

**Faculty of Actuaries**

**Institute of Actuaries**

# **EXAMINATIONS**

September 1999

**Subject 404 — UK Fellowship Pensions**

*Paper One*

**EXAMINERS' REPORT**

*Comment: The overall standard was reasonable. Most candidates demonstrated a good understanding of bookwork. However, non-standard aspects of questions were often tackled very poorly. Candidates either produced apparently standard solutions or wrote in detail on a small number of points, and did not, therefore, demonstrate sufficient breadth.*

**1** *The following is a list of the principal reporting situations. There are others and these were given credit when appropriate.*

Any duty relevant to the administration of the scheme which is not being complied with

... under any enactment or rule of law (e.g. non compliance with scheme documentation)

... that is believed to be material to OPRA in the execution of its duties.  
... OPRA guidance notes give examples

Definitely includes any breach which could give rise to criminal charges e.g. failure to pay contributions by due dates, failure to prepare scheme accounts to timetable.

An accumulation of minor breaches which may not be significant individually, but together indicate a more serious malaise.

Actuary is required to keep a cumulative record of minor breaches.

If Actuary considers that Trustees have failed to comply with an Undertaking to provide information to the Actuary, he should consider reporting.

Actuary is only obliged to report facts that come to light  
— there is no obligation to seek out malpractice.  
— but should investigate suspicions

Required to report immediately.

Actuary may normally wish to report with trustees' knowledge, unless the integrity of the trustees is in question, or in cases of suspected fraud.

*Most candidates gave a reasonable answer.*

2 Actuarial assumptions:

- Funding basis is often prepared on actuarial assumptions which include a margin.
- Funding basis often includes allowance for discretionary benefits. Generally, this would also be included in SSAP 24 figures but not FAS 87.
- Under SSAP 24, accounting assumptions should be best estimate (subject to prudence). These may be less conservative.
- If accounting figures are under FAS 87, they will have regard to current market bond rate, where funding assumptions may reflect long term expectations of actual assets held.  
*[Credit also given if similar comments made about the likely requirements under SSAP 24 following the changes currently proposed by the ASB.]*

Actuarial methodology:

- SSAP 24 prescribes a method that gives a cost which is a level percentage of payroll.
- FAS 87 prescribes the Projected Unit (Credit) Method
- Any method may be used for funding

Amortisation:

- Surplus amortisation under SSAP 24 is over a prescribed period (Average Expected Remaining Service Lives)
  - Corridor requirements under FAS 87 result in some surplus not being amortised at all
  - In some circumstances, SSAP 24 requires immediate recognition of surplus / deficit e.g. on purchase of a company
- For funding, surplus amortisation is not prescribed
  - e.g. could take a contribution holiday until surplus exhausted
  - may have to accelerate funding of a deficit under MFR
- For funding, all surplus is amortised: for accounting, it is the surplus in excess of the amount that has already been recognised (i.e. the balance sheet prepayment)
- The company chooses to pay more than the funding valuation RCR

- FAS/SSAP maybe based on different valuation dates from the funding valuation.

*Overall marks were reasonable. Few candidates commented on the allowance for discretionary increases and there were not many explanations about the differing treatment of surplus.*

### 3

- Any response will depend on the content of the scheme's trust deed and rules.
- This needs to be reviewed to see who is responsible for deciding on the use of surplus (trustees alone, trustees with employer consent etc.)
- and what options are allowed.
- Does employer have power to trigger wind-up? Or the trustees? What happens on wind-up?
- Where would surplus then go?
- Do the trustees have any scope to spend surplus indirectly — by allowing for discretionary benefits in transfer bases perhaps?
- Or setting more generous early retirement factors, commutation terms etc.?
- trustees are not representatives of particular factions but responsible to all beneficiaries equally.
- Typically, one would expect the employer to have to consent to any benefit changes.
- If the trustees cannot initiate benefit changes on their own, they may not be in a position to act on the MNT's recommendation.
- In particular, it is not generally part of their role as trustees to consider whether the scheme benefits are competitive or not.
- The trust deed may give the trustees more control in relation to pension indexation;
- if so, the trustees may be in a position to consider this aspect of the MNT's proposal.
- The FD's proposal to refund surplus could only be considered if:
  - The trust deed permits this (or the trustees obtain a Modification Order);

and

- The scheme is first amended to guarantee LPI for all pensions in excess of the GMP.
- Any refund of surplus is subject to 40% tax
- These factors may mean that the FD will not realise the funds through refund that he hopes, and the route may be unattractive.
- Any discussions need to take regulatory requirements into account. What is the funding position on the GAD basis?
- Will an employer contribution holiday be enough to reduce funding to the 105% level in 5 years?
- If not, the employer may need to concede some benefit improvements.
- Generally, if surplus were being used to finance benefit improvements, it would be usual to try not to include benefit improvements that permanently increase the future service contribution rate,
- e.g. permanently reducing the employee contribution rate.
- A temporary contribution holiday could be considered.
- If the trustees do have an influence on the use of surplus, they may wish to consider the source of surplus
- e.g. has surplus arisen because of deliberate conservative past funding by the employer, suggesting using surplus for the employer
- or has it arisen from some fortuitous event, which might favour sharing of surplus between employer and employee.
- Where sharing of surplus is favoured, trustees may consider sharing in proportion to employer / employee contributions
- ... or bearing in mind precedents set at previous valuations
- A first option for benefit increases might be to provide benefits that may in due course become required legally e.g. LPI.
- The trustees need to check funding levels on other bases e.g. MFR, discontinuance.
- It is possible that 100% funding on the preferred funding basis is less than 100% funding on one of these bases, suggesting that it may be imprudent / illegal to plan to reduce funding to the 100% level.

- Also consider who has control over contribution rate and what the criteria are for setting it.
- Does the actuary have a role prescribed by the scheme documentation in relation to contributions or surplus?
- Has surplus arisen from perhaps pre-funding for discretionary pension increases which have never actually been granted?
- Or in anticipation of some other changes?
- Need to consider who your client is — the trustees or the employer
- — or both — or the trade union! — is there a conflict of interest here?
- Need to talk to the lawyers — should they advise on duties of trustees
- Should the trustees take into account the company's circumstances?
- Is it on the brink of collapse?
- What about any knock-on effect on investment strategy?

*Most candidates got the points regarding a refund of surplus but otherwise this question was poorly answered. Many thought that the Trustees should compare the level of benefits with those in schemes operated by competitor companies. Very few considered the issues surrounding the source of surplus or whether or not the employer would have to consent to any improvement.*

- 4 (i) Answers in parts (i) and (ii)(b) are interrelated. Candidates who put valid points in either section receive a credit provided there was no double-counting.

*The following is one approval. Others, for example using basic salary only, were given credit if correctly argued. Part (iii) was also marked accordingly.*

<b>Pensionable earnings</b>	<b>Accrual rate</b>
basic pay – $\frac{5}{3} \times$ basic state pension or LEL	1.5% Pens Earnings

BSP and LEL broadly equal and easy to calculate.

Assumes person entitled to full BSP. In practice may not (incomplete NI record) but this is a practical way to achieve the goal.

Increases in line with Limited Price Indexation (LPI)

- pensions increase in payment each year in line with increases in RPI or by 5% if less.

(ii) (a) **Check**

To contract out of SERPS the benefits of the scheme must be at least broadly equivalent to those of the Reference Scheme.

At least 90 % of the members and spouses must receive benefits which are at least as good as they would be under the Reference Scheme.

The Reference Scheme structure is

Pension Age	65
Accrual Rate	1/80th
Pensionable Salary	3 year average of 90% of Upper Band Earnings Upper Band Earnings = earnings between LEL and UEL
Spouse's pension	½ of the member's accrued pension

Need to compare scheme benefit with Ref Sch benefit.

$$\begin{aligned} \text{Basic pay } \pounds 18,000, \text{ LEL} &= \pounds 3,328 \text{ [any reasonable figure} \\ &\text{acceptable]} \\ \text{so pensionable earnings} &= \pounds 18,000 - 5/3 \times 3328 \\ &= \pounds 12,453 \end{aligned}$$

$$\text{Scheme accrual} = .015 \times 12,453 = 186.80$$

Reference scheme test is satisfied as long as  $186.80 > 1/80$   
 $\times (\text{total pay} - 3328) \times 0.9$   
i.e. as long as total pay  $< \pounds 19,932$

For scheme to be able to contract out no more than 10% of the membership must have overtime payments in excess of  $\pounds 1,932$  or 10.7% of basic pay.

If this is not the case then the accrual rate will have to be increased or the definition of pensionable salary changed.

(b) **Modifications**

We know that some will fail the test as overtime can be as high as 15%.

Need to get details of basic and total pay for each potential member and check what proportion may fail the test.

The scheme must provide a spouses' pension, payable on death before or after retirement.

The simplest basis will be  $\frac{1}{2}$  of the member's retirement benefit on death after retirement and  $\frac{1}{2}$  of the member's retirement benefit (accrued or prospective) on death before retirement. A spouses' death after withdrawal benefit is also required.

- (iii) In general, when someone retires their outgoings reduce.

They no longer have to pay National Insurance contributions or contributions to their company pension scheme, mortgages are usually paid off, there is no longer any need to travel to work so travel costs may reduce.

For this individual, the total combined pension from the company pension scheme and from the State Pension Scheme will be 60% or  $\frac{3}{5}$ ths of basic pay for the year before retirement if he remains in service till then.

This is the pension benefit set out in the rules and described in the members' pension scheme booklets.

The State provides two kinds of pension, the Basic State Pension and the State Earnings Related Pension.

It pays the Basic State Pension to all pensioners who have paid enough years' National Insurance contributions.

The scheme allows for the fact that the State will pay this.

Because members are not going to get pension from the scheme of this amount their contributions to the company scheme are lower than they would otherwise have been.

The State Earnings Related Pension Scheme pays a pension to all pensioners unless their company pension scheme has opted them out.

A company pension scheme can only opt its members out of the State Earnings Related Pension Scheme if it provides a pension which is generous enough to satisfy Government tests.

The company scheme satisfied these tests so members are taken out of the State Earnings Related Pension Scheme.

Because they are not going to get the State Earnings Related Pension, they will pay lower National Insurance contributions.

Overtime earnings are likely to be lower for older employees than for younger ones.

If pension was based on total earnings just before retirement it would be close to that based on basic pay.

However members would have paid contributions on a relatively higher level of pay.

Most members would see this as unfair.

Members do not pay contributions on their overtime earnings but they can always pay AVCs on these earnings if they want to boost their pension.

*This question could be answered in a number of ways. Candidates were not penalised if they assumed a lower accrual rate with no basic state pension offset as long as they justified this approach. Part (ii)(a) was generally answered well though some candidates stated that a comparison of values/benefits would have to be made but did not give figures. Those who did not use a basic state pension offset in their benefit design did not lose out in (iii) although they were expected to mention the overall benefit levels (including basic state pension) that the member should expect.*

**5** Some points in (i) may be mentioned in (ii). Appropriate credit is given in the circumstances, but avoids double-counting.

(i)

- Relieve:
  - The contribution rate to the scheme can be set at one which is affordable to the employer rather than one dictated by the funding position and benefit structure of the existing scheme.
  - Once set the funding rate to the GPP is fixed
  - The funding rate payable to the FS scheme is open ended and potentially volatile (e.g. legislation changes, market volatility)
  - The expenses of a FS scheme for a small scheme may be disproportionately high - e.g. cost of actuarial reports
  - FS scheme subject to MFR which may require unexpected cash contribution.
  - May be a refund of surplus on wind up if funding position very good.
  - Potentially legislation could be overriding requiring contribution increases, but currently this is not likely
  - Accounting cost of scheme may differ from cash contribution cost and is open ended and volatile. The GPP can remove that volatility and can reduce pension cost.

- (ii) Issues to cover are:
- Deficiency on wind-up regulations
    - require a certificate to be completed by the actuary in accordance with GN19
    - which specifies whether there is a preferential debt on the employer if the scheme is to wind up
    - with the test being done as broadly a comparison of the assets with the MFR liability
    - scheme cannot legally be wound up without debt being met by employer
    - date for calculation being set by the Trustees
  - Winding - up rules must also be consulted
    - as they will likely specify the options available to the Trustees on wind up
    - and may insist that secured deferred annuities are purchased
    - either to meet the full settlement of liabilities
    - or to the extent that assets allow (subject to any GN19 deficit being met)
    - and will therefore specify any potential cost to the employer
    - they may also specify how any surplus should be used
    - either to enhance benefits or to refund to the employer
    - so may or may not have potential of cash payment to the employer
    - or may no longer offset cash contribution or accounting cost
  - Contracts of Employment should be consulted
    - as they may guarantee the members that benefits will be paid/secured in full even if the rules do not require this
    - and it may be difficult to remove salary link for accrued benefits without some form of compensation
  - If any of the above issues require benefits to be secured in full, then it is likely this will lead to a one-off cost to the employer
    - as currently Group Buyout rates are expensive
  - If the cost of wind-up is prohibitive may decide to leave scheme paid-up
    - but then have costs of sponsoring 2 schemes
    - and still have potential cost in the future if assets prove insufficient to meet liabilities as they fall due
    - or if MFR requires a cash injection
    - and variability of accounting costs through SSAP24

- If the scheme is well funded, if it was continued, then there may have been potential for a contribution holiday which will now be lost
- Vesting
  - benefits under final salary schemes can vest after 2 years. A GPP vests immediately. If turnover is high at lower service end costs may increase.
- There will be a great deal of communication required for employees
  - which will cost money
  - and will potentially lead to employee unrest with possible productivity implications
- If GPP produces insufficient benefits (contribution too low, high expenses, poor investments etc.). This may store up future problems for the company.
- Potential for over-riding legislation at anytime — GPP is no guarantee this will not happen.
- There will also be a need for advice to all of the employer, Trustees and members which also has cost implications

*Most candidates scored the more routine points, but the overall standard was disappointing. In part (i) very few candidates considered the impact of the accounting requirements for the company.*

*In part (ii) the vast majority of candidates commented only on points in a limited range of topics and therefore missed the opportunity to score a significant proportion of the marks. Very few noted the potential difficulties for the company if the GPP ultimately produced inadequate benefits, nor the need for advice to be provided to members at the time of conversion.*

**6** (i)

- As a general point, need to find how important pensions are to the transaction. If they are not significant the analysis could be relatively high level.
- The following is a full list assuming a material transaction.
  - Pensions schedule from the corporate transaction.
  - Is the scheme “contracted-in” or “contracted-out” of the State Earnings Related Pension Scheme, and by what method
  - Trust Deeds and rules including any amendments.

- The minutes from all Trustees meetings held within the last 2 years (say).
- Any explanatory literature issued to members including a scheme booklet.
- Service contracts, particulars of employment, letters of engagement relating to employees' pension arrangements.
- Trustees Report and Accounts for the last 3 scheme years, and any shortened version of any report that may have been produced for members.
- Latest actuarial valuation report for the scheme.
- Relevant extracts from the Company's latest statutory accounts regarding SSAP24 in the latest published year.
- Scheme assets details including details of any self investment.
- Statement of Investment Principles.
- The identity of any insurance company to whom contributions are paid and a copy of the relevant policy documentation or contract.
- Individual membership data for actives, deferreds and pensioners. Given the short-time scale, summary data or principal data only may be sufficient.
- Action taken on Earnings Cap (check there are no "hidden" promises even if a formal arrangement doesn't exist).
- A sample copy of the latest benefit statement issued.
- Discretionary increases granted to pensions in payment or in deferment over the previous five years.
- Other discretionary practices: redundancy, early retirement, long service bonus etc.
- Any benefit augmentations or special terms (for example guarantees from past arrangements) in addition to those under the scheme, including any non-tax approved promises.
- Details of any action taken in relation to equalising benefits between males and females under the scheme, including the equalisation of benefits in connection with Guaranteed Minimum Pensions.
- Full details of any benefit expectations that members may have other than details given in standard Scheme documentation.

This should include any benefit promises that members may have received generally or individually and any projection of benefits that may have been produced.

- What have the employers contribution rates been over the last five years?
  - Current Schedule of Contributions to comply with Pensions Act 1995 (if appropriate).
  - Are there any contributions outstanding?
  - Details of any discretionary practice in relation to late entrants to the schemes or the re-admission of former members of the schemes.
  - Details of any complaints or disputes relating to the scheme that have been referred to the Pensions Ombudsman or OPAS or OPRA or the Courts in the last three years?
  - Details of the cash equivalent individual transfer value basis currently in force, together with details of any other scheme factors (e.g. early retirement factors, commutation factors, including any variations for different circumstances) currently in force.
  - Copies of any correspondence regarding the funding level in the scheme or any advice regarding the level of employer contributions and/or benefit changes etc.
  - Are there any proposals to alter the scheme?
  - Details of any bulk transfer payments due to or from the scheme.
  - Details of any arrangements providing lump sum and/or dependant's death in service benefits.
- (ii) How important are pensions to this management? Do they want to continue to provide pensions?

Can pensions be used to negotiate the purchase price?

If there is surplus does Company A want it? May be commercially better to have a less well funded scheme.

Investigate the cost of the current pension arrangements for Company A's staff.

This can be done by a full valuation on the scheme's benefit structure for Company A's staff on a suitable set of assumptions but this is unlikely to be feasible due to

- lack of data
- lack of time

So more likely to be able to estimate whether the membership employed by Company A is significantly different from Company B as a whole

- this may be done by considering average age and salary

In comparing with last valuation would need to consider what has happened since the last valuation e.g. any ageing, any other sales/purchases, any changes in benefits

- Review the scheme's last valuation
  - What are the assumptions — are they conservative or realistic
  - What discretionary practices are allowed for
  - What discretionary practices are not allowed for
  - In particular if there any special terms on redundancy
  - Is the basis used appropriate for Company A e.g. salary scale
  - What is likely investment strategy — will this imply a change in basis
- Review the proposed transfer terms
  - What method used e.g. cash equivalent, PSR, share of fund
  - What flexibility is allowed for any new scheme going forward
  - How is transfer amount adjusted between completion and payment
  - What is the likely future contribution rate
  - What scope does Company A take to vary this (legal and financial)
- Review the accounting treatment
  - If there is a prepayment or provision on the balance sheet, how appropriate is that in the light of the transfer terms
  - Will it have to be reversed out?
  - What contributions have been paid, how does this compare with that expressed historically and allowed for going forward
- Review miscellaneous items
  - expense allowance: is it appropriate
  - insurance premiums: are they adequate for Company A on a standalone basis (Company B may have self insured, Company A may well not be advised to)
  - Earnings Cap: how is this dealt with (are benefits augmented up to Inland Revenue maximum where appropriate)
  - non pensioned part timers service: potential liability

- equalisation of benefits: where are they unequal
- are all contributions up to date
- MFR funding position: what is the risk of capital contributions

*This question was not well answered. Part (i) was bookwork but few took advantage of the opportunity for straightforward marks.*

*Part (ii) was very poorly answered. It appeared that most were running out of time when they came to this question. The answers given were generally too short.*