INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2017

Subject SA4 – Pensions and other Benefits
Specialist Applications

Introduction

The Examiners' Report is written by the Principal Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Luke Hatter
Chair of the Board of Examiners
December 2017

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the Pensions and other Benefits Specialist Applications subject is to instil in successful candidates the ability to apply knowledge of the United Kingdom pensions and employee benefit environment and the principles of actuarial practice to providers of pensions and employee benefits in the United Kingdom.

2. This subject examines the ability of candidates to apply actuarial practice and concepts, together with specific knowledge of the UK pensions and employee benefit environment to potentially complex problems, integrating their analysis into a coherent whole, and evaluating and interpreting results to draw explicit conclusions.

3. The Examiners therefore look for candidates to demonstrate their understanding of the syllabus but in particular they need to demonstrate ability in applying their knowledge and core actuarial skills to the specific situations that the Examiners have raised, having read the question carefully. Consistently, many of the unsuccessful candidates provide answers that are not sufficiently specific to the subject matter of the question, reproduce core reading that does not directly relate to the question context, or focus on one specific point without covering a sufficient range of points to answer the question. This does not enable the candidates to achieve the required marks. The Examiners encourage future candidates to remind themselves of what they learned in the Core Actuarial subjects, and to use past paper questions to practice applying these skills to the specific scenarios tested.

4. Good candidates demonstrate that they have structured their solutions well – this is a big advantage in making points clearly and without repetition. There is a significant incidence of points being repeated in slightly different ways, restricting the scope for candidates to score marks. Good structure enables candidates to use the latter parts of questions to generate ideas for answers to the early parts (or use their solutions to earlier parts of questions to create a structure for latter parts). Time management is important so that candidates give answers to all questions that are roughly proportionate to the number of marks available. The questions are set so that it should take approximately twice as long to answer a 10 mark question as a 5 mark one. Answers should therefore be similarly proportionate.

5. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

B. General comments on *student performance in this diet of the examination*

1. The step up from the earlier subjects to a smaller number of more involved questions is relatively difficult for some candidates who find the application

aspects of the course harder to score well on. This is an area that SA candidates consistently need to work on in their preparation. By taking a methodical approach to answers, step by step, however, there are opportunities to score well. It is important that candidates make sure they provide a full answer to all questions. Breaking the question down into smaller parts helps to make sure that a suitable breadth of answer is supplied. It is critical that candidates check that their answers specifically refer to the details of the question, using all of the information in the question pre-ambles. It is not the intention of the examiners to include information in the questions that is not relevant to the answers.

2. Candidates should take note of the command verbs used to guide the depth given in their answers (a list of what is expected for each verb is available on the IFoA website). Candidates should also note the number of marks available for each question as a guide of how many points they need to cover.

3. Taking care in these points of technique will help students score better.

More detailed feedback is provided on each question below.

C. Pass Mark

The Pass Mark for this exam was 62.

Solutions

Q1 (i) **Business Outlook**

An assessment of the business outlook in general [½]

and specific to the sponsor's sector [½]

Relatively easy to obtain [½]

A general discussion between the Trustees and Sponsor may be sufficient [½]
Results are subjective [½]

and often difficult to quantify [½]

Financial Metrics

Use of financial statistics and accounting ratios [½]

E.g. interest cover, leverage ratio [½]

These can be compared with similar companies [½] and with previous years to spot any trends [½]

particularly any deterioration [½]

However financial statistics of other companies can be out-of-date or infrequent [½]

Simple to undertake [½]

Does not give an indication of the absolute level of risk [½]

Group accounts may not provide information specific to sponsor [½]

Implied Market Default Risk

Where a sponsor has issued investments such as equities or bonds, market prices can indicate market view of sponsor's credit risks, [½]

and how this market view has changed over time [½]

Where securities traded, up to date information is easily accessible [½]

Quantifiable measure of credit risk [½]

The risk to the pension scheme will however differ [½]

E.g. priority / security provided [½]

Other factors determine market prices and hence yields [½]

Only available if investments are regularly traded and prices quoted [½]

Credit Rating

Companies can pay a specialist to provide them with a credit rating [½]

Based purely on financial circumstances of the company, [½]

eliminating impact of market forces / sentiment [½]
The specialist may have access to information not publicly available [½]

Only larger companies tend to have full credit ratings [½]

Merton-type credit risk models

A model is used to determine the probability of default based on the behaviour of the equities [½]

Quantifiable measure [½]

Requires sponsor to have traded equity [½]

Ratings not widely available (as securities not always quoted) [½]

Costly approach [½]

Quantitatively derived credit risk

Model deriving a credit rating or probability of default from standard accounting data and credit information. [½]

Quantifiable output [½]

and wide usage [½]

Relies on accounting information which may be out of date [½]

Independent business review

Report by an external credit advisory specialist, [½]

typically an accounting firm, insolvency practitioner or other niche operator [½]

Can take explicit account of interdependence of funding and sponsor covenant [½]

Requires sponsor cooperation for access to confidential information [½]

Provides a detailed, tailored, independent assessment [½]

Costly approach [½]

Risk based levy

Credit assessment used by PPF when determining levy to be paid. [½]

Quick and easy method of obtaining a broad indication of credit rating [½]

Gives a broad indication only [½]

Only a one-year view [½]

[Max 10]

(ii) General Comments

assumptions should contain a degree of prudence consistent with the employer covenant [½]

and with SFO legislative requirements for prudence [½]

and with each other so that the basis is considered in aggregate [½]

Differences between assumptions can be more important than the absolute values [½]

Trustees consult with sponsor and take actuarial advice [½]

Discount rates pre and post-retirement

Assume that an asset-based approach is used (or other methodology as appropriate) [½]

Using separate pre and post discount rates [½]

reflecting how the investment strategy might change over time for a closed scheme [½]

consider current asset allocation [½]

and possible changes to the allocation as the scheme matures [½]

Pre-retirement discount rate based on equity returns, e.g. margin over gilts [½]

And allowing for investment management fees / expenses [½]

Post retirement discount rate based on bond yields [½]

to match benefits for retired members [½]

again allowing for investment management fees / expenses [½]

Use market data to support best estimate assumptions for the various asset classes [½]

taking a blended rate based on the asset allocation to determine the overall assumption [½]

[Give credit for a suitable description of an alternative method]

Price inflation (RPI)

consider market information based on gilt yields [½]

in particular, base the RPI assumption on the difference in yields between fixed interest and index linked gilts of appropriate duration [½]

and strip out any perceived distortion caused by supply and demand impacts on the two markets / inflation risk premium [½]

consider allowing for the government inflation targets [½]

Salary inflation

consider historical information relating to the differential between salary inflation and price inflation for the country as a whole [½]

and economists' forecasts for future improvements in real wealth [½]

and apply these to the prospects for the industry sectors that the sponsoring employers operate in [½]

after consulting with the employer and rating agencies/analysts on the prospects for the company itself [½]

Pension increases

In payment - as linked to price inflation, consider in conjunction with the price inflation assumption [½]

consider impact of the 5% p.a. cap [½]

E.g. take a margin off the RPI assumption to allow for the cap or undertake stochastic modelling [½]

In deferment – typically use RPI assumption as 5% cap applies across whole term rather than year-on-year [½]

[Max 5]

(iii)

The pension fund continues to pay the pensions to the pensioners [½]

but the longevity swap provider makes matching payments to the trustees [½]

In return the pension fund agrees to pay a series of fixed payments to the swap provider [½]

If the pensioner lives longer than expected the fixed payments stop but the swap provider still makes payments to the fund [½]

The pension fund has bought more certainty over the cash flows to pensioners [½]

The transformation to fixed payments removes the baseline and future mortality improvement risk [½]

Generally only covers pensioners [½]

but index contracts for non-pensioners are now available [½]

however are relatively expensive compared to the ongoing funding reserve [½]

The longevity swap / bond does however introduce a counter party exposure or credit risk [½]

Also there is basis risk if the bond / swap is based on an index rather than the actual Scheme membership (e.g. if the pensioners live a lot longer than those in the population on which the index is based) [1]

[Max 2]

(iv)

The roles in setting terms vary depending on the wording of the scheme's deed and rules. [½]

Consultation may occur between the parties [½]

The key points are:

Trustees

Have a duty to act in the members' best interests [½]

Being fair both to those taking commutation and other members [½]

This does not necessarily mean maximising payments to members [½]

As benefit security of other members needs to be considered [½]

Sponsor

Will have duties to its owners [½]

So is likely to constrain terms to control costs [½]

However as commutation removes risk from the Scheme [½]

May want terms to be relatively attractive to boost take-up rate [½]

Actuary – role may include:

No explicit role under Scheme rules [½]

Provide actuarial advice to the parties setting the terms [½]

May be required to determine the terms [½]

or the terms may need to be certified by the actuary [½]

Terms may have to be reviewed following the funding valuation [½]

Legal advisers

Play a pivotal role in setting the terms given the need for interpretation of the scheme rules [½]

[Max 6]

(v)

Need to be aware of the details of the scheme rules [½]

Act professionally in line with professional guidance [½]

Consider the Trustees' objectives [½]

Consider the frequency of providing advice about commutation factors [½]

E.g. after each funding valuation or before [½]

Be aware of trends in market conditions that could affect commutation factors [½]

E.g. interest rates, mortality etc. [½]

The timing of advice [½]

E.g. allowance for commutation factors as part of the Technical provisions means advice cannot be given after the valuation has been finished [½]

Communication to the Trustees of the consequences of changing or retaining the factors [½]

Consistency of factors with cash equivalent transfer values [½]

particularly near retirement age [½]

Recording the advice [½]

particularly if alternative factors are subsequently used [½]

Consider discretionary practices [½]

Consider the impact of the Pensions TAS when providing advice [½]

[Max 3]

(vi)

Practical Considerations

Requirements of the scheme rules (e.g. who sets the factors?) / compliance with any relevant legislation and guidance [½]

Communication to members / ease of understanding / perceived vs actual fairness [½]

Whether or not consent is required for the option to be exercised [½]

Ease of administration / complexity and cost of making the relevant calculations [½]

Theoretical factors may be smoothed for practical purposes [½]

Timing of the change to any of the factors [½]

How long are the factors likely to be in place for the future hence will fixed factors still be appropriate until the next review? [½]

It is easier to strengthen factors than weaken them – how far should Trustees go to reflect current gilt yields in case yields go back up [½]

Financial Considerations

The current funding position of the scheme and strength of sponsor covenant [½]

Employer's objectives e.g. encouraging members to leave employment through use of generous ERFs / encouraging risk transfer (commutation) [½]

What basis will the generosity (or otherwise) be measured, e.g. SFO or neutral assumptions [½]

However, a general aim is often cost neutrality [½]

Impact may be different on other bases e.g. solvency [½]

The degree to which factors should reflect individual member characteristics (e.g. unisex or sex-specific factors, marital status) [½]

Consideration of any possible selection against the scheme [½]

The relative tax treatment of options [½]

[Max 4]

(vii) Method of provision - general

Benefit accrual ceases [½]

Act in accordance with Trust deeds and Rules, employment contracts etc. [½]

Consult with active members [½]

The key features of the methods of provision that may be available are:

Temporary continuation as a closed scheme

Scheme pays benefits as they fall due [½]

No large scale disinvestment of funds, [½]

no guarantee that the benefits will be met from the current assets as the cost of the benefits will continue to be affected by future investment, inflation and mortality experience [½]

Trustees may aim for self-sufficiency funding target to permit risk reduction [½]

no costs associated with buying a guarantee [½]

good experience may result in surplus funds [½]

this may benefit those beneficiaries who are still alive when the surplus arises [½]

bad experience risks a future funding shortfall for those members who remain [½]

the distribution of surplus arising will require careful management to avoid both subsequent shortfalls and unusable surplus after all the members had left or died [½]

Transferring the liabilities to another scheme of the same employer

This will only be an option if the employer or an owning company continues to exist [½]

and has other schemes. [½]

The situation is then similar to that of temporary continuation [½]

except that any surplus or deficit arising will relate to a larger group of individuals. [½]

The trustees of both schemes will need to agree to such a transfer [½]

and may wish to impose certain restrictions to reduce the risk that "their" assets will be used for the benefit of others [½] or will be supported by funds that should be providing benefits for others [½]

Member consent or actuarial equivalence certification required [½]

Transfer to a Personal Pension or new employer's scheme

The ultimate benefit will depend on the future experience of that individual [½]

and the assumptions used to calculate the transfer value. [½]

The benefits may therefore be greater or smaller than the discontinuance benefit. [½]

Only works for actives / deferreds [½]

Removes funding risk for the Sponsor [½]

Sponsor may encourage take-up by offering enhanced transfer value [½]

Deferred or immediate annuities

guarantees the benefits (subject to the solvency of the insurance company) [½]

a premium will be charged for the risk of providing the guarantee and also to cover the cost of servicing the funds required to write the business [½]

the investments underlying the annuities will be constrained by the guarantee (also increasing the costs) [½]

there is a limited market of insurers willing to accept the risks associated with guaranteeing deferred annuities (including the setting up of reserves), so reducing the competitiveness of the premiums [½]

there may be no insurance companies willing to accept a very large bulk purchase of deferred annuities [½]

Transfer to the PPF

If the assets of the scheme together with any partial debt recovered from the employer [½]

is insufficient to secure the PPF compensation benefits through the scheme, that scheme will pass through an Assessment Period to confirm acceptance of the scheme by the PPF. [½]

Members will receive reduced benefits [½]

E.g. 90% if below NRA, loss of pre 97 pension increases [½]

The PPF eligibility conditions must be met for the PPF to assume responsibility for a scheme [½]

These include:

A "qualifying insolvency event" must have occurred in respect of the sponsoring employer. [½]

There must be no chance that the scheme can be rescued. [½]

[Max 10]
[Total 40]

Q1
i) Mostly well answered.

ii) Generally well answered, with many candidates scoring full marks. Several candidates wrote more for part (ii) than part (i) which demonstrates how important it is to look at the marks available for each question part and write an appropriate level of detail.

iii) Again this was well answered by most. Weaker candidates only described longevity swaps and bonds rather than saying how they mitigate longevity risk directly.

iv) Generally students did not consider a wide enough range of points.

v) Most candidates could think of one or two considerations but only the better candidates were able to think more widely and scored full marks.

vi) Most candidates could think of a few issues, but the best thought more widely from the perspective of all the stakeholders involved.

vii) Most candidates came up with five methods, and the best candidates were able to score full marks (or close) relatively quickly.

Q2 (i) Auto-enrolment

The new DC scheme will need to meet the auto-enrolment requirements. [½]

From October 2012 employees not currently in an employment- related pension scheme must be automatically enrolled into a "qualifying scheme" provided by their employer. [½]

Individuals between age 22 and State Pension Age must be auto- enrolled into a scheme which meets certain minimum criteria. [½]

Provided their earnings exceed a specified threshold [½]

Individuals may opt out of the scheme but those who do so must be re-enrolled at periodic intervals. [½]

Employees outside these age bands, the self-employed and non-workers may opt-in. [½]

Auto-enrolment is phased in depending on the size of the employer. [½]

To protect individuals, employers must not offer employees incentives to opt out of a workplace pension, either during employment for existing employees or during recruitment for prospective employees. [½]

National Employment Savings Trust (NEST)

NEST was set up by the Government to provide a vehicle for auto-enrolment which may be offered to employees by employers who do not wish to set up their own scheme, [½]

or do not currently support a suitable arrangement. [½]

NEST operates as a single multiemployer defined contribution scheme. [½]

Minimum contributions required to qualifying schemes, including NEST, are a total of 8% of Upper Band Earnings, [½]

with the employer paying at least 3% [½]

and the employee making up the difference. [½]

If an employee opts out of the scheme, the employer would not be obliged to contribute. [½]

Employers may pay more than the minimum specified, in which case employees' contributions can be lower to reach the overall minimum total. [½]

[Max 4]

(ii) DB scheme closure

Who has the power to close the scheme? [½]

What are the trustees' views on closure and what likely actions might they take? [½]

Will the scheme be closed to new hires only or to future service? [½]

Will the salary link be retained for active members? [½]

What approach to discontinuance will be followed? [½]

For example wind up, self sufficiency, transfer values? [½]

What is the timeline? [½]

How will the closure be communicated and who will manage this exercise? [½]

The membership will need to be consulted [½]

TPR, and possibly other statutory authorities, will need to be informed [½]

What administration is involved and is the administrative function sufficiently geared up and experienced? [½]

[Max 2]

(iii)

Need to consider automatic enrolment requirements [½]

Needs of the workforce [½]

Employment contracts [½]

Consider the employer's objectives regarding cost and risk [½]

Consider the level of benefits to be provided [½]

Targeted population e.g. different scales for different parts of the workforce or categories of membership [½]

Employer and Employee contribution rates:

Salary base (include bonuses?) [½]

age-related scale to "mirror" old DB possibly, but consider how [½]

many bands, is the scale fair between differing age bands [½]

service related perhaps, rewards loyalty [½]

core contributions plus matching, encourages extra provision by employees, matching level 1×, 2× etc. [½]

what is the minimum employee contribution? [½]

separate rates for executives? [½]

Investment fund range required. [½]

Is there to be default fund? [½]

Life styling option available? [½]

Given the type of members, perhaps there needs to be an extensive range of funds offered (restrictions on how many free switches in a year etc?) [½]

How will the scheme's expenses (including investment) be met? [½]

Consider risk benefits e.g. ill-health and death-in-service. [½]

Use of insurance [½]

Employee profile, new hires etc. [½]

Any payroll constraints [½]

Eligibility requirements [½]

Availability of other benefits e.g. state benefits [½]

Employee needs / expectations [½]

Competitors' provision [½]

Decide whether to buy annuities at retirement [½]

or range of pension freedoms at retirements [½]

or provide pension within scheme [½]

Possible HR issues with any change [½]

Cost of change: communication, professional fees etc. [½]

[Max 10]

(iv)

Risks:

Reputational risk for the employer if members can't afford to retire or get much lower benefits than expected. [½]

Particularly if due to poor member decisions regarding investments or retirement benefits [½]

This could lead to a disgruntled workforce and affect recruitment / retention [½]

Future legal and political risk in the UK include: [½]

expected State benefits being changed detrimentally. [½]

the taxation treatment of scheme benefits or contributions has been changed to make them less valuable. [½]

from 2012 the requirement for insurance companies to provide annuities that do not discriminate in price on the basis of gender. [½]

indirect impact of macroeconomic changes, for example in the inflation target given to the Bank of England. [½]

Effects of Brexit [½]

[Max 1 mark for 2 examples of legal / political risks]

Uncertainties about the cost due to the number of members who join and leave the scheme, [½]

their salaries, [½]

and in some cases, their ages or their individual decisions on the level of contributions they will make. [½]

Uncertainty during the introduction of auto enrolment requirements [½]

since the employer might not be able to predict likely decisions of potential members to opt-out rather than opt-in. [½]

Expense risk [½]

Liquidity risk if investments are illiquid when members want to take benefits [½]

[Max 4]

(v) Governance framework

A comprehensive scheme governance framework needs to be established [½]

with clear accountabilities and responsibilities [½]

Key personnel (trustees / managers) need to understand their duties [½]

And have sufficient time & resources available to do so [½]

Train trustees [½]

Establish and maintain adequate internal controls to mitigate risks [½]

And ensure the effectiveness and performance offered by scheme advisers [½]

& service providers [½]

Monitor fees to ensure expenses controlled [½]

Act in the best interests of all beneficiaries [½]

Manage any conflict of interest [½]

Seek advice where necessary [½]

Investment Strategy / Member decisions

Members will be offered a choice of investment funds [½]

With a variety of risk tolerances [½]

These need to be appropriate to the membership [½]

And take account members' needs throughout their lifetime with the scheme [½]

Ensure suitably liquid funds are available [½]

The investment objectives for each investment option should be identified [½]

and documented [½]

The principles governing how decisions about fund selection are made should also be documented [½]

The potential benefits and risks of each of the funds should be clearly communicated [½]

Ensure that any default strategy is provided which is suitable for members [½]

Monitoring requirements

Investment objectives are documented to allow them to be regularly monitored [½]

Use documented investment information to monitor fund performance [½]

against the stated investment objectives [½]

and ensure the strategy continues to remain suitable for members [½]

Monitor the on-going suitability of the default investment strategy [½]

Trustees and managers review their skills & competencies [½]

to demonstrate they understand their duties [½]

And are fit and proper to carry them out [½]

Ensure that any delegated responsibilities (e.g. administration) are [½]

documented, understood and reviewed regularly [½]

Monitor Investment manager performance to ensure the funds chosen are still appropriate [½]

Monitor value for money in terms of conversion of funds to benefits on retirement [½]

Monitor the performance of the admin function [½]

[Max 5]

(vi) Advantages

Some DC members are long term investors so well placed to benefit from investment in illiquid assets [½]

The pension scheme has experience of investing in illiquid from its existing defined benefit scheme [½]

There will be a liquidity premium so additional returns may be received for additional risk [½]

Provides diversification [½]

with a lack of correlation with mainstream asset classes [½]

and a different risk / return profile [½]

Disadvantages

Lack of transparency [½]

Potential for material loss [½]

Understanding the risk / return profile can be a challenge [½]

Need to consider presentation / explanation to members [½]

Additional governance is needed [½]

complexity means greater understanding required [½]

Costs and charges likely to be higher [½]

requiring active management [½]

Illiquid assets are often valued less frequently than daily [½]

and it may not be possible to disinvest / invest funds immediately [½]

Some illiquid assets e.g. infrastructure require minimum investment amounts [½]

Not matched to cash and/or annuity costs at retirements [½]

[Max 4]

(vii) Advantages

Master Trust makes decisions in the best interests of all its members [½]

and oversees the service providers [½]

Easy way to meet the needs of auto-enrolment compliance [½]

Can accept assets from a single trust that an employer no longer wishes to support [½]

May be able to offer more administratively complex options (e.g. benefits available at retirement) [½]

for example flexible drawdown etc. [½]

May provide better outcomes for members [½]

reducing the costs members face [½]

and provide improved communication [½]

And greater access to engagement tools e.g. projection / planning software [½]

Wide range of investment options [½]

Disadvantages

There may be concerns about the safeguards and protections offered to members [½]

Perhaps around the skill / expertise of the individual Master Trust [½]

Choosing a good Master Trust may require expert advice [½]

Explanation to members may be a challenge [½]

and potentially scare and prevent members having confidence in pensions savings [½]

Lack of control [½]

[Max 3]

(viii)

The company needs to take specialist legal advice [½]

and actuarial advice on equivalence of benefits [½]

The actuary will need to interpret "accrued rights", "broadly no less favourable" and "discretionary benefits or increases in benefits" within a DC context [½]

to ensure the transfer does not disadvantage members [½]

The original legislation for actuarial certification are more naturally applied to defined benefit transfer [½]

so can be difficult to interpret when applied to DC benefits [½]

Need to consider the scheme design before and after transfer [½]

Actuarial equivalence may be difficult to certify [½]

E.g. difference in fee structure [½]

services to members [½]

difference in options [½]

Need to consider the investment funds available [½]

and the associated expected returns [½]

The provisions of the trust deed and rules and other scheme documentation [½] and in particular any powers that the trustees have [½]

The views of the trustees [½]

The need to consult with members [½]

and any resulting potential industrial relation issues [½]

The transitional costs e.g. advice, administration, communication [½]

The timeline [½]

[Max 4]

[Total 36]

Q2
i) Generally well answered. Some candidates did not read the question properly and so did not talk about NEST specifically.

ii) Well answered by most. Some candidates wrote too much for a two mark question; focussing on the marks available can help improve exam technique.

iii) This was fairly well answered. Everyone was able to think of some design considerations but to score high marks candidates needed to be able to think widely. Some candidates focussed too much on one area and did not score as highly as they could have.

iv) Most candidates thought of the obvious risks, but again the best candidates thought more widely to get full marks

v) Not well answered by most. Some candidates used the risks from part (iv) and tried to describe how they could be mitigated, which was a good idea but most didn't apply this to a governance framework which was needed to score well.

vi) Generally well answered.

vii) Not well answered, it was clear that a lot of people do not understand how a multi-employer scheme works.

viii) This was a challenging question and only the best candidates were able to apply the consent \ actuarial equivalence test to a DC scheme.

Q3 **(i) Covenant**

The sponsor Covenant risk is the combination of:
the ability; and [½]

the willingness of the sponsor to pay sufficient contributions to ensure that the scheme's benefits can be paid as they fall due. [½]

The risk of sponsor insolvency leading to reduced benefits (potentially as a result of entering the PPF) [½]

The risk that the sponsor has insufficient liquidity to meet contributions without penalty [½]

The risk that a poor covenant results in the need to pay higher contributions as greater prudence is required in the SFO valuation [½]

Funding

The risk that the actuarial and other assumptions used to calculate the technical provisions are too optimistic [½]

Including any recovery plan [½]

The risk that experience is poor versus the assumptions [½]

and liabilities exceed assets in future by a greater margin than anticipated [½]

The risk that it is difficult to achieve agreement between the trustees and sponsor on the funding approach [½]

Investment

The risk that:
Assets are mismatched against the liabilities [½]

E.g. by nature or term [½]

Investment do not provide the expected investment return [½]

Investments values are low at times of disinvestment – liquidity needs [½]

Volatility of asset values [½]

Lack of diversification [½]

[Max 6]

(ii) Funding

An ALM can be used to reduce funding risk [½]

For example the sponsor may wish the Trustees to reject strategies where the probability of high contributions is significant. [½]

or where the probability of falling below a target level during a given time horizon is unacceptable [½]

Investment

A stochastic approach (ALM) may help in assessing the risks and rewards and in achieving an appropriate balance between them. [½]

An asset liability model (ALM) uses a stochastic model for the economic cashflow elements, in combination with a model for the demographic elements that is usually deterministic or scenario-based in nature. [½]

It is the output from the model and how this is used in practice which is of most interest. [½]

The ALM gives statistics on the distribution (typically expressed as mean, standard deviation, lower and upper quartiles) of possible future valuation results at the end of the projection period for different investment strategies. [½]

The valuation results can be expressed in different ways e.g. funding level [½]

or contribution rate on different bases – ongoing, solvency, accounting. [½]

A range of sensible investment strategies for a particular set of investment return and risk assumptions [½]

often called an "efficient frontier". [½]

Statistics on the distribution of the future net (benefit outgo less contributions and investment income) cash flows for each year over the projection period to minimise the likelihood of having to realise assets possibly on unfavourable terms.[½]

The results above on alternative sets of assumptions to model the sensitivity of the results to different assumptions and economic conditions [½]

E.g. boom market, deflationary conditions etc. [½]

The ALM can identify the extreme results that fall within the tails of the statistic [½] distribution e.g. the top and bottom 5% of an event happening.

The trustees need to consider the implications if such an event happened and whether any insurance (e.g. derivatives) needs to be put in place to protect the Scheme if this happened. [½]

The range of possible investment policies is theoretically infinite hence a subset of optimal or sensible policies is determined from the model [½]

These results need to be tested for robustness under alternative assumptions (sensitivity analysis). [½]

Following the sensitivity analysis, it is usually possible to identify a small number e.g. 3 investment strategies that appear sensible under most reasonable assumptions. [½]

These policies represent suitable candidates for the role of strategic investment policy for the pension scheme under consideration. [½]

A large part of the value of the ALM process will be the clarification of objectives and insights gained by all involved, particularly trustees and the employer, as a result of the discussions arising from the exercise. [½]

[Max 3]

(iii)

The key principles for consideration under IRM are:

The key principles of an IRM approach are set out in TPR's guidance [½]

The key principles are intended to help the trustees and sponsors investigate the relationships between the three key risks: Covenant, and Investment [½]

to prioritise them and assess their materiality [½]

to set appropriate contingency plans [½]

and put in place appropriate and regular monitoring [½]

Principles for trustees and sponsors together

assessing the risks to the overall strategy for meeting the scheme's objectives [½]

assessing the probabilities of these risks [½]

and the relationships between the risks [½]

the capacity of the scheme and/or employer to redress the scheme's funding and/or employer position [½] and any necessary changes to strategy if the risks exceed the risk appetites [½]

the monitoring that should be put in place for scheme funding and/or employer position [½]

options available should the scheme funding and/or employer position improve [½]

Principles for the trustees

the impact on scheme funding and/or employer position of any decisions the trustees make in their funding plans [½]

whether, after discussion with the sponsor, the scheme and/or sponsor have the risk [½]

capacity to manage that impact [½]

Principles for the sponsor

is the sponsor aware of the short-term and long-term impact on its finances of managing the risk [½]

is the sponsor able to manage the potential impact of the risk? [½]

does the sponsor understand the options available to manage the risks and their corresponding costs and benefits [½]

[Max 3]

(iv)

Risk identification (identify, prioritise and quantify) [½]

Better decision making (greater understanding and better informed) [½]

Collaboration (open and constructive dialogue) [½]

Proportionality (focus on the most important risks) [½]

Efficiency (effective management of time) [½]

Risk management (swifter reactions to events should problems arise) [½]

Transparency (easier explanation of decisions) [½]

Helps provide effective governance [½]

and help trustees make better decisions [½]

Helps sponsors and trustees work together more effectively [½]

[Max 3]

(v) Enhanced Transfer Values (ETVs)

Members are offered an enhancement to their benefits in order to encourage them to transfer out of the scheme. [½]

These are options offered to non-pensioners. [½]

Enhancements are usually in the form of an uplift to the transfer value. [½]

this option would reduce the size of the deficit because transfer values are usually lower than value of liabilities on technical provisions and discontinuance bases [½]

Risk is removed from the Scheme [½]

Partial transfers may be offered to encourage a greater take-up [½]

Pension Increase Exchange (PIE) exercise

These are options offered to members whereby they exchange their entitlement to non-statutory pension increases for a one-off uplift to their pension [½]

with nil or lower increases [½]

This option can be offered to existing pensioners as a one-off exercise [½]

and also to future pensioners as an option on retirement. [½]

The level of uplift can be set such that the overall pension liability is reduced [½]

this option would reduce the size of the deficit because value of increased pension usually lower than value of original pension with guaranteed increases on technical provisions [½]

Reduces inflation and longevity risks [½]

Total Pension Increase Exchange (TPIE)

These options are sometimes known by different names such as Retirement Transfer Option (RTO) or Flexible Retirement Offer/Option (FRO). [½]

Members are given the option to transfer their benefits to a DC arrangement at the point of retirement [½]

opening up the greater flexibility available in the DC environment. [½]

This option can be offered as a one-off exercise to members currently eligible to retire [½]

and also to future pensioners as an option on retirement, [½]

Members choosing this option would lead to a decrease in the size of the scheme's liabilities [½]

and the associated risk. [½]

It may lead to an improvement in funding level, depending on the level of transfer values paid relative to the funding measure in question. [½]

Credit should be given for other suitable member options. e.g. Full Commutation, Early retirement etc.

[Max 3]

(vi) General

Ideally needs to be done with support of trustees to prevent problems [½]

Trustees will need to take professional advice [½]

Will require careful communication to members, who must not be advised by employer [½]

Must be offered to members with no suggestion they are required to accept [½]

To protect Employer and to help members decide they should ideally get independent advice [½]

Will take time to put offer together [½]

And members will need time to consider and decide on offer [½]

Cost of exercise may outweigh saving [½]

May have to pay high adviser fees to ensure it is not seen by members as mis-selling[½]

Potential reputational risk for employer [½]

Have regard to Pensions Regulator guidance [½]

and the Code of Good Practice for incentive exercises [½]

However this exercise is not an incentive exercise if the programme will be ordinarily available to members of the pension scheme [½]

Consider legislation and scheme documentation [½]

The administration function may need to be geared up with training provided to manage the exercise [½]

Enhanced transfer values

In order to have a material impact on risk [½]

a generous enhancement may be necessary for high take up [½]

which may result in no or little saving in future SFO contributions [½]

Pension Increase Exchange

There may be little liability with non-statutory pension increases [½]

so the potential for risk reduction is limited. [½]

Those with non-statutory pension increases may be over age 80 and considered vulnerable clients [½]

The conversion terms need to be determined [½]

Members may select against the scheme [½]

for example pensioners in poor health [½]

Total Pension Increase Exchange (TPIE)

In order to have a material impact on risk there needs to be a high take up of the option [½]

The TPIE terms need to be determined [½]

Members may select against the scheme [½]

for example single members or those in poor health [½]

[Max 6]

Credit given for the practical issues for other alternative member options set out in part v e.g. full commutation, early retirement etc

[Total 24]

Qu3 i) The best candidates were able to think widely about all three areas and scored quite highly. Most candidates didn't make enough points for the marks available and focussed too narrowly on investment risk.

ii) Generally not very well answered but most candidates managed to pick up a few of the points on the marking schedule.

iii) and iv). These parts weren't very well answered which is a shame because IRM is very relevant at the moment and is well-covered in the Core Reading. The best candidates were able to score high marks easily.

v) This was well answered with most people scoring full marks. Nearly everyone talked about PIE and ETV with the third option varying.

vi) A lot of candidates appeared to run out of time here which was a shame, because it was reasonably straightforward to score marks here. Students would be well advised to plan the time they spend answering each question. The best candidates were able to think widely and apply the knowledge of the best practice code to the question.

END OF EXAMINERS' REPORT