

# EXAMINATIONS

6 April 2001 (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. *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.*
2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *Write your surname in full, the initials of your other names and your Candidate's Number on the front of the answer booklet.*
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 and this question paper.*

*In addition to this paper you should have available  
Actuarial Tables and an electronic calculator.*

**1** Imagine that a new regulatory solvency test has been introduced for UK pension funds. The basis of this test assumes the scheme is wound up and the accrued benefits secured by purchasing non-profit immediate and deferred annuities from an insurance company. If the scheme is insolvent on this basis then the regulations require an acceleration of contributions to improve the position.

(i) Discuss the investment factors that can give rise to volatility in the new regulatory solvency position of a typical UK final salary pension scheme. [8]

(ii) Suggest how these factors can be mitigated and describe the investigations that you would carry out to test the effect of your suggestions. [7]

(iii) Comment on the effects of adopting a matching strategy from the perspective of the plan sponsor. [2]

Company X is a diversified UK engineering group that operates a mature self-administered final salary scheme with assets of £200m. On the basis of the new regulatory solvency test the scheme was 110% funded. The management of one rapidly growing division within the group has recently completed a successful buyout of their part of the company, a part that contains 50% of the total work force. The final salary scheme is invested in a diversified managed fund and it has been agreed that a transfer value will be paid into a new scheme. The investment managers of the new scheme have yet to be appointed but it is known that the new trustees are keen to adopt a more aggressive investment approach. The manager has offered a cash transfer later in the month but due to the amount involved will encash the units on a bid basis.

The actuary representing the new entity has proposed that stocks are transferred rather than cash so as to minimise the cost and that the FTSE All-Share Index be used to adjust the transfer value due from the date when the liability is assessed until the date of payment to compensate for the investment return foregone.

(iv) Discuss the actuary's suggestion from the point of view of the following parties:

(a) the trustees of the existing scheme [8]

(b) the trustees of the new scheme [8]

(c) the managed fund [5]

Company X has suggested to the trustees of the existing scheme that in order to stabilise the regulatory solvency position, the weighting in bonds should be increased to 70% but with scope to depart from this by 20%. In addition, the company suggests that to maintain returns, an aggressive specialist bond manager be introduced with a brief to aim at upper quartile performance.

- (v) Comment on the effectiveness of the company's proposal and suggest modifications which would increase its effectiveness. [6]

The buyout company has suggested to the trustees of the new scheme that, in order to minimise the costs of pension provision, the majority of the new fund should be invested in high return assets like private equity, hedge funds, aggressive property etc.

- (vi) Discuss the factors the trustees of the new scheme should consider in preparing a response to this suggestion. [11]  
[Total 55]

- 2** A large UK final salary pension scheme has two investment managers each operating without implicit investment restrictions. Their performance is monitored against a specific peer group benchmark. You are the investment advisor to the fund and during a trustee meeting the chairman queries the performance record of his two managers. The following data is presented to you.

*Amounts in £m*

	31/12/99	31/03/00	30/06/00	30/09/00	31/12/00
Manager A	50	56.5	55	61.5	65.5
Manager B	50	56	50	65	66
Quarterly benchmark performance (%)		10	(5)	10	5

In addition you are told that Manager A received a steady cash flow stream at the rate of £1m per quarter. Manager B received £8m exactly in the middle of the year and was asked to pay out £2m at the end of the each of 1<sup>st</sup> and 3<sup>rd</sup> quarters.

The chairman asks you to assess and compare the performance of each of the two managers and explain why A has underperformed B. He wants a quick response from you in time for the afternoon's discussion. In order to set the scene the chairman also asks that you to present a more general introduction on the subject of performance measurement.

- (i) Outline your introduction which should include a basic explanation of the purpose of performance measurement and the methods involved as well as details of the various risk-adjusted calculations which might be made. [11]
- (ii) Using the information given calculate the basic (non risk-adjusted) performance of each manager over the course of the year. State clearly any assumptions made. Comment on the results. [10]
- (iii) Detail the additional information which you would require in order to carry out a full analysis of the two managers explaining why each item is needed. [4]

- (iv) Following the meeting the trustees agree to conduct a site visit to both managers in order to assess for themselves the quality of the respective organisations. They also wish to give consideration to re-organising the assets suggesting that the steadier of the two houses manages the core UK equities and bond portions and that other is told to manage the overseas assets. The chairman asks for two things:
- (a) A background paper on the typical structure of a UK institutional investment manager and how the two managers should be assessed. [14]  
[1 mark for drafting]
- (b) Your thoughts on the proposed reorganisation of the assets including guidance on the way the split between the UK and overseas equities should be decided and on the way the overseas portion should be managed in the future. [6]  
[1 mark for drafting]

Draft your response to each request. [Total 45]