Subject SA1 — Health and Care
Specialist Applications

EXAMINERS' REPORT

April 2009

Introduction

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

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Chairman of the Board of Examiners

July 2009

General comments

Candidates who approached the questions, especially the more substantial elements of each question, in a methodical and detailed manner were far more likely to satisfy the examiners and receive a pass in the subject. Candidates will lose marks if they do not address the question asked. There was often a lack of sufficient detail in the answers. The mark allocation for each question part gives an indication of the relative length of answer or number of points to be made to gain full marks. In general each valid point in the answer would normally attract ½ marks with the more basic elements e.g. details in a pricing basis such as age and sex, attracting ¼ marks.

Some papers were not clearly marked at the top of each page as to which part of the question was being answered.

Marks may be lost where answers are difficult to read.

Comments on individual questions

Question 1

Scripts often contained a lot of repetition, which naturally restricted the marks awarded. Candidates could use the reading time to make a plan of their answer, or use sub-headings, to ensure their answer contains sufficient breadth.

Question 2

Answers were not always sufficiently adapted to the situation in the questions – just repeating standard bookwork without applying it to the situation described would not earn many marks on this question. It was not always appreciated that the service would be offered to all companies, and not just ones insuring with the insurer.

Question 3

This question was generally well answered, although many candidates did not provide many factors in answering part (iv).

1 (i) **Impact on new business**

New business volumes could fall due to fear about economy reducing propensity to buy – inclination to hoard rather than spend, increased costs of debt reducing disposable income to be spent on non-essential insurance, reduced disposable income through increased unemployment
However, fear about the future could potentially increase new business volumes
Overall the impact will be affected by the competitive position if market volumes fall then some companies will compete on price, and some won't
If budgets are tight then average premiums might be expected to fall as clients purchase only the level of cover they really need
Also new business volumes may reduce if premiums increase as a result of higher claims experience.

Mortgage business would be the worst hit, so CI would be hit worse than the other lines of business mentioned
Fall in mortgage business is likely to reduce sales at younger ages and hence average age of new business increases
Average sum assured may be affected, if changes in value of house purchases or if only the most wealthy can afford insurance at all
Most expensive and "nice to have" products will be worst hit, so volumes of IP and CI may fall significantly as likely to be seen as less essential than life only cover
However, there may be increased demand for IP e.g. from self-employed

LTC policyholders don't generally have mortgages and hence may be less hurt by the economic situation
Their financial position depends on where their money is invested:
They may have substantial cash savings, which may benefit from rising interest rates
But interest rates may also fall in a recession and if their money is in equities, they could also be suffering the effects of this
However it is more usual for most of their wealth to be locked into residential property
Immediate needs LTC is more essential and less "nice to have" so volumes will be much less affected

Group business volumes will depend on the state of companies' finances
If companies are struggling to service their debt they may not be able to afford PMI cover
Companies may even be wound up
so number of new schemes may fall
Size of schemes may be relatively unaffected, depending on the industry unless companies are laying off staff and reducing size of workforce
Companies may reduce benefit levels in order to cut costs, which would reduce new business premiums
Similarly companies would be aware that there is less need to offer high benefits to recruit and retain in a recession – again this could reduce business levels

These are all longer term effects than those for the individual business
So in the short term, there may be less effect than on the other lines of business
An exception would be any contributory schemes, which may suffer from reduced take up if the members are feeling the pinch

Mix of business may change if people move to buying through cheaper channels
New business volumes for this company may fall if they themselves get into financial trouble and confidence in them is lost

(ii) **Monitoring**

Monitor the level of new business sold by total premium income
and number of policies sold or average policy size or some new business index such as annual premium plus single premium /10

- split by line of business
- split by channel
- or other splits that affect the profitability, such as if there are loss leading tranches of business

Compare the figures against last month
Total market activity and market share
For group PMI can monitor the proportion of renewals actually taken up

Complications:

Seasonality will affect the comparison so take the figures for the same month of last year
Project forward a year allowing for the trend
The data may be of poor quality (can improve this through systems improvements, suitable IT etc)
Need to strip out new business cases that subsequently cool off
New business is slow to respond to changes due to the time taken to underwrite and the time the application spends in pipeline so monitor quote activity and/or application activity and amount of enquiries
Could also investigate causes of the quotes that were not converted into sales

(iii) **Investment returns**

Expect these to reduce for many asset classes, such as equities and corporate bonds
Returns would be more volatile
If there is any investment in property, this is also likely to fall in value as highly correlated to equities and loan interest rates
Cash returns may increase because banks require liquidity, and seek cash on deposit
Also need to consider possibility that interest rates may fall if credit squeeze turns into a recession

Future inflation rates

May increase in a high interest environment
May reduce if the credit squeeze is expected to develop into a recession
For PMI hospitals may increase charges to recover lost revenue

Lapses and renewal rates

Lapses may increase, and renewal rates decrease, because people might not be able to afford the premiums if the cost of debt increases
Lapses would also increase due to mortgages/loans defaulting

Expenses

Per policy and renewal expenses may increase due to fixed elements
Investment expenses may increase, if more active trading is required in the volatile market
If values fall then investment expenses as a % of fund values may rise
Expenses could decrease if company takes cost cutting measures in a recessionary environment
Expenses could increase if need to do more underwriting and claims management (e.g. to counter potential increases in fraud)

Claim inception rates

May rise, particularly for income protection due to increased stress working in the current economic environment
and because companies try to put people on IP claims rather than make them redundant
Similarly there may be increased claim activity under PMI under the "claim while I still can" mentality
Could also increase due to lapses being largely selective
Critical illness and long term care inception rates may be relatively unaffected
For all claim types, the level of fraudulent claims is likely to increase significantly in difficult economic conditions

Recovery rates

Depend on policy wording
People may be less motivated/unable to return to work in adverse economic conditions
However, recovery rates could improve if IP claimants are worried about the safety of their jobs and/or need to return to a full salary if other savings or household income has reduced

(iv) How risk is allowed for in ICA:

The principle is to cover all the risks to which the company is exposed

- market risk
- credit risk
- morbidity risk
- mortality risk
- expense risk
- lapse risk
- third party default risk
- operational risk
- liquidity risk
- group risk
- pension scheme risk

Some can be very hard to quantify e.g. operational risks
The amount of the risk to include should be consistent with a 99.5% certainty of solvency over a one year timeframe or can use a lower confidence level over a longer timeframe if it can be demonstrated that this is of overall the same strength
Market consistent techniques should be used
This may involve stochastic modelling
Or in practice the risk could be allowed for by applying 1 in 200 shocks to the risk factors identified allowing for 1 year's worth of new business and the possibility of closure to new business and recalculate the surplus capital expected at the end of the period
Aggregation of the risks needs to be carried out, to reflect any diversification benefits this may be done using a correlation matrix approach. noting that correlations in extreme conditions can differ from those observed in "normal" circumstances
Also need to test scenarios in which a certain subset of events can interact and lead to a higher capital requirement than the basic 1 in 200 correlated calculation.

(v) **Effect on pillar 2**

Impact on realistic capital available:

Realistic liabilities might increase due to higher claims as identified in (iii)

Credit spreads:

The expected credit spread widening would reduce the market value of corporate bonds
The effect on assumed earned yields after the widening depends on the company's view of why credit spreads are expected to widen

If spreads widen as a result of increased chance of default then there would be no change to the expected future risk adjusted yield so liabilities will be unchanged
Hence the "capital available" will have reduced
If spreads widen but risk of default is assessed to be unchanged then the "liquidity premium" part of the yield has increased and corporate bond assets can be assumed to earn a higher risk-adjusted future yield so liabilities can be assessed at a higher valuation rate and hence the "available capital" position may be broadly unchanged
Effect depends on whether the company expects to hold its assets to maturity and how well the asset and liability cashflows are matched
However, some companies choose not to anticipate liquidity premia as well as default premia, in which case the position would be as above, i.e. reduced capital available

Regarding the equity falls:

If equity markets fall then this will weaken the solvency position because asset values fall but there would probably be no change to the market consistent value of liabilities (unless unit-linked)
Note that we might hold equities if we have some long term real liabilities, such as pre funded inflation linked long term care

Other impacts on capital available:

There may be other impacts if the anticipated conditions cause ripple effects on other economic indicators e.g. changes in the risk-free rate or inflation

Additional considerations for the ICA calculation:

The company also needs to consider whether its view of the future "1 in 200" risk events might have changed e.g. did it underestimate corporate bond default risk events?
Did it underestimate extreme liquidity risk events?
Correlation assumptions might also increase due to greater understanding of contagion effects
Volatility is important in pillar 2 because the calculation is based on an extreme event
The co-efficient of equity volatility could be increased in the projections
This will increase the ICA
Note that following the events, the company would need to test based on a further 1 in 200 position
This could be very onerous and may result in the company breaching its capital requirements
The regulator may decide to act to protect the industry, for example by granting waivers and temporarily reducing the onerousness of the ICA rules.
The impact will also depend on whether there has been a change in the underlying "risk-free" rate; if this has fallen then this increases the ICA

(vi) **Review benchmark asset allocation**

Principle of investment is to maximise the return taking due account of the risk involved so if risk has genuinely increased, it may be sensible to consider reviewing the benchmark
However, benchmark should be set considering matching by nature, term, currency and certainty
If equities do become volatile it would then become less easy to sell, so we may wish to sell now but if rising volatility is widely expected then this will already be factored into prices
Need to consider timing issues
If equities are going to become generally depressed, would it be worth getting out now while the going is good
If markets are generally risk averse at the moment, less risky assets may have temporarily high prices, making it a bad time to buy
The predicted economic crisis might not happen, in which case it's a bad idea to incur lots of dealing costs
Reviewing the matching strategy may be a better solution than arbitrarily moving into lower risk assets
For immediate needs products this may well be a solid block of low risk government bonds
and for PMI business which is short term, cash based assets may be appropriate
However, some business could be long term with liabilities increasing at real rates, such as pre funded long term care. This business would be better matched using equities
Also consider the effect on the reserves
If liquidity is currently an issue, it may be more important to review the liquidity position and improving the liquidity position could also improve the ICA
Carry out a full ALM study to identify the optimal asset allocation taking into account the costs of any mismatching reserve
Corporate bonds could be as risky as equities in a widening spread environment
Tax should be taken into account in setting the benchmark

Subordinated debt

Subordinated debt may be at higher risk of default than other classes, and if the finance director wishes to reduce the risk of the portfolio then this action may achieve that
However, some subordinated debt may offer healthy returns especially in the current uncertain climate
Ruling out such investments may reduce the returns achievable
A more sensible approach might be to restrict the companies that can be invested in – e.g. to BBB rated companies and above
or to restrict the percentage in any one counterparty
or even to link the amount that can be invested in a company to their credit rating.

Restrict investment managers

It is wise to ensure that investment managers don't have carte blanche, as they may look more for tactical opportunities, and think less about matching
but if markets are expected to be volatile, this may be a good time for tactical investments
and if investment managers are too strictly managed, they may be unable to seek good value investments
They may be unable to dump shares that start to go into freefall
However, if the benchmark is set in order to match then, in the long term, departing from the benchmark would be dangerous
Maximum departure from the benchmark should be set as a percentage range, because as asset values move, a single point benchmark is likely to be breached and require a portfolio rebalancing.
Restricting investment managers could lead to loss of morale and loss of high quality active managers

In each case,
Need to consider any regulatory restraints
More investigation would be required before any action taken

2 (i) **Advantages**

The service may be a profit centre if it is possible to charge more for the administrative fees than the costs of administration
For policies taken out with the insurer it may reduce overall absence and therefore claim cost
Might give insurer information on absence incidence and lengths of sickness lasting fewer than 13 weeks
It may be possible to offer a discount to new and existing group IP policyholders who take up the service
And hence increase group IP business
The proposal would help the company to expand its business in the health arena
Using nurses to staff the unit ensures that they already have health management training
May need to introduce this service in order to keep pace with competitors

Disadvantages

The insurance company may not be able to access the data, as the service would have to be provided by a non-insurance subsidiary
It does nothing to help individual sales and may divert resources that could have been used to enhance individual sales
Difficult to cost as the insurer currently does not receive notification of sickness until the end of the deferred period hence it may no idea how many periods of absenteeism lasting fewer than 13 weeks there might be and how long they will last

The proposal involves considerable set up costs and ongoing costs due to possible high volumes of contacts for short periods
The service will use qualified health professionals with higher salary costs than normal administrative staff and with an unknown level of new business
Possible legal complications as not insurance
The service could be hard to sell given the likely high cost
Employees may not like it, reducing the insurer's reputation

(ii) **Monitoring Costing Basis**

Will need an estimate of:

- Frequency of contact
- Absence incidence
- Length of disability

Reporting Levels

Industry data e.g. from insurers' associations
Data from reinsurers
Assess the adjustment needed to relate any published data to the particular circumstances of the company, its products and target market.
Further adjustment may be needed to align different target market with that underpinning the base data.
Investigate whether need to rate by industry/location
Need to allow for expected future trends also.

Expenses

Need to forecast volumes of new business
Based on relevant data
May need to build a bottom-up model for expenses
Need to derive manpower costs and expertise required
Lengths of phone calls of different types
Cost of outbound calls/helplines
Salaries and other benefits of staff and management
IT, management systems costs
Advertising costs
Property costs/floor space/rent
Absentee costs will be split between initial absentee validation and ongoing absentee monitoring
Split costs into those that are member related and those that are per-contract.
Need to understand the extent to which specific one-off costs (e.g. establishment overheads) and expected additional costs (e.g. regulation) are to be costed against individual client company policies.
Degree of detail will depend on size of company and volume of expense information
Inflation may need to be split between manpower costs, future equipment costs and others.

Projected inflation may possibly be measured as difference between government fixed-interest and index-linked securities.
Allocation of company overheads

Estimated renewal rates based on lapse rates

Tax

Make suitable assumptions as to the insurer's current and future tax position.
The tax position might be different as the service is not insurance

Profit

Include company profit criteria, commensurate with underlying risk of venture — risk discount rate, PVFP, pay back period.
Cash flow projection results
Vary the charges to meet profit targets

Sensitivity analysis

Test the sensitivity of the final charges to adjustments in the individual assumptions and refine inputs accordingly.

Competitors' rates

Research competitors' charges

Assumptions and strategy

The values of the assumptions and the charges that they produce will reflect the company's strategy in launching into the new market:

An aggressive growth strategy may require assumptions stripped of margins.
A slow portfolio build strategy may permit more caution in the assumptions.

3 (i) **Guaranteed rates**

Policyholder has financial certainty and piece of mind
Easier for intermediary to explain at point of sale
May need to offer guarantees to compete with other companies who offer them
ABI Statement of Good Practice on CI improving robustness of definitions
Reviewable products have a heavier burden of demonstrating TCF
Reviewable products may cause poor reputation if premiums are increased materially on review
Easier administration
Lower selective lapsing

Reviewable rates

The company can offer the product at lower premium rates than if guaranteed
Affordability leads to financial inclusion
Increased consumer choice
Encourages innovation
Reviewable premiums can go down – happy customers
Improved definitions to avoid doubts over unfairness
The company may find that when it comes to review the rates, TCF considerations mean that it is unable to do so and thus effectively the rates are guaranteed
Easier to get reinsurance
Reduced risk of losses to the insurer and therefore lower capital requirement

(ii) Option to end contracts or reduce benefit
The policy should state clearly when the reviews will take place
Set out any minimum and maximum limits (if appropriate)
State that the review applies to tranches of business only
State that the circumstances of individual policyholders will not be taken into account
State that the premium review will be carried out in a fair and reasonable manner
Valid reasons stated in the policy
Increases can be made due to events outside the control of insurers
Reviewability should be clearly explained at point of sale
Choice between guaranteed and reviewable should be fully explained
Should ensure do not change the premium for invalid reasons
Reviews should take place when specified
How the review process will work should be fully explained
Provide a complete list of assumptions that could change
Explain how these assumptions will be used to re-calculate premiums
Base premiums using assumptions appropriate for full term
Assumptions reviewed regularly and fully documented
Assumption values for in force should be consistent with those used for new business
Practices used in the review should conform to current industry standards
Full documentation about how, when and what factors you will use to review
Explanation of what data source will be used
All customer literature will explain in plain English with no ambiguity
Reinsurance contracts and customer contracts should be perfectly aligned
Thorough staff training
Keep copies of all documentation sent to policyholders
Communicate the results of the review to policyholders, even if no change

(iii) The following are unlikely to be valid reasons:

Recouping losses incurred up to date of the review
Increasing profitability margins beyond those originally assumed
Unfairly targeting a particular group
Unfairly targeting an individual

Errors made in original pricing assumptions
Deliberate low initial price
Increasing reinsurance costs, unless based on valid reasons
One way only i.e. company will only consider increasing but never consider reducing premiums
Changes in assumptions linked to internal company factors
One-off adverse experience unlikely to recur

(iv) Issues to consider:

Customer's understanding at point of sale
Need to assess it there is adequate historical own experience in heterogeneous groups
Interpreting reinsurer and industry experience data
Is it possible to justify changing expectations of the future; could this have been foreseen at the outset
Alignment of interest between insurer and reinsurer
Materiality of reasons for review
Size of the likely premium change
Expected direction of premium change – the overall justification and discussion process may be more straightforward if the intention is to reduce premiums
Time
Costs
Resources
Legal opinion
External review
Discussed with ABI
Discussion with FSA to explain and discuss
Pilot the results of the review with sample customers
Actions of other companies with reviewable products
Likelihood and frequency of future reviews and changes
TCF legislation
Impact on persistency/selective lapsing
Opportunity to use the communication with the policyholder to increase business
Systems capability
Impact on new business rates and volumes
Frequency and outcomes of past reviews

END OF EXAMINERS' REPORT