EXAMINATIONS

7 April 2003 (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 A small UK engineering company has a closed and mature final salary pension scheme with assets of approximately £20 million. You are the investment consultant to the scheme. After the last actuarial valuation, the scheme's trustees decided to invest the majority of the scheme's assets in two passively run bond funds, one index-linked and one corporate, to match closely the scheme's mainly LPI linked liabilities. The remainder, about £3 million, is in an actively run UK equity portfolio.

Shortly before the next trustee meeting a large multinational purchases your client for an undisclosed sum. The multinational operates a large, immature final salary pension plan in the UK. The plan is still open to new entrants. All assets are invested in a segregated fund, which is actively managed. The segregated fund is invested broadly in line with the UK average pension fund and has total assets of £700 million.

The chairman of the engineering company asks you to attend a meeting with the financial controller of the multinational along with the chairman of trustees of the large segregated fund. They wish to understand the rationale for the previous approach and consider how best to integrate the small scheme into the large segregated fund.

(i) Explain possible reasons behind the investment strategy for the small scheme. [15]

(ii) Discuss potential investment issues that will need to be considered in transferring assets to the common investment fund and explain in practical terms how the transfer might work pointing out clearly all the risks and how they may be overcome. [15]

You have now been appointed as advisor to the common fund. One year later, the chairman of trustees calls you. Investment performance in the common investment fund has been extremely poor due to falling equity values and both the recent actuarial report and the FRS17 position show that the funding position of the scheme has deteriorated sharply. The company finance director has stated that he would like to "reduce the risk in the fund" and suggests cutting the proportion of equities. He has suggested to the chairman that up to 20% of the fund should be invested in alternative assets including long-short equity hedge funds and private equity funds. He also notes that property assets have performed very well in recent years and suggests that the fund increase its exposure to this asset class dramatically. The chairman would like you to draft a report in order to help him discuss the finance director's proposals.

(iii) Draft your report. In it you should ensure that you describe the key features of the various investment classes proposed by the finance director. You should also cover in detail the key issues which the board of trustees would need to discuss before any such strategy was implemented noting any alternative strategies which may fulfil the "risk reduction" objective of the finance director.

(There are no marks for drafting.) [30]

[Total 60]

2 The trustees of a pension fund have delegated their equity investments to two managers, who invest in both domestic and global markets. Manager A is a small house which prides itself on its more aggressive higher risk approach whilst manager B is a very large investment house which adopts a more conservative approach. As part of their performance monitoring process, the trustees use risk-adjusted performance measures as well as traditional stock and sector analyses.

(i) Define the Treynor and Sharpe measures. [4]

(ii) Explain why it is more appropriate to use the Treynor measure to assess the risk adjusted performance of each manager. [2]

(iii) Calculate the Treynor measures for each of the managers in each quarter, for each asset class given the following data:

	Return		*Beta*	
	2002 Q1	2002 Q2	2002 Q1	2002 Q2
Manager A — Domestic	2.9	−8.2	1.2	1.8
Manager B — Domestic	2.2	−8.4	1.1	0.9
Domestic index return	2.3	−11.0	1.0	1.0
Manager A — Overseas	3.9	−18.5	1.4	2.0
Manager B — Overseas	2.5	−14.3	1.2	1.3
Overseas index return	2.9	−15.3	1.0	1.0

[4]

The trustees are also extremely keen to understand the full costs incurred by the two managers in running their funds. They engage you as advisor to the fund to compile a report on costs. The report should cover both the direct fees levied by the two managers as well as the explicit and implicit transaction costs incurred.

(iv) List the information which would be required from the investment managers in order that you might make an estimate of the costs involved. [5]

(v) By making reasonable assumptions about the major items listed above calculate the approximate annual cost of running the two pension portfolios. [4]

It has been suggested that the investment managers move from the current arrangement to either a performance related fee basis or to an "all-inclusive" fee basis. In the latter case the manager would charge a set fee (say 0.6% of the fund value p.a.) which would not only cover all management fees but also all explicit transaction and custodian costs.

(vi) Comment on these two suggestions from the perspective of the large investment house, the small investment house, the trustees and the sponsoring company . [21]

[Total 40]