EXAMINATIONS

April 1999

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 A large UK pension fund has a specialist overseas equity component (i.e. excluding UK equities) which is currently valued at £550 million. This component part is split among four regional equity mandates for US equities, European equities, Japanese equities and Pacific (ex Japan) equities, respectively. Each of these regional portfolios is separately managed by a specialist manager. Tactical asset allocation (TAA) of the entire global equity mandate is conducted by a further specialist TAA manager, who uses derivative overlays to conduct his tactical management of the portfolio.

Each of the regional specialist managers has the objective of outperforming their regional FT / S&P total return index in local currency. They each receive a remuneration of 0.6% p.a. of the value of the assets they manage. The entire portfolio has a fixed benchmark, which is weighted as shown in the table below, and which is subject to re-balancing to these proportions at the end of each calendar quarter.

Region	**Benchmark Weight**
US equities	27%
European equities	27%
Japanese equities	20%
Pacific (ex Japan) equities	20%
Cash	6%

The TAA manager is responsible for re-balancing the portfolio to its fixed benchmark. However, he has also been given the objective of beating this fixed benchmark by conducting tactical asset allocation around the fixed benchmark. He conducts both roles by using index futures.

Three years ago, when the mandate was awarded, it was valued at £400 million. This amount was split among the four regional managers according to the proportions of the benchmark. Since that time, there has been no further money awarded to, or taken from, these managers, so that the current values of their portfolios are based on their respective regional market performances and their own success in managing their mandates. As a consequence, a current valuation of the entire global mandate is made up from the Rebalanced Portfolio and the Tactical Asset Allocation Portfolio as follows:

Re-balanced Portfolio

US equity manager.............................	35% directly held
European equity manager..................	36% directly held
Japanese equity manager....................	10% directly held
Pacific (ex Japan) equity manager......	13% directly held
Cash held by TAA manager................	6%
TAA Manager (re-balance positions)...	(All held via index futures)
US equity weighting...........................	– 8%
European equity weighting................	– 9%
Japanese equity weighting.................	+10%
Pacific (ex Japan) equity weighting....	+7%

Tactical Asset Allocation Portfolio

TAA Manager (tactical portfolio)........	(All held via index futures)
US equity position..............................	– 4%
European equity position....................	+ 2%
Japanese equity position.....................	– 5%
Pacific (ex Japan) equity position.......	+ 4%

You act as investment adviser to the pension scheme. You have proposed to the trustees that a physical re-balancing of the assets between the TAA manager and the four regional managers should take place.

(i) Discuss the advantages and disadvantages of the use of a fixed benchmark for a regional asset split, rather than a benchmark based on regional market capitalisation weights or one based on regional GDP weights. [12]

(ii) You have been asked to prepare a report for the Board of Trustees which concerns the roles of the tactical asset allocation manager.

Your report should:

(a) Explain in detail how the manager currently conducts the re-balancing of the portfolio at the end of a calendar quarter, specifying the information he will require and its source.

(b) Explain the advantages and disadvantages of conducting the re-balancing through the TAA manager, both in general terms, and with specific reference to this particular portfolio.

(c) Explain the steps which are involved in this process of conducting a physical re-balancing of the assets, and detail the major issues which need to be considered in planning how this process will be accomplished.

Draft your report. [38 including 8 marks for drafting]

[Total 50]

2 A FTSE 100 company has ordinary shares, convertible bonds and preference shares in issue.

The details of the various instruments are as follows:

Class of Security	*Net Dividend/Coupon*	*Price*	*Par Value*
Ordinary Shares	12p	425p	—
Convertible Loan Stock	5.6% (gross)	470p	500p
Preference Share	6% (net)	75p	100p

The ordinary shares have a beta of one. The ordinary dividend has been growing steadily at 8% p.a. over the last five years, and the last declared dividend was 12p.

The convertible loan stock will be redeemed in 2004. The conversion ratio is one ordinary share for each £5.00 nominal of convertible loan stock. The stock can be converted in September each year up to and including September 2004. If the convertible is not converted by September 2004, it will be redeemed at par.

The preference share will be redeemed at par in five years time.

It is expected that the stock market will rise by an average of 10% p.a. for the foreseeable future. The discount rate in common use is 7% p.a.

The investment managers of a charity fund, an authorised investment trust and a life fund wish to invest in the company in question. You may assume that all three classes of security are suitable for the funds in question.

Analyse the three classes of security to determine which will provide the best investment for each of the managers over a five year period, stating any assumptions you make.

[50]