EXAMINATIONS

19 April 2004 (pm)

Subject 401 — UK Fellowship Investment

Paper Two

You must answer this subject only, you may not attempt another subject in the 400 series.

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 at 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.*

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 Actuarial Tables and your own electronic calculator.

1 You are an actuary working in a firm advising pension schemes and their sponsors. Recent internal discussions have identified a clear gap in your service range. Considerable research and client activity has built up asset liability modelling capabilities that helped to drive your advice in connection with investment strategy and pension scheme funding. Selection of investment managers has historically been an area of limited involvement.

Your initial investigation has identified two key options for helping your clients to identify and appoint effective investment managers. These are:

A building an "in-house" investment manager selection capability; or
B buying in this capability from a third party

A series of underperforming investment portfolios across your client base, coupled with a desire to protect your firm's revenue stream, has led to you being asked to conduct an investigation into what more could be done in the area of investment manager advice.

(i) List and describe the main aspects of the additional work in this area that your firm could take on. [8]

(ii) Discuss each of the options A and B commenting on the advantages and disadvantages of each and the suitability for your particular situation. [12]

Having completed your investigation and presented your final report, the favoured approach, which has emerged, is for your firm to buy a well-regarded niche player operating in the investment consulting industry. The purchase will include existing research, all staff contracts and other assets of the business. This team will become your investment consulting practice reporting into you as the practice leader.

You have suggested that part of your new service offering should include a range of specifically branded "manager of managers" funds.

(iii) Describe how a "manager of managers" fund could work and comment on its suitability for your circumstances. [5]

(iv) Comment on the potential problems your firm might face were the "manager of managers" funds route to be taken. [5]

(v) Describe in detail how you would approach the design of the proposed fund range stating the funds you would expect to include from the outset. [8]

(vi) Describe in detail the process you and your team would go through to establish the investment manager arrangements within one of the new funds. [8]

[Total 46]

2 (i) Compare the returns to the writer of a put option on the shares of a quoted company with the returns to the holder of a quoted corporate bond issued by the same company under the following headings:

- Initial payment by the writer of the put and the holder of the bond.
- Upside potential for the writer of the put and the holder of the bond.
- Downside potential for the writer of the put and the holder of the bond.
- Credit risk faced by the writer of the put and the holder of the bond.

You may assume the following:

(a) The term of investment is to the maturity of the bond which is in five years' time.

(b) The bond is an unsecured debt of the company.

(c) The bond's coupon rate is 1% per annum payable annually in arrears.

[16]

In order to hedge the credit risk on the corporate bond in (i) above, an investor borrows a number of shares in the company from a pension scheme. The investor then sells the shares in the market, invests the sales proceeds in cash deposits and promises to buy the shares back in the market and return them to the pension scheme in five years' time. In the meantime, the investor will pay the pension scheme any dividends which it would have received had it not lent the shares to the investor.

(ii) Describe how this strategy might reduce the credit default risk on the corporate bond. [8]

(iii) Describe the risks and implementation difficulties in the strategy for the investor. [16]

(iv) Suggest a simpler way that the credit default risk could be partially hedged by the investor and comment on how your proposed method would cope with the risks and difficulties you identified in (iii) above. [14]

[Total 54]

END OF PAPER