

EXAMINATIONS

11 September 2003 (pm)

Subject 404 — UK Fellowship Pensions

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.*

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.

A new Finance Director has just joined one of your clients ABC plc, for whom you are the company's actuarial adviser. The company operates a defined benefit pension scheme that provides the following benefits:

- Benefit formula — $1/60 \times \text{final pensionable salary} \times \text{pensionable service}$
- Normal retirement age 65
- Member contributions — 3% of pensionable salary
- Contracted-out of State Second Pension
- Limited Price Indexation (LPI) increases to pensions in payment (i.e. 5% p.a. or RPI if lower)

The Finance Director contacts you and says she wants to meet to discuss ABC's pensions arrangements. She mentions that the pension scheme at her previous employer was defined contribution, so she did not get at all involved in pension matters. She has heard, however, that many companies are switching from defined benefit to defined contribution because defined benefit schemes are becoming too expensive.

(i) Draft a report to the Finance Director, covering the following issues:

- the main responsibilities and powers of the employer and the members of a defined benefit pension scheme [8]
- the financial risks involved for the employer and the members of a defined benefit pension scheme [8]
- how these responsibilities and risks differ (for both employer and members) for a defined contribution scheme [8]
- what steps would be involved for ABC plc in designing a suitable defined contribution scale and what the main decisions are that would need to be taken [6]
- what the options are for dealing with the benefits members have built up to date should the change be made for future service [6]
- the steps you would expect the Trustees of the current scheme to take to fulfil their responsibilities, once they are aware of a possible switch to defined contribution [8]

[6 further marks are available for drafting]

[Total 50]

(ii) Summarise the legislative constraints and professional requirements for actuaries that may be relevant to the process of switching from defined benefit to defined contribution pension provision. [10]

On the day before your meeting the Finance Director rings you. She has been warned that ABC's employees very much value their current benefits, and would be highly sceptical about a switch to defined contribution, particularly given recent press coverage of this issue. She would therefore like to know more about three other options for pension benefit design:

- A revalued average earnings scheme, with indexation in line with increases in the Retail Prices Index, for which the member contribution will be unchanged.
- A mixed defined benefit / defined contribution scheme, with a reduced accrual rate (100ths) for which members are not required to contribute, together with flat rate matching defined contribution arrangement on top (up to 3% of pensionable salary).
- A defined contribution scheme for all members up to age 45, with age-related contributions as set out below and the current defined benefit arrangements only being made available from age 45:

<i>Age band</i>	<i>Member Contribution</i>	<i>Employer Contributions</i>
25 or under	3% of Pensionable Salary	3% of Pensionable Salary
26–35	3%	6%
36–45	3%	9%

- (iii) Using the information below, estimate the company's contribution rate and cash saving for each of the three proposals. Assume the switch is made for future service for all existing members with immediate effect. State any further assumptions you make. [20]

Salary Increases — 4.5% per annum

Inflation / LPI Pension Increases — 2.5% per annum

No allowance is made for withdrawals or death before retirement

<i>Age Next</i>	<i>Total Pensionable Salary (£)</i>	<i>Contribution Rate* (includes member contributions)</i>
25 or under	1,100,000	10% of Pensionable Salary
26 to 35	2,600,000	13%
36 to 45	4,500,000	16%
46 to 55	4,600,000	21%
56 to 65	2,200,000	26%
Total	15,000,000	18%

* Standard Contribution Rate for the existing scheme, calculated using the Projected Unit Method

- (iv) For each of the three proposals, outline why each proposal may be attractive to the employer in managing financial risk, together with any disadvantages or practical limitations each proposal may have. [20]