Subject SA4 — Pensions and other Benefits Specialist Applications

EXAMINERS' REPORT

September 2008

Introduction

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

R D Muckart
Chairman of the Board of Examiners

December 2008

.

Comments

The examiners are concerned about the high proportion of candidates who appear to find it difficult to generate the basic ideas for which marks are awarded. Too often candidates seem to have learnt a generic solution to a question on a particular topic and fail to relate their knowledge to the specific situation outlined in the question.

Candidates should make sure that they have answered the question asked (not the one they were hoping for) and aim to make sufficient distinct points that reflect the marks available.

Particular comments on the individual questions are set out below:

Q1 *In part (i) too many candidates simply described the general properties of the different asset classes and missed the key issues of sponsor covenant and liability matching. Part (ii) was reasonably well answered but for part (iii) only the better candidates thought about the funding objective and the risks involved with the company's proposal.*

Q2 *Parts (i) and (iii) were mostly answered well. However the explanations provided in part (ii) were too limited.*

Q3 *Surprisingly, many candidates limited their answer to part (i) to a consideration of the Myners' principles, they therefore limited their scope to score highly.*

For part (ii), the keyword in the question is "how" and this was generally ignored. Instead candidates wrote at length on the mechanics of performing an ALM exercise.

Part (iii) was reasonably well answered but many answers did not include sufficient detail/points to score highly on part (iv).

Q4 *Parts (i) and (ii) were generally well answered. For part (iii) many candidates based their calculations on the accounting basis although this has no bearing on the actual company contributions that will be required. For part (iv) many candidates limited their answer to the communication issues. Similarly the solutions to part (v) were too limited with many candidates getting distracted by providing a lengthy discussion on the appropriateness of the cash equivalent transfer value basis.*

For part (vi) only the better candidates noted that some warning about risk would be required.

1 (i)

- Consider their own attitude to risk
- Trustees will need to consider ability and willingness to pay of sponsor
- If this is acceptably strong considerations are:
- What proportion of liabilities relate to pensioner liabilities?
- The natural match for these is a range of fixed interest type investments or index-linked type investments (depending on mix of liabilities)
- What is distribution of the non-pensioner liabilities by term?
- The liabilities for those with longer terms to retirement might be backed by real assets such as equities or property
- Whereas those closer to retirement might be best backed by bond and cash investments
- What proportion of longer term liabilities relate to active members rather than deferred?
- As greater active membership again suggests greater real assets, due to salary link
- All assuming that scheme is to be funded as an ongoing entity

- Need to consider period over which the company could afford to fund any shortfall if investment returns are poor
- And any statutory requirements for funding.
- And assumes there is no potential for requiring to buy out benefits on wind up

(ii)

- A starting point might be to back all pensioner liabilities with a mix of government and corporate debt
- And all liabilities with, say, more than 15 years to retirement by equities
- With a sliding proportion of assets in bonds and cash for terms to retirement of less than 15 years
- This may result in a different proportion to the current 50/50 equity/bond split
- Trustees may agree to greater proportion in equities if covenant of employer is very good
- Or if there are any contingent assets offered by the employer should funding position fall below a prescribed level
- May consider higher equity content in return for insured pensioner liabilities
- Or may consider property investment counting partly as bond investment, again assuming covenant satisfactory
- To allow greater real returns with diversification
- But with more stable income structure from property
- May in more complex scenarios consider some sort of structured products or hedge funds to enable greater equity exposure with less risk
- May continue to fund on long term strategy of 50/50 equity/bond but with medium term tactical moves, subject to employer guarantees

- Trustees could agree to employers request subject to some form of ratchet on contributions
- Could agree to phase in change over time,

(iii)

- Currently funding plan assumes investment returns commensurate with 50/50 equity/bond split so any revised funding plan will likely start with revised return assumptions based on revised strategy
- Or assume revised strategy only in place for a period, reverting to long term assumptions based on 50/50 equity/bond split
- May however retain current funding plan as a prudent margin
- Although future valuation results likely to be more volatile due to mismatch of actual assets and liability measure
- but expectation that there will be outperformance to arise as surplus
- Trustees may require employer to agree to a shorter recovery period in return for higher risk investments
- Or require a short term cash injection
- Or a mismatching reserve
- Or require a margin to be built into technical provisions
- Either as an added percentage, say 105%
- Or a revised target (e.g. percentage of PPF, FRS17 or buy out liabilities)
- May build in other margins around mortality/withdrawals/inflation etc. in return for less prudent investment return assumption
- Or funding plan may make explicit allowance for contingent asset and realistic investment assumptions
- The Trustees may consider using stochastic asset liability modelling in setting their funding plan

2 (i)

- Sex and age of member
- Full details of members accrued and prospective benefits
- Particularly require to know whether accrued benefits are subject to revaluation or whether any benefits fixed
- and amount of member contributions
- Proportion of total scheme liability represented by this member
- Full details of dependants, including ages of spouse/children
- Full details of risk – health of member and occupation
- Full details of likely cost of death benefits if self insured
- Likely cost of death benefits if bought out
- Reserve for member on ongoing basis
- Company covenant/cashflow position

(ii)

- The member is older as long serving
- so will likely have a higher reserve
- which may be sufficient to meet any death benefits
- especially if there are no or older children
- If there is no spouse then benefit very low relative to reserve
- Conversely young spouse could result in a strain unless a 'large age gap' reduction is made to scale spouse benefit
- Although there may always be a subsequent marriage that step changes liability
- As if this scheme is only 75% funded then implication might be that even if pension benefit value higher there would be an immediate strain
- So funding position may mean there is a concern around cashflow if dependants benefits to be bought out
- Although if funded from scheme this will be of less concern
- If this is the only member that has similar level of benefits then there is a higher risk as there is no "pooling"
- As this Trustee is an older member then occupation risk likely to be lower (unlikely to be an undersea diver, perhaps office role?) and higher value of benefits might imply low mortality risk, so overall risk may be low

(iii)

- Are there any younger members with significant death benefits
- If so the gap between reserve and cost of death benefits will be much greater
- This may be partly mitigated if there is a reduction for a young spouse
- Or explicitly funded for by insuring risk
- What are the criteria for dependants' benefits – these could be mitigated by formal policy for determining eligibility
- If there are fixed benefits at retirement (without revaluation) then gap between reserve and death benefit may be accentuated – again can insure
- There are risks around investment strategy in equities compared with a dependant's benefit that may require more cautious investment.
- Even if there is an allowance in valuation for death benefits, are annuities valued assuming equity returns? – cost implication if insure?
- Consider change to investments to mitigate above two risks
- Cost of insurance may be high, especially given the business area
- Could look to insure gaps between reserves and value of dependants' benefits
- Although this will require regular re-assessment, especially given equity investment
- Could reinsure big liabilities only and carry remainder of risk
- There is a potential risk of multiple deaths
- Consider Catastrophe insurance risk
- However need to consider actual occupations of members – are they staff or "works/divers" etc?
- Does company have insurance in place already covering business risks

- May be able to add to company insurance and ask company to underwrite single contributions for any deaths

3 (i) Liability profile – nature

- The proportion of fixed and inflation linked liabilities is important for determining the matching assets.
- Active and deferred liabilities are real in nature up to retirement – salary growth and inflation in deferment.
- In retirement the Scheme's pension increases will determine proportion of fixed and inflation linked benefits.
- Executive members are likely to have large average pensions so the proportion of GMP is likely to be small.
- Therefore pensioner liabilities are likely to be dominated by inflation linked benefits
- unless there is a history of fixed pension increases in the Scheme.

Liability profile – Term

- Duration of the liabilities is important i.e. how sensitive the liability value is to changes in interest rates.
- Mature pension scheme – dominated by pensioners and with a small number of actives and deferreds who are close to retirement.
- Therefore expect short average duration of 10–15 years.
- As short duration important to know what the "end game is" e.g. run off the Scheme until last pensioner dies
- or buy-out the benefits in the short term once there are no actives left and only deferreds and pensioners

Expected future cashflows

- Net disinvester as benefit outgo (pensions in payment) will exceed contribution income (only 2 actives) and investment income.
- Timing of the cashflows is important so need to consider options that members can exercise e.g. cash commutation, transfer values, early/late retirement.
- Assets need to be liquid and marketable and/or assets with sufficient investment income to meet benefit outgo.
- Make appropriate allowance for current mortality and expected future mortality improvements.
- Executive members with high average pensions can expect to live longer than the industry average.

Funding position

- Scheme has small surplus on an accounting basis which is good but still has a chunky shortfall on a buy-out basis.

- In view of maturity may be more appropriate to focus on the buy-out position.
- Level of funding could impact on strategy (ie high funding could suggest more investment risk can be taken)
- The Trustees need to consider the impact of changing the investment strategy on the Scheme's funding target

Employer covenant

- The funding position needs to be considered in the context of the strength of the Employer's covenant.
- If the funding position is strong but the covenant is weak then the Trustees may wish to protect the current position and adopt a less risky strategy.
- On the other hand a strong covenant may allow the Trustees to adopt a riskier strategy
- with the objective of using the expected out-performance to fund the buy-out shortfall over a period of time and/or provide a cushion against increasing life expectancy.

Size of assets

- The size of the fund will decrease over time.
- The impact of the volatility of the funding levels is geared up when the fund is shrinking.

Trade off between risk and reward

- The Trustees are faced with a trade off between retaining their equity exposure in order to reduce the buy-out shortfall but running the risk of increasing the shortfall if things turn out worse than expected
- ….and increasing their exposure to bonds in order to reduce the risk of the funding position worsening but with a much lower chance of reducing the shortfall without additional contributions from the Employer.
- The strength of the Employer covenant is important here.
- Need to establish both the Trustees and Employer's attitude to risk.

Miscellaneous

- Trustees are required to consult with the employer over any changes to the investment strategy which will be documented in the SIP.
- Check Trust Deed & Rules to see whether there are any restrictions on amount or type of assets than can be held.
- Check whether there are any legislative constraints e.g. self investment

(ii)

- The purpose of the ALM is to assist the Trustees in their discussions on what changes are required to the current strategy in light of their objectives and attitude to risk.
- The results will allow the Trustees to analyse how the different investment strategies might affect the funding level and contribution rate over time.
- The projections can be carried out on different funding bases e.g. both FRS17 and buy-out.

- For this scheme the important measure is the funding level because the ongoing contributions to meet the cost of future accrual are small and will only continue for an average of two more years.
- The range of the results is important relative to the suitable mean result.
- The bigger the spread the higher the volatility associated with that particular strategy under different economic conditions.
- Need to consider the implications of the best outcome e.g. on a buy-out basis the Employer may not want to have a buy-out surplus if the Rules say it needs to be used for benefit improvements before any remaining surplus can be refunded to the Employer less a large tax charge.
- Also need to consider the implications of the funding level in the worst case scenario e.g. is the Employer willing and able to pay additional contributions if this happens?
- The ALM process will also be able to determine the least risk portfolio of matched assets.
- Although this portfolio minimises the investment risk there are other risks which it is not possible to eliminate such as mortality and legislative risks.
- Once the Trustees have agreed on the allocation between return seeking and liability matching assets the ALM process can then help determine the mix of bonds to best match the scheme's liability profile by using the same methodology i.e. project funding levels under different bond portfolios.
- By best match we mean minimising interest rate and inflation rate risks by an appropriate mix of conventional bonds or derivatives if bonds of a suitable duration are not available.
- Although derivatives may not be needed in this scheme due to the short duration of the liabilities.
- Within the return seeking assets the Trustees can then consider the impact of diversification and holding alternative assets other than UK equities to achieve similar levels of return but at lower risk.
- Also, consider the need for currency hedging if overseas assets are held.
- ALM is only a tool and the results are highly dependent on the underlying model and assumptions.
- Therefore the results of the ALM will not identify one particular strategy as the optimum strategy.

(iii)

- Check rules to see whether they require a wind up when last active member leaves service.
- Small scheme with <100 deferred and pensioners. There comes a time when it is not viable to continue to run the Scheme particularly in light of all the governance requirements and management time associated with running an occupational pension scheme.
- The Employer will need to be able to afford any buy-out shortfall.
- If the cost is too high the alternative is to continue the Scheme for a few more years retaining sufficient investment risk with the aim of asset outperformance being used to fund some/all of the buy-out shortfall.
- The Employer's attitude to the Scheme may change once there are no actives left.

- There are lots of new players in the annuity market which has resulted in more competitive terms. Therefore it could be an attractive time to buy-out the benefits.
- The pension scheme costs and volatility are removed from the Employer's accounts.
- The investment, expense, mortality risks are transferred across to the insurance company.
- The insurance premium will therefore include an allowance for these risks, the insurance company's capital requirements and an allowance for profit.
- The insurance company will prefer the pensioner liabilities where the investment and mortality risks are more predictable due to the shorter term of the liabilities compared with the deferred liabilities.
- Could buy-out tranches of pensioners e.g. older first which might be cheaper.
- Therefore, the Employer may need to wait a few more years until all the deferreds have become pensioners to achieve better terms.
- Running the Scheme off may be cheaper for the Employer if the Scheme benefits from favourable asset returns and mortality profit.
- Seek professional advice
- Consider if there is another scheme that assets and liabilities can be transferred to.

(iv)

- The Scheme Actuary needs to calculate the debt on employer in accordance with GN19.
- Trustees will need to purchase immediate and deferred annuities with an insurance company to secure the benefits for the deferred and pensioner members.
- The annuities will be purchased in the names of the individual members thereafter leaving an empty trust which will be wound-up.
- The Trustees will need to obtain quotes from the insurance market to determine the best policy available to secure the benefits.
- The wind-up is likely to take some time. During the wind-up process the Trustees must continue to run the Scheme in the normal way complying with statutory requirements e.g. Scheme accounts, valuations, members retiring.
- The Trustee will have to report annually to the Pensions Regulator on the progress of the wind-up together with reasons for not having completed any steps agreed in previous reports.
- The Scheme's investment strategy will need to be reviewed in light of the forthcoming annuity purchase and will involve a move into matching bond assets.
- The Trustees must inform all the Scheme members that the Scheme is to be wound-up and provide them with prescribed information including a minimum of an annual update on the winding-up process.
- The membership data will need to be cleansed to ensure member records are complete and accurate which is not a simple exercise.
- Trustees could take out insurance to cover any errors in their data

- Members will need to be provided with details of their benefits and options including CETVs.
- Members will need to sign a consent form to secure their benefits. A default option will be needed for those who do not return their form.
- Any contracting-out certificate will need to be surrendered
- GMP details will need to be reconciled with the NISPI.
- The Scheme benefit information will need to be summarised and validated by the Scheme lawyer as this will form the basis of the benefit structure used by the insurance provider in their quotation.
- The Scheme lawyer will need to advise on various issues e.g. discretionary powers in the Rules, equal treatment of benefits including GMP equalisation.
- A dispersal of assets form must be submitted to HMRC
- NISPI must be informed and approval obtained for securing contracted-out rights.
- If the Employer is insolvent and the Scheme is underfunded on the PPF basis it can apply to the PPF who may provide all members with a minimum of their PPF level of benefits which is less than their full accrued benefits.

4 (i)

- the trustees have an obligation to adopt prudent assumptions in assessing the technical provisions of a pension scheme
- the range of possible assumptions starts with best estimate (generally appropriate for a company with an exceptionally strong covenant or funding guarantee) to those that an insurance company would charge to settle the liabilities (generally more appropriate for a company with a very weak covenant)
- Company X has a weak covenant and therefore the trustees are likely to consider actuarial assumptions which are very prudent
- the Trustees' preferred basis may not give any credit for the potential long term outperformance of the growth assets
- possibly using the return on risk free matching assets (i.e. gilts of appropriate duration) (or something similar) as the discount rate
- the accounting basis is likely to use good quality corporate bond yields
- which are higher than gilts
- therefore placing a lower value on both the pensioner and deferred pensioner liabilities
- the proportionate impact on the deferred pensioner liability is greatest since the duration of these pensions is longer than for pensioners.
- the other possible factor is the assumption for mortality
- where an insurance pricing basis has possibly been adopted by the trustees
- compared to the best estimate assumption required under the accounting basis.

(ii)

- the deficit has been spread over a relatively short period (just 3 years) probably reflecting the trustees poor view of the strength of the covenant
- and assessed against the trustees view of what the employers can afford
- having taken independent advice on prospects for company
- or concerns over potential changes in attitude (willingness to pay angle)
- maybe opening negotiating point, with expectation of settling for longer period
- short period consistent with trustees duties re security of benefits
- company may have cash funds/assets that can be sold even if experiencing "trading difficulties"

(iii) The revised balance sheet on the Trustees' preferred basis would look like this:

Deferred pensioners	£ 32.5m	= 50% × 65
Pensioners	£ 63.0m	= 50% × 70 plus 50% × 80% × 70
Total	£ 95.5m	
Assets	£ 88.1m	= 105 – 50% × 0.75 × 45
Deficit	£ 7.4m	

Transfer value financing costs = £1.7m = 10% × 50% × 75% × 45
plus pensioner payments = £3m = 50% × 10% × 60
Total company payments = 1.7+3.0 = 4.7
net saving to company = £17.9m = 30 – 7.4 – 4.7
assuming that there is no selection/bias in 50% take up rates
and that pensioner liability with no non statutory increases on the Trustees' preferred basis is also 80% of the liability with such increases

(iv) Points to include would be as follows:

- The needs of the company is to maximise the saving by offering an enhancement that was low enough to make a material saving per case, and high enough to encourage a high take up rate
- it might be sensible for the company to employ financial advisers to support the proposal
- or, in setting the level of the enhancement, to have regard to the standards adopted by IFAs (e.g. minimum critical yields) when advising on transfer values
- there is also a possible acceleration in the timing of cash payments (in relation to the enhancements) compared to the regular scheme contributions which means that liquidity issues would also need to be considered
- good communication is essential
- company will want to avoid future accusations of mis-selling and/or bad press
- legal advice will be needed
- make sure that Trustees/other interesting parties are kept on side

(v)

- Trustees must operate within
    - Principles of Trust Law
    - The TD&R for the scheme
    - Current legislation
- Trustees must
    - Act in best interests of members
    - Treat different categories of members fairly
    - Not profit from their duties
- Relevant responsibilities include
    - Ensuring benefits are adequately funded
    - Look after investments
- taking legal, actuarial and other specialist advice where necessary.
- Considering the best interest of members, is it in the interests of the deferred members to be offered the enhanced transfer value?
    - Note that enhanced transfer values are, by definition, greater than normal transfer values on offer
    - Which the trustees are already comfortable with as representing fair value on some set of assumptions
    - Trustees may be concerned, however, that the temporary incentives ("act now or lose out) may act to pressurise individuals to transfer without properly considering the risks involved
    - So may feel it is appropriate to communicate with individuals in some way beyond just quoting the enhanced transfer value on offer
    - May ask employer to meet the costs of individual, independent financial advice…
    - … or more generic help – e.g. surgeries, cost of trustee communication
    - Make sure they have time to make an informed decision
- Considering their need to treat different categories of members fairly, will payment of enhanced transfer values adversely affect the security of other members' benefits?
- Check with Scheme Actuary the impact on the following positions
    - Technical Provisions
    - Buyout basis
- May ask actuary to compare proposed transfer values / Technical Provisions / estimated buyout liabilities on an individual or age-banded basis.
- Enhanced transfer value may exceed buyout liabilities for older members.

- May want to consider a few scenarios e.g.
  - All deferred pensioners take enhanced transfer values
  - 50% of deferred pensioners take enhanced transfer values
  - (possibly assuming some form of selection against the scheme takes place)
- May make counter-proposal regarding level and structure of enhancements.
- Review / negotiate sponsor contribution requirements in the context of
  - Statement of Funding Principles
  - Current Recovery Plan
  - Revised deficit against technical provisions
  - If deficit larger, increased conts (and reduced term?)
  - If deficit smaller, same conts but reduced term
  - Revised covenant given sponsor's short-term funding of enhanced transfer values
- May call for formal valuation once members have made decisions and enhanced transfer values paid?

Investments

- Need to consider cashflow requirements in relation to potential transfer payments
  - Unlikely to be able to meet TVs from contribution income
  - What assets will be realised and when
- Review Investment Strategy in light of
  - revised nature and term of liabilities
  - reduced assets

(vi) Communication to deferred members

Factual Information

- Member details on which calculation is based
  - Dates
  - Pension amounts
- Relevant scheme benefit rules
  - Age at which benefits are payable
  - Option and terms for taking cash instead of pension
  - Increases before and after retirement

  - Benefits payable on death before and after retirement
  - Any other benefits (e.g. early retirement rights)
- Financial assumptions – in particular:
  - Discount rate
  - Price inflation
- Demographic assumptions
  - May be appropriate to express in terms of expected remaining lifetime at retirement
- Normal Transfer Value
- Enhanced Transfer Value

Risk warnings

- If benefits are retained in the scheme, benefits are known (subject to inflation) and the scheme sponsor is ultimately responsible for
  - Investment underperformance
  - Risk of members living longer than expected
- If member transfers (to DC arrangement), they take these risks by way of
  - The variability of their fund values (which may go up or down)
  - The terms on which they can convert funds to pension at retirement ("annuity rates")
- Members will only be better off transferring if performance is at least as good as the assumptions used in determining the transfer values
- PPF covers scheme insolvency (up to a certain level) but not individual arrangements (other protection may be available)
  - May be appropriate to give broad details of PPF benefits
  - At minimum, note that PPF cover less valuable for members with benefits above the cap.
- Some individuals may prefer / benefit from the additional flexibility
  - Level of dependant's benefits
  - Ability to take more cash (on better terms)
  - Level of increases purchased
- Emphasise that Trustees are not recommending either option

Next Steps

- Deadlines for decisions/default options
- Recommend individual seeks independent financial advice

- What member needs to do if they wish to transfer
- Contact details for queries
- What other information may be relevant to their decision making
  - Report and Accounts
  - Recent annual funding statements to members
  - Latest valuation report

END OF EXAMINERS' REPORT