

# EXAMINATION

26 April 2010 (pm)

## Subject SA3 — General Insurance Specialist Applications

*Time allowed: Three hours*

### ***INSTRUCTIONS TO THE CANDIDATE***

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You have 15 minutes before the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*
3. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
4. *Mark allocations are shown in brackets.*
5. *Attempt both questions, beginning your answer to each question on a separate sheet.*
6. *Candidates should show calculations where this is appropriate.*

### ***AT THE END OF THE EXAMINATION***

*Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.*

*In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.*

- 1 (i) Outline the basic structure of Solvency II. [2]
- (ii) Describe the role of the Actuarial Function. [3]
- (iii) Identify the key regulatory regime changes to Solvency II from Solvency I. [5]

An actuary joining a London market general insurance company has been appointed to manage the Actuarial Function under Solvency II and has been asked by the Chief Executive Officer to assist in the setting of the business plans for the next three years. This planning process will include a major review of the business as the company is currently experiencing poor results, partly as a result of the economic climate, with a steady deterioration in profits over the last two years.

The company writes three of its five classes of business through brokers (commercial property, EL and D&O), and the other two directly via internet sales (motor and personal creditor). The gross written premium is similar for each class. The D&O and personal creditor lines have experienced poor and deteriorating underwriting results over the last three years, the commercial property and motor lines have experienced volatile results, while the EL line has seen small but steady profits.

The overall results for the last two years have led to returns on shareholders' capital of  $-15\%$  and  $-20\%$  respectively. The corresponding budget figures for these two years were  $+5\%$  and  $0\%$ .

From the initial work on looking at the problems, it has been noted that:

- there has been poor risk selection with a large influx of unprofitable business
- the D&O line has experienced three very large losses
- a blanket 20% rate increase has been applied across all lines of business
- the average cost of claims has increased across all lines of business
- prior year losses are emerging owing to under-reserving for reported claims
- expenses are escalating and exceeded the budget by 30% last year

The objectives of the company are to turn the situation around over the next three years, with target returns of  $-7\%$ ,  $0\%$  and  $+10\%$  respectively on the shareholders' capital. The financial planning process used historically has been as follows:

- The starting point is the total earned premium and aggregate earned to incurred loss ratio for the previous 12 months.
- Premiums are adjusted in proportion to rate changes, in this case a 20% increase.
- Claims are increased by 3% for claims inflation.
- Expenses are assumed to be the same monetary value as the actual expense cost for the previous 12 months.
- Commission and investment income are assumed to be the proportion of premiums and assets respectively as in the previous plan.

A draft report is required by the Board of Directors explaining the problems associated with the current method used for financial planning.

- (iv) Outline the key issues which should be discussed in this report, including any potential compliance issues under Solvency II. [17]

The Board recognises that the current planning process does not provide adequate insight into the business and is unlikely to be acceptable under Solvency II.

Suggest key considerations for improving the planning process, including potential actions and appropriate measures to track the effectiveness of the process, with respect to the following aspects of the plan:

- (v) Run-off of existing gross reserves. [11]

- (vi) Future business volumes and gross performance. [9]

- (vii) Reinsurance issues. [10]

[Total 57]

2 A UK general insurance company has recently formed a new business division, known as the Special Investments Division (SID). SID accepts transfers of portfolios of business from other general insurance companies.

(i) Give reasons why other general insurance companies may wish to transfer portfolios of business to SID. [5]

(ii) Give reasons why SID may want to accept transfers of portfolios of business from other general insurance companies. [5]

Mojo Insurance is a large international insurance business. Mojo is financially strong, with a Standard & Poor's credit rating of AA. Mojo operates in almost every country in the world through a number of subsidiary companies. Each of its subsidiaries underwrites a number of lines of business.

Following a strategic review, Mojo has decided to stop underwriting two lines of business:

- Travel insurance – Mojo currently sells annual travel insurance policies in several countries. All policies are sold direct to customers via a website which is owned and operated by Mojo.
- Employers' liability reinsurance – Mojo underwrites excess of loss reinsurance in the London market for general insurance companies writing EL for UK employers.

Mojo would like to reduce its exposure to these businesses as soon as is reasonably possible while still maintaining a reasonable return on capital.

(iii) Describe possible exit strategies for the above lines discussing for each strategy and each class of business whether the exit strategy is likely to be attractive to Mojo. [25]

SID is currently considering accepting two portfolios of business. The table below shows details of each of the portfolios under consideration.

<i>Portfolio</i>	<i>A</i>	<i>B</i>
Liabilities (best estimate)	\$2.0 million	\$0.1 million
Transfer Premium	\$1.0 million	\$1.0 million

The liabilities have been estimated by the general insurance companies that wish to transfer the business to SID, and the transfer premium is the amount in excess of the best estimate quoted by SID to assume the liabilities.

A director of SID has expressed surprise that the transfer premium proposed by SID is the same for both portfolios A and B, given that the estimated liabilities for portfolio A are much larger than those of portfolio B.

(iv) Suggest possible reasons why the two transfer premiums are different relative to the best estimates of the liabilities. [8]

[Total 43]

**END OF PAPER**