all the same and compete on price and service) insurance is difficult to sell using a negotiated fee. Personal lines is a good example of a commoditized insurance product. /
  Consider the need of the policyholder – is negotiable commission what they want/need?

- Look for alternative ways to be more cost efficient (and therefore competitive) or differentiating product from the rest of the market e.g. increased excesses, changes in terms and conditions, loyalty bonuses etc.
- If brokers don’t want less commission, they won’t sell Springbok business, this in turn drops new business volume, without Springbok necessarily retrenching staff or cutting cost, causing the expense ratio per policy to increase, forcing a theoretical increase in premium for the next new policy ----→ meaning premiums need to increase leading to exactly the opposite effect they wanted
- Changes in premium will affect the statutory IBNR and capital adequacy requirement (they are functions of premium).
- Brokers may up-sell products to policyholders (which they might not need/want) in order to get the same absolute amount of commission – this leads to reputation risk.

  Or

  Brokers may reduce risk premium (if they have the pen) and keep their commission rate the same leading to decreased premium to the insurer’s detriment
- If policyholders are more aware of the commission they pay (because of negotiations) it might lead them away from brokers to direct channels, if they believe that they can get better value for money there

(iii)

Monitor the impact of an alternative commission structure

- To monitor the impact Springbok will have to do portfolio analysis on a more granular (and more regular e.g. monthly) basis than would normally be sufficient
- Monitor new business (and renewal) rates and volume
- Costs:
  Need to have the number of policies per segment. This is necessary to calculate the average cost per policy.
  If Springbok loses business due to the change in commission structure, one needs to monitor trends in average cost per policy over time. Need to determine the point where economies of scale are not reached.
  If the systems were not set up to handle variable commission, the systems will need to change leading to an increase in cost
- Monitor the source of business – which brokers are adding/removing business (compare with the quality of business of those brokers) / Monitor the number of brokers selling our products.
- Monitor movements in the types of policyholder – for example, does Springbok retain high net worth individuals (with more complex insurance needs and who are knowledgeable to negotiate a fee with the broker) compared to policyholders from the lower income market who might not need specialised knowledge/advice from a broker
- Calculate loss ratios per segment (by source, type of policyholder, type of benefit) to monitor the underwriting result.
  This is especially important to make sure that Springbok does not retain loss-making business only.
- Monitor average rate of commission to determine if most brokers remain on the maximum commission level or if the average rate is coming down
- Monitor commission rate to make sure that commission does not exceed the maximum prescribed commission rates (i.e. the negotiated commission may not exceed the maximum payable)
- Monitor the commission rate per broker to identify those brokers who do negotiate with their clients
- Need to define a "lapse" and monitor lapse rates
- Measure trends in the number of quotes requested per broker

iv) *This question asks how to calculate inflation exposure (relating to liabilities) in the insurer's existing book. The question did not look for:*

- *how to mitigate inflation exposure;*
- *impact on assets (or ALM);*
- *inflation in future business written; or*
- *how inflation works*

which were included in many of the candidates' answers.

Estimating inflation risk

There are some theoretical methods to calculate inherent inflation but we need to estimate something fast.

- The first step of the investigation should be to investigate the historic inflationary risk on the portfolio by considering the average claims cost over time using the claim amount triangle divided by the number of claims triangle, viewed at the same duration after incident date to establish an inflationary trend.
- Personal lines business – assume that there is enough history (i.e. years of data) available …
- … and that reserves (IBNR) are calculated using chain ladder (or other statistical) techniques
- Then the inflation inherent in the history will be projected forward and is already included in the IBNR
- Estimation described below should be done in smaller segments (products, classes grouped together for reserving purposes etc.) depending on how much data is available and how the data available "maps" to the reserves
- Estimation also done on a gross and net of reinsurance basis
- Use triangles from *paid* claims to determine future development pattern of payment of claims
- Use the development pattern to estimate the future cash flows in calendar periods (years, half-years etc, depending on the format of the information available)
- The more granular the future calendar period (e.g. quarters vs. years) the more accurate the estimation will be (assuming that sufficient data is available)
- The development pattern is applied to the outstanding claims reserve and the existing IBNR
- this leads to a set of estimated future payments in calendar periods
- calculate the average duration of the expected future liability payments
- to do this use the mid-point of the future calendar periods' duration, weighted by the cashflows in that period
- Consider the average duration of the different products/classes in relation to an assumed duration after which inflation may become a risk factor (e.g. if average duration of liability payments is 3 months then inflation risk is negligible)
- Say this point is 1 year. Determine the proportion of liabilities that has an average duration larger than this point using the claims paid development triangle run-off. (E.g. 10%)
- This will give an estimate of the maximum inflation exposure (as the full liability for those classes won't be exposed to inflation)

- Talk to underwriters/claims assessors to get their view on inflation in claim amounts as a benchmark (i.e. do they agree with the “10% of liabilities” estimate?)
- It is important that the members of the risk committee appreciates the fact that actual inflation in future will be different from what was experienced in the past and will differ from CPI:
    - Personal lines – depending on products actually sold, consider exposure to court award inflation
    - Medical inflation (if personal accident policies for example) behaves differently from other forms of inflation
- Although personal lines is mostly written on a monthly basis, there may be an element of UPR, and this will include an element of inflation.
- Policyholder liabilities should also consider the cost of management / administration of claims. This element might need to be considered.
- Split information per cause of loss e.g. property damage vs. third party liability to determine inflation trends separately