

# Subject SA4

## CMP Upgrade 2024/25

### CMP Upgrade

This CMP Upgrade lists the changes to the Syllabus, Core Reading and the ActEd material since last year that might realistically affect your chance of success in the exam. It is produced so that you can manually amend your 2024 CMP to make it suitable for study for the 2025 exams. It includes replacement pages and additional pages where appropriate.

Alternatively, you can buy a full set of up-to-date Course Notes / CMP at a significantly reduced price if you have previously bought the full-price Course Notes / CMP in this subject. Please see our *2025 Student Brochure* for more details.

We only accept the current versions of assignments / mock exams for marking, *ie* those published for the sessions leading to the 2025 exams. If you wish to submit your scripts for marking but only have an old version, then you can order the current assignments / mock exams free of charge if you have purchased the same materials in the same subject in a previous year, and have purchased marking for the 2025 session.

This CMP Upgrade contains:

- all significant changes to the Syllabus and Core Reading
- additional changes to the ActEd Course Notes, Assignments and Mock Exam that will make them suitable for study for the 2025 exams.

## **0 Changes to the Syllabus**

There have been no changes to the syllabus objectives.

# 1 Changes to the Core Reading and ActEd material

This section contains all the *non-trivial* changes to the Core Reading and those changes to ActEd text needed to make the Course Notes suitable for study for the 2025 exams.

## Overall

There have been changes to some chapters to reflect the new UK funding regime for defined benefit pension schemes which applies to valuations with an effective date on or after 22 September 2024. The Course Notes include some significant changes due to this new regime.

## Chapter 1

### Sections 3 and 4

These sections have been updated. Replacement pages can be found at the end of this Upgrade.

## Chapter 2

### Page 3

The *Australian example* at the bottom of the page now reads:

**As a further example, in 1992 Australia introduced a system of compulsory employer pension contributions of 3% of earnings, initially funded through a collective agreement that replaced a 3% pay increase. Contributions at this rate were inadequate on their own to provide a reasonable retirement income, and over time the compulsory rates have been gradually increased to 11% of pay, increasing to 12% in 2025.**

At the time of writing (May 2024), the compulsory rate is increasing to 11.5% in July 2024 and 12% in July 2025.

### Page 4

The final paragraph at the bottom of the page now reads:

**The minimum contribution requirement is currently 8% of earnings between minimum and maximum thresholds, of which at least 3% must be paid by employers. There are also proposals to extend auto-enrolment to younger employees, although it will remain voluntary for the self-employed and non-workers.**

### Page 8

The average ages in the third paragraph have been updated to **66.3 for men and 65.8 for women**.

## Chapter 3

### Section 4

This section, and the summary of the chapter which follows, have been updated. Replacement pages can be found at the end of this Upgrade.

## Chapter 4

Additional material has been added at the end of Section 4.2 concerning the new UK funding regime for defined benefit pension schemes. Replacement pages can be found at the end of this Upgrade.

## Chapter 5

### Section 2

The Core Reading is based on version 1.0 of both TAS 100 and TAS 300. Version 2 of both TAS 100 and TAS 300 has been published and applies to work completed on or after 1 July 2023 and 1 April 2024 respectively.

The FRC has also introduced TAS 310 which aims to promote high quality technical actuarial work in relation to collective money purchase pension schemes and is intended to apply to technical actuarial work in scope and completed on or after 30 September 2024.

### Section 5

This section has been updated. Replacement pages can be found at the end of this Upgrade.

## Chapter 8

### Page 17

The **UK example** at the bottom of the page now reads:

**In the UK, any lump sums will be assessable against the Lump Sum and Death Benefits Allowance (LSDBA) with any excess liable to the beneficiary's marginal tax rate.** The LSDBA is £1,073,100 for the 2024/25 tax year.

### Page 20

The following line of Core Reading has been deleted:

**The value of dependants' pensions is not tested against the member's LTA.**

## Chapter 10

### Section 5

A new example has been added to the end of Section 5 as follows:

#### UK example

**In March 2023 The Pensions Regulator published a review of climate related disclosures made by occupational pension schemes, which can be accessed via this link:**

**[thepensionsregulator.gov.uk/en/document-library/research-and-analysis/review-of-climate-related-disclosures](https://thepensionsregulator.gov.uk/en/document-library/research-and-analysis/review-of-climate-related-disclosures)**

Examples of good practice within these disclosures included:

- linking the climate related risks disclosed over each time horizon to the asset classes held by the scheme now and / or likely to be held in the future
- considering the potential climate-related impact on DB scheme assets, liabilities and covenant in an integrated way, using consistent scenarios
- considering the potential climate-related impact on DC funds at retirement for a range of members of different ages.

## Chapter 12

### Section 1

Some new material has been added to the end of Section 1 as follows:

#### New funding regime

**The new funding regime in the UK coming into force in 2024 includes a detailed definition of sponsor covenant, with closer scrutiny. Trustees will be required to take account of a wider range of factors and elements in relation to the sponsor's covenant. This is discussed in more detail in Chapter 4 (Security).**

Under the new funding regime, the strength of the employer covenant is determined by:

- the financial ability of the employer to support the scheme
- scheme support from any contingent assets to the extent these:
  - are legally enforceable
  - will be sufficient to provide that level of support when required.

Note that this new definition does not explicitly include reference to the 'willingness' of the employer, unlike the definition of sponsor covenant given in the Subject SA4 Glossary.

## Chapter 14

### Section 8

Section 8.2 has been updated. Replacement pages can be found at the end of this Upgrade.

## Chapter 18

### Section 5.2

Some updates have been made to the Course Notes concerning the following issues.

In February 2024, CMI published the S4 mortality tables based on the experience of self-administered DB pension scheme. These use data for 2014 to 2019 to avoid years affected by the coronavirus pandemic and have an effective date of 1 January 2017.

In April 2024, CMI published its latest mortality projection model, CMI\_2023.

The principles in Version 1.0 of both TAS 100 and TAS 300 are used in the mortality advice detailed in the Core Reading on page 29. The relevant principles covered in Version 2.0 of both TAS 100 and TAS 300 are very similar.

## Chapter 19

### Page 7

Some new material has been added after the *UK example* as follows:

From 6 April 2024, the Authorised Surplus Payments Charge (Variation of Rate) Order 2024 amended the tax charge that applies to authorised surplus payments to sponsoring employers of registered DB schemes from 35% to 25%.

## Chapter 20

### Section 1.1

The information to be contained in the scheme funding report is based on Version 1.0 of TAS 300. Version 2.0 of TAS 300 requires the same information.

## Chapter 21

### Section 3.4

The requirement to have regard to corporate bonds when setting the discount rate has changed to high-quality fixed-income investments.

## Glossary

The following definition has been updated:

### **Lifetime Allowance (LTA)**

**A fixed monetary amount, set each tax year, against which the total value of a member's aggregate benefits from registered schemes in the UK used to be assessed. Benefits in excess of the LTA were subject to specific tax charges.**

**The LTA was abolished with effect from 5 April 2024 and replaced with the Lump Sum Allowance (LSA) and Lump Sum and Death Benefit Allowance (LSDBA).**

**See *Lump Sum Allowance* and *Lump Sum and Death Benefit Allowance*.**

The following definitions have been added:

### **Low dependency**

**A status where a benefit scheme has no expectation that the sponsor will make any further deficit payments into the scheme.**

**See also *Self-sufficiency basis*.**

### **Lump Sum Allowance (LSA)**

The Lump Sum Allowance (LSA) replaced the Lifetime Allowance (LTA) from 5 April 2024.

The LSA limits the tax-free lump sum benefit payable during a member's lifetime and has been set initially as 25% of the LTA that applied when it was abolished. Most tax-free lump sums typically taken on retirement from registered pension arrangements count towards an individual's LSA. Any such lump sum payments in excess of the LSA are taxed at the individual's marginal tax rate.

See *Lifetime Allowance*.

### **Lump Sum and Death Benefit Allowance (LSDBA)**

The Lump Sum and Death Benefits Allowance (LSDBA) replaced the Lifetime Allowance (LTA) from 5 April 2024.

The LSDBA limits the total tax-free lump sum payable in lifetime and on death and has been set initially at the same limit that is applied under the LTA rules. Most tax-free lump sums paid from registered pension arrangements during an individual's lifetime or on their death count towards an individual's LSDBA. Any lump sum payments in excess of the LSDBA are taxed at the recipient's marginal tax rate.

See *Lifetime Allowance*.

## 2 Changes to the X Assignments

### Assignment X1

#### Question X1.2(i)

This question and solution have changed and are set out below:

- (i) Outline the responsibilities of a pension scheme trustee and what training requirements may be needed to fulfil these. [8]

(i) ***The responsibilities and training requirements of a pension scheme trustee***

A trustees' role is as guardian or custodian of trust assets for the benefit of the beneficiaries ... [½]

... acting prudently and conscientiously with the utmost good faith ... [½]

... seeking sufficient knowledge and understanding to make informed decisions ... [½]

... which due to the complexity surrounding pensions may involve seeking expert advice. [½]

Requirements of a trustee's role include:

- maintain confidentiality [½]
- not profit from their duties [½]
- act in the best interest of beneficiaries [½]
- strike a fair balance between the interests of different classes of beneficiary [½]
- delegate duties to appropriate specialists [½]
- obtain specialist advice ... [½]
- assess the sponsor covenant. [½]

[Maximum 2 marks for 4 examples]

Training requirements will include obtaining sufficient knowledge and understanding on the following general issues:

- the legislative environment [½]
- governance requirements [½]
- scheme documentation requirements [½]
- financial, covenant and investment issues. [½]



A trustee's responsibilities, and examples of the understanding and hence training required to fulfil these, include:

- investment and custody of the assets ... [½]  
 ... which requires understanding of risk and reward in the context of the relationship between the liabilities and assets [½]
- financing benefits ... [½]  
 ... which requires understanding of integrated risk management [½]
- benefit administration and communication ... [½]  
 ... which requires understanding of the schemes' benefits, accounting and disclosure requirements [½]
- exercise of discretionary powers ... [½]  
 ... which requires understanding of the powers and needs of different stakeholders [½]
- regular meetings and maintenance of proper records and minutes ... [½]  
 ... which requires understanding of risk and risk mitigation. [½]

[Maximum 8]

## Assignment X2

### Question X2.1

This is a new question. Replacement pages can be found at the end of this Upgrade. The replacement pages for the questions are for the whole paper for convenience.

## Assignment X3

### Question X3.1

Part (v) of this question has been deleted and its solution starts the solution to the following part. Consequently parts (vi), (vii) and (viii) have been renumbered as parts (v), (vi) and (vii) respectively. The mark for the (newly named) part (v) has been increased from 11 to 13 marks.

## Assignment X4

### Question X4.1

Part (iii) of this question has moved up to become part (i). A new part (ii) has been added as follows:

- (ii) Discuss the issues the trustees should consider in setting the deficit recovery contributions (DRCs). [5]

Consequently parts (i), (ii), (iv) and (v) have been renumbered as (iii), (iv), (v) and (vi) respectively.

These latter two parts have been slightly amended to:

- (v) Estimate the reduction in discount rates that would trigger an immediate 50% rise in employer contributions, assuming the same reduction pre- and post-retirement. [5]
- (vi) Discuss how the trustees might use the results of (iii) – (v) in reviewing the financing of the scheme. [10]

This question is now worth 35 marks.

### Solution X4.1(ii)

The solution for this part is as follows:

#### (ii) *Setting the DRCs*

The trustees need to agree DRCs with the sponsor ... [½]

... reflecting the sponsor's covenant ... [½]

... and cash flow limitations ... [½]

... in the context of running their business. [½]

The negotiation between the trustees and sponsor concerns the level of prudence in the discount rate, and what period and method to use to determine the DRCs, whilst balancing member security and affordability. [1]

The DRCs could be set to reflect a more realistic view of investment returns than the prudent approach used to set the valuation discount rate. [½]

To improve the funding position as quickly as possible, thereby improving the security of members' benefits, the trustees will usually prefer: [½]

- the deficit to be paid off over a short payment period [½]
- front-end loading of contributions. [½]

If the DRCs are calculated using a discount rate based on asset outperformance and that outperformance is not achieved, higher contributions would be needed equal to the difference between what was assumed and actual experience ... [½]

... which could be set as contingent contributions, paid if higher returns are not achieved. [½]

The trustees should also consider:

- any restrictions in legislation, or scheme documentation, ... [½]  
... such as a statement of strategy [½]
- the long-term plan or funding target for the scheme ... [½]  
... *eg* if the trustees and company are aiming to have sufficient assets to insure scheme liabilities at a defined point in the future, they may wish to remove the deficit quickly [½]
- how quickly the scheme is likely to mature (or the duration of the liabilities is likely to decrease) ... [½]  
... the quicker this is likely to happen, the shorter the desired deficit recovery is likely to be [½]
- whether the company will offer additional forms of security, *eg* a charge over assets ... [½]  
... all other things being equal, such offers of security may make a long deficit recovery period more acceptable. [½]

[Maximum 5]

#### **Solution X4.1(vi) (previously part (v))**

In the fourth point the words 'at least' have been amended to 'around'.

#### **Question X4.2**

The marks for some parts of this question have been reduced such that parts (iii), (v), (vi) and (ix) are now worth 5 marks each and part (vii) is now worth 7 marks. The total mark for this question is now 45 marks.

### **Assignment X5**

#### **Question X5.2**

This is a new question. Replacement pages can be found at the end of this Upgrade.

### **Assignment X6**

#### **Solution X6.1(i)**

The first bullet point has changed to:

- The level of the enhancement needs to be high enough so that a satisfactory take-up rate is achieved ... [½]  
... but not so high that it fails other employer objectives, *eg* to improve the scheme's financial position such that the cost of the enhancement can be reclaimed from a reduction in contributions. [½]

An additional bullet point has been added as follows:

- Members may select against the scheme, *eg* they will only take an ETV if they believe they are likely to be better off, and so funding gains may not materialise in respect of such members. [½]

The point after the *Fairness to all members* sub-heading has been expanded to:

The employer may want to ensure the enhancement applies equally to all members or may want to consider targeting certain groups of members ... [½]

... *eg* those with higher liabilities (*eg* older members) to remove most liability from the scheme. [½]

### **Solution X6.1(vi)**

The first sentence of the first bullet point has been changed to:

- the reason that the account is depleting and whether this is likely to continue; this may be due to: [½]

The final part after the Risk sub-heading has been changed to:

If the member opts to continue with income drawdown the following risks remain:

- investment and mortality risk [½]
- the risk of deferring annuity purchase which could mean annuity terms worsen, *eg* due to changes in government bond yields reflected in annuity rates [½]
- the impact of mortality drag which will become more significant as the member ages [½]
- expense risk, especially as expenses will represent a growing proportion of the fund as it reduces in size. [½]

### **Question X6.2**

In part (ii), the first bullet point (concerning an enhanced transfer value exercise) has been removed and this part is now worth 8 marks.

The marks for some other parts of this question have also been changed such part (iii) is now worth 11 marks and part (iv) is now worth 15 marks. The total mark for this question remains at 55 marks.

The paragraph after part (iv) has been changed to:

After some discussion, the sponsor and the trustees agree to close the scheme to future accrual (moving all active members to deferred pensioner status) and consider buying out all the scheme's liabilities. An insurance company provides an indicative quotation of 2,000*m*. As the sponsor considers this prohibitively expensive the buy-out does not go ahead.

**Solution X6.2(i)**

The first point after the *Objectives of the various parties* sub-heading has been changed to:

The trustees will wish to protect the security of benefits. [½]

An additional point has also been added at the end of this sub-heading as follows:

Any restrictions in legislation should be adhered to. [½]

The fourth point after the *Funding position* sub-heading has been expanded to:

The employer and trustees may wish to consider:

- the reasons for the deficit, how this has changed since the previous valuation and how previous deficits were met [½]
- post-valuation events and their impact on the deficit. What is the current position of the scheme? [½]

An additional point has also been added (after the first point) under the *Covenant and affordability* sub-heading as follows:

The trustees will not wish to push the sponsor into insolvency by requiring contributions which are unaffordable. [½]

**Solution X6.2(ii)**

The section on an enhanced transfer value exercise has been removed.

**Solution X6.2(iii)**

The section on an enhanced transfer value exercise has been removed.

The section under the *Investment strategy: Scheme membership* sub-heading has been expanded as follows:

As benefits in a DB scheme are not directly related to investment returns there should be no immediate impact on the level of members' benefits. [½]

The security of benefits may improve if scheme experience is less volatile ... [½]

... or worsen if funding levels reduce and the increased contribution requirements are unaffordable to the sponsor ... [½]

... leading to the discontinuance of the scheme and reductions in benefits. [½]

Discretionary benefits may become less likely due to lower (expected) returns on the de-risked investment strategy. [½]

The first point under the *Scheme closure: Sponsor's accounting balance* sheet sub-heading has been expanded as follows:

There may be an immediate reduction in the liabilities due to the removal of the salary link ... [½]

... leading to a curtailment gain. [½]

An additional point has been added at the end of the *Scheme closure: Scheme membership* sub-heading as follows:

The longer-term funding objective may change, *eg* to buying out benefits with an insurer, which could eventually change the level and security of all members' benefits. [½]

### **Solution X6.2(iv)**

An additional point has been added under the *General* sub-heading as follows:

Insurance is likely to reduce risk, particularly mortality and investment risk. [½]

An additional point has been added under the *Partner's pensions on death in service* sub-heading as follows:

Pensions could be directly insured or the coverage of the lump sum on death in service could be increased to provide more approximate insurance. [½]

The section under *The purchase of non-profit deferred annuities* sub-heading has been changed to:

Non-profit deferred annuities may be purchased to match or extinguish a scheme's liability to a member with an entitlement to a deferred pension. [½]

Insurance companies tend to charge a relatively high price for deferred annuities because of the greater risk *eg* reinvestment risk and anticipated improvements in life expectancy (the liabilities are longer term and less predictable) ... [½]

... and to reflect a less competitive market. [½]

### **Solution X6.2(v)**

The final bullet point has been changed to:

- an ETV exercise could be carried out ... [½]

... even if the enhancement is generous, the transfer value is still likely to be less than that required to insure the benefit ... [½]

... and so these members' benefits will be settled more cheaply than via buy-out. [½]

### 3 Changes to the Mock Exam

#### Solution 1(iv)

An additional bullet point has been added to the first set of bullet points as follows:

- may reduce contributions for the company ... [½]
- ... if paying enhanced transfer values leads to a funding gain [½]

#### Solution 1(vii)

An additional point has been added at the beginning of the solution:

The company should take advice, particularly actuarial and legal advice. [½]

## 4 Other tuition services

In addition to the CMP, you might find the following services helpful with your study.

### 4.1 Study material

For further details on ActEd's study materials, please refer to the *Products* pages on the ActEd website at **ActEd.co.uk**.

### 4.2 Tutorials

We offer the following (face-to-face and/or online) tutorials in Subject SA4:

- a set of Regular Tutorials (lasting a total of three days)
- a Block Tutorial (lasting three days).

For further details on ActEd's tutorials, please refer to our latest *Tuition Bulletin*, which is available from the ActEd website at **ActEd.co.uk**.

### 4.3 Marking

You can have your attempts at any of our assignments or mock exams marked by ActEd. When marking your scripts, we aim to provide specific advice to improve your chances of success in the exam and to return your scripts as quickly as possible.

For further details on ActEd's marking services, please refer to the *2025 Student Brochure*, which is available from the ActEd website at **ActEd.co.uk**.

### 4.4 Feedback on the study material

ActEd is always pleased to receive feedback from students about any aspect of our study programmes. Please let us know if you have any specific comments (*eg* about certain sections of the notes or particular questions) or general suggestions about how we can improve the study material. We will incorporate as many of your suggestions as we can when we update the course material each year.

If you have any comments on this course, please send them by email to **SA4@bpp.com**.



## 3 The Subject SA4 Core Reading

### 3.1 Introduction

The Institute and Faculty of Actuaries has produced Core Reading to support students in their learning and development in this subject. The Core Reading relates directly to the topics within the Syllabus.

The Core Reading is reviewed every year to reflect any changes to the Syllabus and current practice. Tuition providers may use the Core Reading to support their tuition services or products.

The Core Reading will reference the version of any current legislation, standards, professional guidance.

The United Kingdom left the European Union on 1 January 2021 without an EU-wide arrangement for the operation and regulation of financial services and this continues to be the situation. This version of the Core Reading reflects this situation.

The full subject Syllabus is available on the IFoA website here:

[actuaries.org.uk/curriculum](https://actuaries.org.uk/curriculum).

The subject Syllabus includes information on how this subject will be assessed. Students can use the subject Syllabus as a guide for learning and development, however this must not be used by another party, copied, electronically transmitted (including the use of AI or Generative AI) or published on a website.

### 3.2 Required reading

The required reading forms part of Core Reading for Subject SA4.

The following papers, whilst not included in this document, form part of Core Reading. It is therefore important that they are read.

The Institute and Faculty of Actuaries (IFoA)

Core Reading: Subject SP4

Financial Reporting Council (FRC)

Framework for FRC technical actuarial standards

Technical Actuarial Standard 100: Principles for Technical Actuarial Work

Technical Actuarial Standard 300: Pensions

Glossary of defined terms used in FRC technical actuarial standards

Professional Guidance for Actuaries

APS P1: Duties and responsibilities of members undertaking work in relation to pension schemes

APS X1: Applying Standards to Actuarial Work

APS X2: Review of Actuarial Work

### 3.3 Assessment

Students are expected to apply knowledge and concepts learned from the subject syllabus using the Core Reading and other available resources as additional learning material.

#### IFoA handbooks and regulations

For further advice and guidance on the assessment please read:

- **IFoA Assessment Regulations**
- **IFoA Examinations Handbook**
- **IFoA Qualifications Handbook**

These documents can be found here:

**[actuaries.org.uk/qualify](https://actuaries.org.uk/qualify)**

The Institute and Faculty of Actuaries has produced a number of documents, which it advises students to read and understand. In particular, the:

- Qualification Handbook, which contains information on studying and preparing for exams, as well as available support and resources
- Examinations Handbook, which contains practical assistance on how to sit an Institute and Faculty of Actuaries' examination
- Assessment Regulations document, which includes rules on eligibility, entry and conduct during an online assessment.

The Qualification Handbook can be found at:

**[actuaries.org.uk/qualify/student-and-associate-exam-news/qualification-handbook](https://actuaries.org.uk/qualify/student-and-associate-exam-news/qualification-handbook)**

The Examinations Handbook and Assessment Regulations document can be found at:

**[actuaries.org.uk/qualify/my-exams/ifo-exams](https://actuaries.org.uk/qualify/my-exams/ifo-exams)**

*IMPORTANT NOTE: These documents may be updated and re-published in the weeks leading up to each exam session. It is important that you keep up-to-date with any changes and developments.*

### 3.4 Accreditation

The Institute and Faculty of Actuaries would like to thank the numerous people who have helped in the development of the material contained in this Core Reading.

## 4 Further reading and references

### 4.1 Further reading

The items included as further reading help to boost and broaden your knowledge of pensions. Many of the documents are related to UK pensions topics. If you do not have time to read all the papers in detail, try to read some executive summaries, introductions or concluding sections to give you at least a flavour and some of the salient points of each paper.

**The following list of suggested reading for Subject SA4 has been drawn up. Candidates will find it useful to consult some of the material to obtain a different viewpoint when studying a particular topic. However, candidates are not expected to have read all of the items on the list for their chosen subject. Equally candidates may use other sources of information to enhance their wider understanding, such as:**

- **The financial and trade press, including The Actuary magazine.**
- **Bulletins and other publications from consultancies and insurers and other providers of benefits.**
- **Information on the websites of other bodies such as The Pensions Regulator.**
- **Other papers from the Institute and Faculty of Actuaries and SIAS.**
- **Continuous Mortality Investigation bulletins.**
- **Presentations made at recent Pensions Conferences or other events.**
- **Pensions related presentations made at recent cross-practice conventions or for other practice areas (eg Life, Risk, Investment).**
- **Pensions seminars arranged by the Institute and Faculty of Actuaries.**
- **Other recommended references on the Pensions practice area of the Institute and Faculty of Actuaries' website.**

Many of these sources of information are available on the appropriate website, *ie*:

- The Actuary magazine's website is [www.theactuary.com](http://www.theactuary.com)
- the CMI area of the IFoA's website, and the FAQs on the latest model as at the time of writing (May 2024), are respectively:
  - [actuaries.org.uk/learn-and-develop/continuous-mortality-investigation](http://actuaries.org.uk/learn-and-develop/continuous-mortality-investigation)
  - [actuaries.org.uk/mortality-improvements-and-cmi-2021-frequently-asked-questions-faqs](http://actuaries.org.uk/mortality-improvements-and-cmi-2021-frequently-asked-questions-faqs)
- the pensions practice area of the IFoA's website is:
  - [actuaries.org.uk/practice-areas/pensions](http://actuaries.org.uk/practice-areas/pensions).

## 4.2 Example papers

The following may be of interest for candidates who wish to read further on this subject, but it should be noted that this list is not exhaustive:

- **TASs are available on the FRC website ([frc.org.uk](http://frc.org.uk)) and professional guidance is available on the Institute and Faculty of Actuaries' website via:**

[actuaries.org.uk/upholding-standards/standards-and-guidance](http://actuaries.org.uk/upholding-standards/standards-and-guidance).

This guidance can now be found at: [actuaries.org.uk/standards/standards-and-guidance/](http://actuaries.org.uk/standards/standards-and-guidance/)

- **Access to electronic versions of papers in journals and publications such as the British Actuarial Journal (BAJ) and Annals of Actuarial Science is available on the Institute & Faculty of Actuaries website via:**

[actuaries.org.uk/learn-and-develop/research-and-knowledge](http://actuaries.org.uk/learn-and-develop/research-and-knowledge).

These journals and publications are now available via: [actuaries.org.uk/thought-leadership](http://actuaries.org.uk/thought-leadership)

**You may be asked to log in, using your normal website login, to access some items. In case of difficulty in accessing any item, contact the libraries (email: [libraries@actuaries.org.uk](mailto:libraries@actuaries.org.uk)).**

- ***Good governance for pension schemes*. Thornton, P.; Fleming, D. Cambridge University Press, 2011. 322 pages. ISBN: 9780521761611**

- **Staple Inn Actuarial Society (SIAS) papers can be located at:**

[sias.org.uk/resources/papers/](http://sias.org.uk/resources/papers/)

These papers can now be found at: [sias.org.uk/resources/](http://sias.org.uk/resources/)

- ***Detailed guidance for trustees*. The Pensions Regulator.**

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance](http://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance)

- ***Code of Practice 03: Funding Defined Benefits*. The Pensions Regulator**

[thepensionsregulator.gov.uk/en/document-library/code-of-practice/funding-and-investment/funding-defined-benefits](http://thepensionsregulator.gov.uk/en/document-library/code-of-practice/funding-and-investment/funding-defined-benefits)

- ***DB Investment Guidance*. The Pensions Regulator**

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/db-investment/db-investment-governance](http://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/db-investment/db-investment-governance)

- ***DC Investment Governance*. The Pensions Regulator**

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes](http://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes)

- ***Draft DB funding code of practice*. The Pensions Regulator**

[thepensionsregulator.gov.uk/en/document-library/consultations/draft-defined-benefit-funding-code-of-practice-and-regulatory-approach-consultation/draft-db-funding-code-of-practice](http://thepensionsregulator.gov.uk/en/document-library/consultations/draft-defined-benefit-funding-code-of-practice-and-regulatory-approach-consultation/draft-db-funding-code-of-practice)

### 4.3 Resources

A list of additional resources to support candidate learning and development for this subject can be found on the Module pages on the IFoA website:

[actuaries.org.uk/curriculum/](http://actuaries.org.uk/curriculum/).

All resources are hyperlinked to their source publication or the IFoA Library. Where a resource is available through the IFoA Library, members, students and affiliates can 'request' from the IFoA Library Service, subject to availability.

### 4.4 References

The following were consulted in the production of this Core Reading.

- Fleming, D., and Thornton, P., *Good governance for pension schemes*. Cambridge University Press, 2011. 322 pages. ISBN: 9780521761611
- McGill, Brown, Haley & Schieber, *Fundamentals of Private Pensions*, (2004) and (2010), 8th and 9th Ed. Oxford University Press.
- *Pensions Pocket Book*, (2013), Rev. Ed., Economic and Financial Publishing Limited in association with Aon Hewitt
- *Pensions Terminology – A Glossary for Pension Schemes*, The Pensions Management Institute/ Pensions Research Accountants Group (PRAG), 8th and 9th Ed.
- The Pensions Regulator (TPR)

[thepensionsregulator.gov.uk](http://thepensionsregulator.gov.uk)

*Integrated risk management:*

[thepensionsregulator.gov.uk/en/trustees/investment-and-db-scheme-funding/integrated-risk-management](http://thepensionsregulator.gov.uk/en/trustees/investment-and-db-scheme-funding/integrated-risk-management)

*Glossary – Trustee Toolkit (The Pensions Regulator)*

[trusteetoolkit.thepensionsregulator.gov.uk](http://trusteetoolkit.thepensionsregulator.gov.uk)

*Code of Practice 03: Funding Defined Benefits*. The Pensions Regulator

[thepensionsregulator.gov.uk/en/document-library/code-of-practice/funding-and-investment/funding-defined-benefits](http://thepensionsregulator.gov.uk/en/document-library/code-of-practice/funding-and-investment/funding-defined-benefits)

Other Codes of Practice can be found on:

[thepensionsregulator.gov.uk/en/document-library/codes-of-practice](http://thepensionsregulator.gov.uk/en/document-library/codes-of-practice).

*DB Investment Guidance*. The Pensions Regulator

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/db-investment/db-investment-governance](http://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/db-investment/db-investment-governance)

*DC Investment Governance*. The Pensions Regulator

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes](http://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes)

- **Financial Reporting Council (FRC)**  
**Framework for FRC technical actuarial standards**  
**Technical Actuarial Standard 100: Principles for Technical Actuarial Work**  
**Technical Actuarial Standard 300: Pensions**  
**Glossary of defined terms used in FRC technical actuarial standards**  
**(TASs are available on the FRC website (frc.org.uk))**
- **Professional Guidance for Actuaries**  
**APS P1: Duties and responsibilities of members undertaking work in relation to pension schemes**  
**APS X1: Applying Standards to Actuarial Work**  
**APS X2: Review of Actuarial Work**  
**(Professional guidance is available on the Institute and Faculty of Actuaries' website via: [actuaries.org.uk/upholding-standards/standards-and-guidance](https://actuaries.org.uk/upholding-standards/standards-and-guidance))**

This guidance can now be found at:

[actuaries.org.uk/standards/standards-and-guidance/](https://actuaries.org.uk/standards/standards-and-guidance/)

- **Staple Inn Actuarial Society (SIAS) papers can be located at:**

**[sias.org.uk/resources/papers/](https://sias.org.uk/resources/papers/)**

These papers can now be found at:

[sias.org.uk/resources/](https://sias.org.uk/resources/)

**Access to electronic versions of papers in journals and publications such as the British Actuarial Journal (BAJ) and Annals of Actuarial Science is available on the Institute & Faculty of Actuaries website via:**

**[actuaries.org.uk/learn-and-develop/research-and-knowledge](https://actuaries.org.uk/learn-and-develop/research-and-knowledge)**

These journals and publications are now available via:

[actuaries.org.uk/thought-leadership](https://actuaries.org.uk/thought-leadership)

In addition to these references, several publications are referenced elsewhere in the Core Reading. These (or more current versions) are detailed below:

- *Climate Change*, The Pensions Regulator:  
[thepensionsregulator.gov.uk/en/document-library/research-and-analysis/review-of-climate-related-disclosures](https://thepensionsregulator.gov.uk/en/document-library/research-and-analysis/review-of-climate-related-disclosures)
  
- Climate Change*, The Bank of England:  
[bankofengland.co.uk/prudential-regulation/publication/2015/the-impact-of-climate-change-on-the-uk-insurance-sector](https://bankofengland.co.uk/prudential-regulation/publication/2015/the-impact-of-climate-change-on-the-uk-insurance-sector)
  
- Climate Change*, IFoA website:  
[actuaries.org.uk/document-library/standards/risk-alerts/2022-climate-change-and-sustainability-risk-alert-final/](https://actuaries.org.uk/document-library/standards/risk-alerts/2022-climate-change-and-sustainability-risk-alert-final/)  
[actuaries.org.uk/media/f1ih0kzh/ethical-and-professional-guidance-on-climate-change.pdf](https://actuaries.org.uk/media/f1ih0kzh/ethical-and-professional-guidance-on-climate-change.pdf)
  
- *Speaking up*, IFoA website:  
[actuaries.org.uk/media/d2rhp3sh/speaking-up-a-guide-for-members.pdf](https://actuaries.org.uk/media/d2rhp3sh/speaking-up-a-guide-for-members.pdf)  
[actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/whistleblowing-guide-employers-actuaries-feb-2015/](https://actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/whistleblowing-guide-employers-actuaries-feb-2015/)
  
- *Conflict of interest*, IFoA website:  
[actuaries.org.uk/standards/conflicts-of-interest/](https://actuaries.org.uk/standards/conflicts-of-interest/)  
[actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/conflict-interest-guide-members-v20/](https://actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/conflict-interest-guide-members-v20/)
  
- *Conflict of interest*, The Pensions Regulator:  
[thepensionsregulator.gov.uk/en/trustees/governing-the-scheme/conflicts-of-interest](https://thepensionsregulator.gov.uk/en/trustees/governing-the-scheme/conflicts-of-interest)
  
- *The Actuaries Code*, IFoA website:  
[actuaries.org.uk/standards/standards-and-guidance/the-actuaries-code](https://actuaries.org.uk/standards/standards-and-guidance/the-actuaries-code)
  
- *Incentive exercises*, The Pensions Regulator:  
[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/administration-detailed-guidance/incentive-exercises](https://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/administration-detailed-guidance/incentive-exercises)
  
- *Statement of Strategy under the new funding regime*, The Pensions Regulator:  
[thepensionsregulator.gov.uk/en/document-library/consultations/statement-of-strategy-consultation/example-statement-of-strategy](https://thepensionsregulator.gov.uk/en/document-library/consultations/statement-of-strategy-consultation/example-statement-of-strategy)

- *CMI mortality projections*, IFoA website:  
[actuaries.org.uk/mortality-improvements-and-cmi-2021-frequently-asked-questions-faqs](https://actuaries.org.uk/mortality-improvements-and-cmi-2021-frequently-asked-questions-faqs)
- *The Actuarial Quality Framework*, FRC website using the search facility on [frc.org.uk](https://frc.org.uk).



## 4 Restrictions

### 4.1 Restrictions on tax concessions

**Generally the State will monitor benefit schemes to restrict the tax concessions offered using limits to the benefits and contributions enjoying tax concessions.**

The State's main intention will be to limit any abuse of the taxation concessions by schemes.

For example, **the State can introduce limits on the level of benefits in schemes which attract tax relief.**

### 4.2 UK example

**The UK government introduced the Annual Allowance (AA) which sets the annual limit on tax relieved pension savings and the Lifetime Allowance (LTA) which is the overall limit of tax relieved savings in a pension scheme. The LTA was abolished from 5 April 2024 and replaced by the Lump Sum Allowance (LSA) and Lump Sum and Death Benefits Allowance (LSDBA), which set the overall limit of tax-free lump sum benefit payable during a member's lifetime and on death. The important features are described below.**

#### **Annual Allowance (AA)**

**Individuals can claim tax relief on personal contributions up to a limit.** The limit is currently the higher of £3,600 and 100% of annual earnings. **Restrictions will apply for certain high earners which are covered in more detail below.**

**In addition, individuals can claim full tax relief in respect of any contributions paid on their behalf by a third party, provided the total personal contributions does not exceed a limit (which is currently the same limit as above).**

For non-taxpayers, 'tax relief' will be granted on pension contributions up to the maximum of £3,600. In practice this means that the individual can contribute the amount net of tax and the Government will add the tax 'paid' so that the overall contribution is £3,600.

**Individuals can pay in greater amounts but they will not attract tax relief.**

**In order to control the flow of contributions to, or accrual in a registered pension scheme, there is an upper limit, known as the AA, on the amount of contributions (including employer contributions) and benefits that may be built up in any one tax year that are eligible for tax relief.** The standard AA for the 2024/25 tax year is £60,000.

**There is also further consideration for individuals who have accessed their pension as a result of the pension flexibilities introduced in April 2015, namely the Money Purchase Annual Allowance (MPAA). The rationale for the MPAA is to prevent individuals from using the flexibility to avoid tax on their current earnings by diverting their salary into their pension scheme, gaining tax relief then effectively withdrawing 25% tax-free. It also restricts individuals from gaining a second round of tax relief by withdrawing savings and reinvesting them into their pension.**

The MPAA of £10,000 applies to money purchase pension savings for individuals who flexibly access a money purchase arrangement in certain circumstances.

## Lifetime Allowance (LTA), Lump Sum Allowance (LSA) and Lump Sum and Death Benefits Allowance (LSDBA)

Before 6 April 2024, the total value of a member's aggregate benefits from registered schemes was assessed against a Lifetime Allowance (LTA). Registered schemes include occupational pension schemes, personal pension plans, stakeholder plans, retirement annuity contracts and deferred annuity contracts.

From 5 April 2024 the LTA was replaced by the Lump Sum Allowance (LSA) which limits the tax-free lump sum benefit payable during a member's lifetime, and the Lump Sum and Death Benefits Allowance (LSDBA) which limits the total tax-free lump sum payable in lifetime and on death.

The LSA is £268,275 for the 2024/25 tax year. (This figure represents 25% of the LTA that applied when it was abolished.) Most tax-free lump sums typically taken on retirement from registered pension arrangements count towards an individual's LSA. Any such lump sum payments in excess of the LSA are taxed at the individual's marginal tax rate.

The LSDBA is £1,073,100 for the 2024/25 tax year. (This is the same limit that is applied under the LTA rules.) Most tax-free lump sums paid from registered pension arrangements during an individual's lifetime or on their death count towards an individual's LSDBA. Any lump sum payments in excess of the LSDBA are taxed at the recipient's marginal tax rate.

Thus, for each individual:

- if they die before retirement, the LSDBA will apply
- if they reach retirement the LSA applies. On death after retirement, the LSDBA will apply with this allowance calculated as the LSDBA remaining after taking into account the LSA already used up by the individual.



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### Question

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Akash will retire in August 2024. He will receive:

- a New State Pension of £11,500 *pa*
- a pension of £20,000 *pa* and a lump sum of £45,000 from a registered DB scheme
- a lump sum of £250,000 from a registered DC scheme
- a lump sum of £50,000 from a non-registered pension scheme.

Calculate the value of Akash's benefits for the purposes of comparison with the LSA.

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## Solution

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Only benefits from registered pension schemes are to be valued *ie* benefits from the State and non-registered pension schemes are excluded.

So, the value of Akash's lump sum benefits is  $45,000 + 250,000 = £295,000$

This is over the LSA for the 2024/25 tax year of £268,275. Thus £268,275 can be taken tax-free with the excess of £26,725 taxed at Akash's marginal tax rate.

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**The other main features of the current tax regime are as follows:**

### ***Taking benefits as cash***

#### *Members of defined contribution schemes*

**For members of registered defined contribution schemes up to 25% of the member's accumulated fund can be taken as tax-free cash, subject to the LSA.**

**The remainder of the fund can also be taken as cash, subject to income tax.**

**Members can enter into an income drawdown arrangement where the fund remains invested but the individual withdraws cash when required. There are no restrictions on the amount of cash that can be withdrawn. The amounts withdrawn are subject to income tax.**

An income drawdown arrangement is a mechanism for the withdrawal of income while annuity purchase is deferred. Whilst deferral of annuity purchase may allow the individual to remain invested for longer, survivors will experience mortality drag if they purchase an annuity at the end of the drawdown period.

**Due to the increased flexibility on DC pensions, it is anticipated that the number of members of DB schemes opting to transfer their benefits out of their scheme will increase. The Pensions Regulator has issued specific guidance – DB to DC transfers and conversions – to assist DB pension scheme trustees and managers of private and funded public service schemes to manage transfer requests and their impact.**

At the time of writing (May 2024), this guidance can be found at:

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/administration-detailed-guidance/db-to-dc-transfers-and-conversions](https://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/administration-detailed-guidance/db-to-dc-transfers-and-conversions)

#### *Members of defined benefit schemes*

**A tax-free sum of up to 25% of the value of the benefits can be taken, up to a maximum of the LSA, and subject to the rules of the member's scheme.**

It is more difficult to determine the maximum tax-free cash sum in a defined benefit scheme than a defined contribution scheme. This is because the value of the benefits and hence the maximum lump sum depends on the amount of pension being given up and the commutation factor that is applied. Setting aside the overall £268,275 limit, the maximum tax-free lump sum ( $LS$ ) can be calculated using the formula:

$$LS = \frac{20 \times p \times f}{20 + (3 \times f)}$$

where:

- $p$  is the member's initial pension before any is exchanged for cash
- $f$  is the commutation factor.




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### Question

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Show that  $LS = \frac{20 \times p \times f}{20 + (3 \times f)}$

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### Solution

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Let's define  $AC$  as the value of the residual (after exchange for cash) scheme pension, which is calculated as 20 multiplied by the residual scheme pension.

The maximum tax-free cash lump sum,  $LS$  is 25% of the value of the benefits  $ie$

$$LS = \frac{AC + LS}{4}$$

Now,  $AC = \left( p - \frac{LS}{f} \right) \times 20$

So,  $LS = \frac{\left( p - \frac{LS}{f} \right) \times 20 + LS}{4}$

Rearranging this expression leads to the equation given  $ie$ :

$$LS = \frac{20 \times p \times f}{20 + (3 \times f)}$$


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### Question

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A defined benefit scheme has a commutation factor of 16:1. Lucy is about to retire and is entitled to a pension of £30,000  $pa$ . Calculate the maximum tax-free lump sum that Lucy can take (subject to compliance with the scheme's rules and the LSA).

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## Solution

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The maximum tax-free lump sum,  $LS$ , can be calculated using the formula:

$$LS = \frac{20 \times p \times f}{20 + (3 \times f)}$$

where:

- $p$  is the initial pension before any is exchanged for cash, *ie* £30,000
- $f$  is the commutation factor, *ie* 16

Therefore:

$$LS = \frac{20 \times 30,000 \times 16}{20 + (3 \times 16)} = \text{£}141,176.47$$

So, Lucy can take a tax-free cash sum of up to £141,176.

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### ***Age limits on receiving benefits***

**Benefits, except in cases of ill-health, cannot generally be drawn before age 55. Scheme rules may permit members to take benefits while remaining in service. The UK government has proposed to raise this minimum age to 57 from 2028, thereafter maintaining it ten years below State Pension Age.**

**Benefits are not required to come into payment by age 75. However, a ‘benefit crystallisation’ event will automatically be triggered at age 75 in relation to any benefits that have not already come into payment and the value of those benefits will be tested against the LTA.** The LTA has been abolished and these benefits are no longer automatically tested at age 75.

### ***Benefits payable on death***

**On death before vesting any lump sums together with any lump sum benefits payable before death, will be assessable against the LSDBA with any excess liable to the beneficiary’s marginal rate of income tax. On death after vesting (but before age 75) a lump sum can be paid equal to the capital value of the pension less any payments made to date. In addition schemes can offer a ten year guarantee (in practice a five year guarantee is common).**

In the UK, a member’s benefits vest if they have two or more years of qualifying service on exit. Qualifying service is pensionable service completed in the scheme, plus actual pensionable service completed in a previous scheme whose benefits have been transferred into the current scheme.

### ***Pensions sharing on divorce***

**Pensions sharing on divorce, when a proportion of the member’s pension rights is given to an ex-spouse, is covered in more detail later in the course.**

Neither pension credits nor debits will count towards the AA.

### ***Unauthorised payments***

**There will be a punitive tax charge on the member / employer and on the scheme in relation to any unauthorised payments.**

Broadly speaking unauthorised payments are payments that break the rules of legislation.

## **4.3 Refunds from an occupational pension scheme**

**A sponsor may be permitted to take a refund from a scheme it sponsors if the scheme is funded to a level sufficient to meet the full buy-out cost of benefits were the scheme to wind up.**

### **UK example:**

**In the UK any refund would be taxed and the power to repay the surplus to the sponsoring employer can only be exercised by the trustees, subject to the agreement of the employer.**

Surplus can only be refunded if the scheme is overfunded on a buy-out basis, and any refund is subject to tax at 25%. In addition, the trustees must be satisfied that a payment to the employer is in the interests of the members and must write to the members and TPR with certain information concerning this payment.

**If there is an existing power in a scheme's rules to pay a refund while the scheme is not winding up, the trustees must have made a resolution by 5 April 2016 if they wished to retain this power.**

### **USA example:**

IBM's DB pension plan was closed some time ago and replaced by a DC arrangement whereby IBM paid contributions matching member contributions of up to a maximum of 5%.

The DB plan became significantly overfunded. In the USA, pension law prohibited employers from using DB scheme surplus to cover DC contributions and a refund of surplus was subject to substantial tax. Therefore, IBM decided to re-open its DB plan by including a cash balance arrangement. Thus, for each year from 2024, instead of paying a 5% matching contribution to its DC plan, IBM gives each employee a 5% credit in the cash balance plan using the surplus assets.

Under IBM's cash balance plan, each member has a cash balance account which increases each year with interest, defined as 6% *pa* for the first three years and based on the 10-year Treasury yield thereafter. Members are given the option of converting their cash balance account to an annuity at retirement.

## Chapter 3 Summary

### Encouraging provision

One of the main methods of encouraging non-State retirement provision is tax concessions on contributions, investments, and / or benefit payments. In the UK, the most generous tax concessions are only available to or through registered schemes.

### Pension arrangements not eligible for tax concessions

It may be possible to set up financial provision (for retirement or otherwise) that does not receive tax concessions, or receives limited tax concessions.

In the UK an example of such an arrangement is an Employer Financed Retirement Benefit Scheme (EFRBS). An EFRBS is a pension scheme set up by an employer which has not been registered with HMRC. EFRBS may be funded or unfunded. They are not eligible for the tax concessions and are not subject to the regulations that restrict the tax concessions and benefits that can be provided under a registered scheme.

### Non-retirement specific saving

In the UK, the most significant examples of non-retirement specific savings that also benefit from some form of tax concessions are the Individual Savings Account (ISA) and Lifetime ISA (LISA).

### Restrictions

The tax concessions granted may be subject to restriction in order to minimise the risk of abuse.

In the UK, tax concessions on pension contributions and registered scheme benefits are restricted via, for example, the Annual Allowance, the Lump Sum Allowance and the Lump Sum and Death Benefits Allowance.

The practice questions start on the next page so that you can keep the chapter summaries together for revision purposes.



## The new UK funding regime for defined benefit pension schemes

The Department for Work and Pensions has published final draft funding and investment strategy regulations for DB pension schemes that amend the funding regime under the Pension Schemes Act 2021. The regulations apply to valuations with an effective date on or after 22 September 2024. The Pensions Regulator's revised Code of Practice on DB scheme funding is about to be published at the time of writing this learning material, in April 2024.

At the time of writing (May 2024) this code has yet to be published. The draft code can be found at:

[thepensionsregulator.gov.uk/en/document-library/consultations/draft-defined-benefit-funding-code-of-practice-and-regulatory-approach-consultation/draft-db-funding-code-of-practice](https://thepensionsregulator.gov.uk/en/document-library/consultations/draft-defined-benefit-funding-code-of-practice-and-regulatory-approach-consultation/draft-db-funding-code-of-practice)

### Aim of the new regime

The new regime comprises two requirements:

- to plan for the long-term funding of the scheme
- to carry out valuations showing the current funding position of the scheme.

**Broadly speaking, the aim of the new regime is for DB schemes to target an 'end game' where the funding and investment strategy targets a state of 'low dependency' by the time the scheme reaches a certain level of maturity.** This will be agreed by the employer and set out in a Statement of Strategy (see below).

**The level of maturity is expected to be defined as a weighted average of liabilities of no more than 12 years, though this may vary depending on the type of scheme, for example cash balance or defined benefit.**

For schemes open to accrual, if the trustees assume that membership will remain stable over time, the scheme may not get closer to its relevant date.

**'Low dependency' is defined as having no expectation that the sponsor will make any further deficit payments into the scheme, irrespective of the level of sponsor covenant. This will include:**

- **an appropriate investment strategy with assets chosen such that their value relative to that of the liabilities is highly resilient to short-term adverse changes in market conditions; ie a well-matched investment strategy**  
**and**
- **a set of funding assumptions that are chosen based on the expectation that no further sponsor contributions would be required. This may also include an allowance for expenses to cover any costs of managing the scheme, or sponsors may consider holding a separate expense reserve outside the scheme.**

So, under the new regime trustees must:

- agree how they intend their scheme to provide benefits in the long-term (*ie* their long-term objective (LTO)), *eg* through buyout with an insurer
- aim to ensure that their scheme will be at least 100% funded on a low dependency funding basis and invested in a low dependency investment allocation by the 'relevant date', where:
  - the 'relevant date' must be no later than the end of the scheme year in which the scheme is expected to reach (or did reach) 'significant maturity'
  - 'significant maturity' will be defined in TPR's Code of Practice (CoP) and will be stated in terms of duration of liabilities. (TPR's draft CoP suggested a scheme would reach significant maturity when the duration of its liabilities falls to 12 years.)

## Features of the regime

**Some key features of the funding regime include:**

### ***Sponsor covenant***

**The new regime includes a detailed definition of sponsor covenant, with closer scrutiny.**

Legislation for the new regime specifies that the strength of the employer covenant is determined by:

- the financial ability of the employer to support the scheme
- scheme support from any contingent assets to the extent these:
  - are legally enforceable
  - will be sufficient to provide that level of support when required.

**Trustees will be required to take account of a wider range of factors and elements in relation to the sponsor's covenant. Any contingent assets and sponsor guarantees in place will need to be reassessed under the new regime. Trustees are also likely to need significantly more information from the sponsor under the new regime, therefore a clear dialogue between both parties is essential.**

**When measuring the covenant, trustees should consider:**

- **Visibility:** over the sponsor's forecast covering the short term;
- **Reliability:** where trustees have reasonable certainty over the sponsor's ability to pay the contributions due; and
- **Longevity:** the maximum period that trustees can reasonably assume that the employer will remain in existence to support the scheme.

These factors to consider are specified in TPR's draft CoP.

### ***Deficit recovery***

**Funding deficits will be required to be cleared as soon as the sponsor ‘can reasonably afford’ which will be the overriding principle of recovery plans.**

**Scheme sponsors will therefore be subject to greater scrutiny over the distribution of their funds to shareholders, creditors, or in terms of investment in the business. The new regime and funding code may also provide the Pensions Regulator with greater power to impose a schedule of contributions if, for example, it disagrees with a bespoke plan set up by the trustees and employer that is based on a strategy with higher risk or a longer recovery period.**

### ***Journey plan***

**Schemes will be required to establish a ‘journey plan’ which sets out how the scheme will develop from its current position to reach the ‘end game’.**

**The sponsor covenant will be a key factor in establishing the journey plan because this will influence the level of risk that can be taken and therefore the degree of prudence required. If this differs from the level of prudence already in the funding basis, this could result in the funding and contribution requirements under the journey plan being significantly different, resulting in higher (or lower) deficit recovery requirements.**

### ***Fast Track or Bespoke approach***

**The Pensions Regulator has proposed a twin track approach to scheme funding: Fast Track, and Bespoke.**

**Schemes adopting the Fast Track approach must follow specific set risk parameters set by the Pensions Regulator which, if met, should remove the need for further scrutiny.**

Fast Track represents TPR’s view of tolerated risk for a scheme and sets out a series of quantitative parameters that need to be met. If a scheme meets all the Fast Track parameters, TPR have said that they are unlikely to scrutinise the valuation submission further. Where they do not meet individual parameters, TPR have said that the scope of TPR’s engagement will likely be limited to those areas.

The Fast Track parameters cover:

- the low dependency funding and investment strategy
- technical provisions
- investment risk
- recovery plans.

**Schemes adopting the Bespoke approach, that is, a funding approach based on the rationale supporting a higher degree of risk, will be required to provide supporting documentation to justify this approach.**

Bespoke offers trustees greater flexibility and scope to select an approach that suits the specifics of their scheme. Bespoke submissions should be principles-based but with clear boundaries based on the legislative requirements and expectations in TPR’s code.

Trustees may submit a Bespoke submission if they:

- want to take more risk than available under Fast Track and can demonstrate that the total risk run by the scheme is supportable by the employer covenant and in line with the maturity of the scheme
- cannot meet the Fast Track recovery plan length based on demonstrable employer affordability constraints
- have genuinely unique employer circumstances that necessitate a different approach.

### ***Statement of Strategy***

**Trustees will be required to submit a Statement of Strategy to the Regulator.**

**The statement should cover two key areas, as follows:**

- **Funding and investment including:**
  - long-term objectives
  - investment strategy
  - journey plan
  - assumptions.
- **Supplementary matters including:**
  - the trustees' assessment of the appropriateness of the strategy
  - an actuarial assessment of scheme maturity
  - valuation results including recovery plan
  - investment information
  - covenant information.

**An example Statement of Strategy can be found on the Pensions Regulator's website here:**

**[thepensionsregulator.gov.uk/en/document-library/consultations/statement-of-strategy-consultation/example-statement-of-strategy](https://thepensionsregulator.gov.uk/en/document-library/consultations/statement-of-strategy-consultation/example-statement-of-strategy)**

## 4.4 APS X3 – The Actuary as an Expert in Legal Proceedings

**APS X3** came into force with effect from 1 January 2015 and was updated with effect from 20 April 2018. Its purpose is to provide guidance to actuaries who have been approached to act as an **Expert Witness** and/or **Expert Advisor** for the purpose of legal proceedings. This usually means criminal and civil proceedings but may also encompass regulatory or discipline proceedings. The guide focuses on UK proceedings but members involved in such work outside the UK are expected to apply the principles.

Provisions of the standard include:

- members must be familiar with the rules that apply to the proceedings and jurisdiction in which they are instructed
- before accepting the instruction, the member must be clear as to its exact nature, for example, whether the role is as an **Expert Advisor** or an **Expert Witness**
- where appropriate, instructions should be received in writing
- members should ensure that advice is independent and objective (and can reasonably be seen to do so) and they should not act if they cannot ensure this is the case
- remuneration should not be dependent on the outcome of the hearing, for example, ‘no win, no fee’ arrangements are prohibited.

The latest version of APS X3 includes a new Section 6, concerning interpretation and application of the standard, together with some new definitions.

## 5 Non-mandatory resource material from the IFoA

As noted earlier, the IFoA also produces other non-mandatory resource material which is intended to provide helpful guidance for its members.

These include:

- ***Speaking Up: A Guide for Members* (current version April 2019) and *Whistleblowing: A Guide for Employers of Actuaries* (current version February 2015)**

These leaflets are intended to help all actuaries (and their employers) understand their whistleblowing obligations, both professionally and legally, and to alleviate concerns that they may have about such responsibilities.

At the time of writing (May 2024), these can be found at:

[actuaries.org.uk/media/d2rhp3sh/speaking-up-a-guide-for-members.pdf](https://actuaries.org.uk/media/d2rhp3sh/speaking-up-a-guide-for-members.pdf)

[actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/whistleblowing-guide-employers-actuaries-feb-2015/](https://actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/whistleblowing-guide-employers-actuaries-feb-2015/)

- ***Conflicts of Interest: A Guide for Members* (current version April 2019)**

This leaflet builds on the provisions of the Actuaries' Code in relation to conflicts of interest and sets out views on good practice regarding such conflicts and how they might be managed.

At the time of writing (May 2024), this can be found at:

[actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/conflict-interest-guide-members-v20/](https://actuaries.org.uk/document-library/standards/standards-and-guidance/non-mandatory-guidance/conflict-interest-guide-members-v20/)

- ***Ethical and professional guidance on climate change: A Guide for Members* (current version January 2024)**

This non-mandatory guidance aims to provide members with an understanding of how climate change matters may be relevant to their individual practice and states that 'As professionals who assess risks and advise on long-term investments, and the financing of pension schemes and insurers, actuaries are particularly well placed to consider how climate change might impact our lives, our health and our economy. Members may be involved in assessing the risks but may also play a vital role in influencing the advancement of sustainable investment'.

At the time of writing (May 2024), this can be found at:

[actuaries.org.uk/media/f1ih0kzh/ethical-and-professional-guidance-on-climate-change.pdf](https://actuaries.org.uk/media/f1ih0kzh/ethical-and-professional-guidance-on-climate-change.pdf)

## 8.2 A guide to DC investment governance

**In July 2016 The Pensions Regulator published a guide to investment governance to be read alongside Code of Practice 13: Governance and administration of occupational defined contribution trust-based schemes providing money purchase benefits. This guidance was last updated in October 2021.** At the time of writing (May 2024), this was last updated in August 2023.

At the time of writing (May 2024), the guidance can be found at:

[thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes-](https://thepensionsregulator.gov.uk/en/document-library/scheme-management-detailed-guidance/funding-and-investment-detailed-guidance/investment-guide-for-dc-pension-schemes-)

This is one of six guides to support trustee boards of DC schemes in meeting the standards set out in Code of Practice 13. The guides concern the trustee board, scheme management skills, administration, investment governance, value for members and communicating and reporting. The guides aim to provide practical information, examples of approaches which could be taken and factors to consider.

The purpose of the guide is to ensure trustees have the right investment governance arrangements in place, involving the right advisers and investment strategies to provide pension scheme members the best chance of achieving a good outcome.

### **A brief summary of the guide is below:**

ActEd text has been added below most of the Core Reading bullet points to summarise some key conclusions. However, TPR's guide contains a detailed discussion and therefore we recommend that you read this as well as the text below.

### **The trustee board's role in investment governance**

The trustee board retains ultimate responsibility for a scheme's investments. Certain tasks and decisions can be delegated, but the trustee board retains effective control, gives direction and intervenes when problems are identified.

- **working with investment advisers**

It is the trustees' responsibility to decide when to use advisers.

- **investment delegation structures**

The governance structure should balance speed of action with checks and balances.

- **clear roles and responsibilities**

The roles, responsibilities and terms of reference of all parties should be clearly defined.

## Investment decisions and the statement of investment principles (SIP)

The SIP sets out the scheme's investment strategy, including investment objectives and policies.

- **financial and non-financial factors**

The trustees should consider financially material matters over the appropriate time horizon of the investments including how those considerations are taken into account in the selection, retention and realisation of investments.

It may be reasonable for the trustees to also consider some non-financial factors.

- **sustainability**

Financially material factors should include those relating to ESG considerations, such as climate change.

- **members' views**

The trustees should consider the extent to which members' views on non-financial matters (*eg* ethics, quality of life) are taken into account in the selection, retention and realisation of investments.

- **exercise of rights**

The trustees should consider the exercise of the rights (including voting rights) attaching to the investments, and undertaking engagement activities in respect of the investments.

- **arrangement with asset managers**

For example, how the trustees incentivise the asset manager to align its investment strategy and decisions with the trustees' policies.

## Monitoring investment governance

Trustees should regularly assess the effectiveness of their investment decision making and governance processes.

- **reviewing the trustees' performance**

A range of issues should be considered when reviewing the trustees' performance, for example whether sufficient advice and knowledge is available.

- **investment beliefs**

The trustees may wish to develop and maintain a set of investment beliefs to help to provide a framework for investment decision-making.

- **stewardship**

Stewardship involves responsible allocation of capital and monitoring of the assets. Trustees often delegate some stewardship activities to their investment managers.

- **setting objectives and strategies**

When setting objectives and strategies, the trustees should consider how members' needs may vary over time.



- **implementing the objective**

When deciding how to achieve an objective, factors such as cost, risk, flexibility, other services and transition issues should be considered.

## Designing investment arrangements (including default arrangements)




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### Question

---

List some member characteristics that will drive their investment options.

---

### Solution

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Member characteristics include:

- age and number of years until each member expects to retire
- importance of pension in relation to overall wealth
- attitude to risk
- expected salary increases (members may want their fund to increase at least in line with their salary so as to maintain their standard of living on retirement).

---

- **understanding the membership**

The trustees need to understand the current and likely future needs of the membership in order to design appropriate investment arrangements.

- **interpreting the data**

Data analysis should be proportionate and meet governance requirements.

- **available market options**

Schemes, particularly those with limited resources, may wish to make use of 'off the shelf' products.

- **unregulated investments**

Unregulated investments are not subject to the same controls, restrictions, regulatory oversight and protections as regulated investments. Before investing, trustees should ensure they fully understand any such investment and seek advice.

- **implementation costs**

When designing a new investment strategy, trustees should take account of implementation costs.

- **implementation governance**

When designing a new investment strategy, trustees should take account of initial and ongoing governance requirements and costs.

- **implementation report**  
Many trustee boards will need to produce a report documenting how they have followed and acted upon the SIP and the details of any review of the SIP.
- **asset liquidity and dealing frequency**  
The trustees should consider the needs of their members for liquid assets. For example, daily dealing may not be necessary.
- **allowing for the future**  
The trustee should consider the resilience of the investment arrangements to future changes in, for example, membership, investment markets and the employer.
- **bespoke arrangements**  
Before implementing a bespoke arrangement, the trustees should document their strategy and objectives and how they can be achieved using the arrangement.
- **additional fund options**  
The number of funds made available to members will be influenced by a range of factors including the views of the employer, the governance budget and the needs of the membership.
- **fund selection**  
When selecting funds, trustees should consider a range of factors including the objective of each fund; the costs, charges and risks; the provider and platform; members' needs.

## Strategy and performance monitoring and review

The circumstances when the trustees must review their SIP, default strategy and performance of the default arrangement are described. For example, significant changes to the demographic of the membership should usually lead to a review.

- **monitoring**  
Monitoring is most effective when it is prioritised, conducted regularly and identifies any issues requiring action.
- **fund and strategy performance**  
Trustees should regularly review the long-term performance of individual funds.
- **monitoring investment managers**  
Trustees should monitor the performance of the investment managers.
- **fund documentation**  
The trustees should review fund managers' documentation and, if appropriate, negotiate additional protection.
- **member notice**  
Members should be notified in good time before any fund transfer so that they can switch to a different fund if they wish.

## Market developments

Market developments may help trustees to meet scheme investment objectives or manage investment risks more effectively. However, costs of changing funds can be significant.

- **fiduciary management**

Fiduciary management of a DC scheme's investment strategy is a developing area. When appointing a fiduciary manager, regulation may require trustees to undertake a competitive tender process.

- **impact investment and patient capital**

Trustees should consider the suitability of new investment concepts and strategies as markets develop. Impact investment (also known as social and / or environmental impact investment) and patient capital (the provision of long-term finance to firms that have long-term growth potential) are two developing concepts.

- **smoothing of performance fees**

Since 6 April 2023, trustees have the option to exclude performance-based fees, which covers both fees and payments made under profit-sharing arrangements, from the charge cap if they meet certain criteria.

This change was made to remove a regulatory barrier that may have hindered trustees in the past from exploring investment in certain funds that came with performance fees.

This change also repealed previous options for schemes to smooth the performance-based fees under the charge cap, although transitional arrangements apply for trustees who were using the smoothing provision.

- **security of assets**

The trustees should seek to determine the level of protection that different scheme assets have in the event of loss due to fraud, malfeasance or other adverse events. It is best practice to communicate the conclusions to members.

- **negotiating additional protections**

The trustees may be able to negotiate with investment managers, investment platform providers or the scheme administrator to obtain additional protection for the scheme's assets.

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**X2.1** A multinational company has expanded its operation into a new developed country and is seeking actuarial advice on setting up a pension arrangement for its new employees.

- (i) Outline for defined benefit, defined contribution and hybrid pension arrangements the key risks and uncertainties that may be experienced by the company. [10]
- (ii) Suggest ways the risks could be mitigated. [6]

It has been decided that a collective defined contribution (CDC) pension scheme will be set up to provide employees with a 'target income' at retirement based on the expected pension from the combined fixed employer and employee contributions.

- (iii) Describe the advantages and disadvantages of a CDC scheme for:
  - (a) members
  - (b) the company. [11]
- (iv) Set out the key aspects that needs to be considered by the company to establish the new scheme in terms of:
  - (a) its objectives
  - (b) benefit design
  - (c) legal and practical issues. [16]

[Total 43]

**X2.2** A final salary pension scheme was closed to new entrants some years ago. The employer has indicated that it wishes to change the basis on which future accrual is provided. It proposes to offer the following options:

- A Retain existing final salary basis (60ths of basic salary for each year of service), but increase member contributions from 5% to 10% of basic salary.
- B Switch to a revalued career average basis (also 60ths accrual rate), maintaining member contributions at 5% of basic salary. Revaluations will be in line with a domestic price inflation index.
- C Switch to a separate trust-based defined contribution arrangement, maintaining member contributions at 5% of basic salary and with the employer contribution being 15% of basic salary at all ages. In addition, the employer will meet the expenses of the arrangement.

For all options, the final salary link for accrued benefits will be maintained, a standard death in service dependant's pension of 33% of basic salary at death is payable, and the normal pension age is unchanged at 65.

- (i) Calculate the expected pension at retirement at age 65 earned in respect of future service for a 45-year old member with current basic salary of 30,000 *pa* under each option, based on the following assumptions:

Investment Return	6.0% per annum
Salary increases	4.5% per annum
Price Inflation	3.0% per annum
Cost of 1 <i>pa</i> of pension at age 65	20 (allows for post-retirement benefits to be consistent with defined benefit options)

- State any further assumptions made. [13]
- (ii) Suggest, with reasons, which option the member in (i) is likely to select, based purely on an assessment of the best value for money for their contributions using the results calculated in (i). [4]
- (iii) Discuss what factors might lead to the member in (i) selecting a different option. [5]
- (iv) Discuss why the employer is proposing each of the options above. [9]
- (v) Discuss any different considerations for a 55 year old member with current basic salary of 60,000 *pa*, and 30 years' pensionable service. [3]
- (vi) Outline the additional design considerations for Option C. [7]
- (vii) Set out the key risks to the employer for Option C and discuss the governance procedures that should be put in place to mitigate those risks. [8]

The employer has expressed interest in introducing an element of risk-sharing to the scheme design.

- (viii) State the aims of risk-sharing arrangements. [2]
- (ix) Give two examples of how each of the three options above could be adapted to reflect a risk-sharing design. [6]

[Total 57]

**END OF PAPER**

**X5.2** Company X operates a pension scheme (Scheme X) with a closed final salary section (FS Section) and an open defined contribution section (DC Section). Active members of Scheme X are currently earning DC benefits but may also have past service benefits in the FS Section which maintain salary linkage.

Company X is in negotiations to sell one of its subsidiaries (Company Y) to Company Z, which operates a defined contribution pension scheme (DC Scheme). It is proposed that those members of Scheme X who are employees of Company Y will each be offered a one-off opportunity to take an individual transfer value from Scheme X to the DC Scheme equal to:

- the value of their accrued benefits in the FS Section on a best estimate basis (FSTV) (where the best estimate basis is the same for all employees),  
plus
  - the value of their DC account (DCTV).
- (i) Discuss the likely rationale behind the proposal to calculate the FSTVs using the value of accrued benefits method and a best estimate basis. [6]

The best estimate basis to be used for FSTVs is weaker than the funding basis employed at the last funding valuation of Scheme X.

- (ii) Explain why the last funding basis is stronger than the best estimate basis being suggested to calculate FSTVs and the potential impact on the funding position of Scheme X of paying FSTVs. [10]

The trustees of Scheme X have suggested that the size of the FSTVs should be increased because the receiving scheme is a defined contribution arrangement rather than defined benefit.

- (iii) Discuss this suggestion. [4]
- [Total 20]

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## Assignment X2 Solutions

### Solution X2.1

#### Comment

*This question tests your ability to apply the material from Part 2 of the course on scheme design, both general and specific features.*

#### (i) **Key risks and uncertainties to the company**

*Note to markers: Give credit for any reasonable examples which are given as alternatives to the ones given below.*

#### *General*

The key risks and uncertainties that apply whatever the arrangement include:

- it may be a hindrance to recruitment and retention of staff if the company's competitors offer a more attractive scheme [½]
- a risk of poor governance which could lead to financial and other penalties ... [½]  
... *eg* as a result of non-compliance and / or fraud [½]
- legislative and guidance risk ... [½]  
... *eg* that any minimum contributions required are unaffordable [½]
- the risk of maladministration, ... [½]  
... particularly if the scheme is complex. [½]

#### *Defined benefit arrangement*

The key risks and uncertainties include:

- the cost of providing the benefits is uncertain ... [½]  
... and may be too high, *eg* due to: [½]
  - the company bearing the longevity risk and members living longer than expected [½]
  - salary increases being too high (in a final salary scheme) [½]
  - price inflation being too high and affecting increases to pensions / deferred pensions [½]
  - the scheme taking investment risk ... [½]  
... and the assets underperforming [½]

- the contribution requirements can be inflexible and volatile ... [½]  
... *eg* due to a mismatch between the assets and liabilities [½]
- the contribution requirements can be too high ... [½]  
... *eg* due to legislative constraints [½]
- the risk that members select options (such as early retirement) which result in a cost to the scheme and hence the company. [½]

#### *Defined contribution arrangement*

The key risks and uncertainties include:

- a reputational risk to the company as a result of inadequate benefits ... [½]  
... *eg* because retirement pensions are low due to poor investment performance [½]
- manpower planning issues, *eg* if members cannot afford to retire at an optimum time for the company [½]
- the cost and uncertainty of company contributions ... [½]  
... due to the uncertainty of take-up / opt-out rates, salary increases and any company matching contribution structure [½]
- liquidity risk, as the contribution requirements can be inflexible. [½]

#### *Hybrid scheme*

The key risks and uncertainties depend on:

- the type of arrangement offered [½]
- the type of risk sharing involved. [½]

The key risks and uncertainties include:

- the key risks detailed above as relevant to the DB and DC elements of the design [½]
- the need to comply with both DB and DC legislation, which will increase complexity [½]
- complexity of administration and communication ... [½]  
... and the consequent risk of lack of employee appreciation, because members don't fully understand the benefits offered by the scheme [½]
- any guarantees, which may be difficult to cost and fund. [½]

[Maximum 10]

(ii) **Ways the risks could be mitigated**

*Note to markers: Give credit for any reasonable examples which are given as alternatives to the ones given below.*

*General*

Suggestions for mitigating risks that apply whatever the arrangement include:

- establish a risk register... [½]  
     ... which will help to identify, manage and monitor risks [½]
- set options terms so that they are cost neutral [½]
- ensure good communication and disclosure in order to educate members to ensure they fully understand the benefits and risks ... [½]  
     ... *eg* by providing regular pension statements, which may result in better member outcomes [½]
- set appropriate administration practices and governance procedures. [½]

*Defined benefit arrangement*

Suggestions for mitigating risks include:

- change the design of the scheme, *eg* to a hybrid scheme ... [½]  
     ... or more fundamentally to a DC arrangement [½]
- fund prudently, *eg* by using prudent assumptions [½]
- set the investment policy to achieve an appropriate balance between risk and return, *eg* limiting risk by: [½]
  - investing in longevity or inflation swaps [½]
  - adopting a matched strategy, perhaps using an asset-liability exercise [½]
- through the use of insurance, *eg* by purchasing annuities at retirement ... [½]  
     ... or buying out the benefits which will eliminate risk such as legislative risk. [½]

*Defined contribution arrangement*

Suggestions for mitigating risks include:

- encourage members to contribute significant amounts, *eg* by the use of a matching contribution strategy [½]
- set generous employer contributions, *eg* to mitigate against reputational risk. [½]

*Hybrid schemes*

Mitigating risks to the company in hybrid schemes depends on the type of hybrid scheme. [½]

Many of the mitigation options for DB and DC arrangements apply. [½]

[Maximum 6]

(iii) **Advantages and disadvantages of a CDC scheme for members and the company**(a) **Members****Advantages**

A CDC scheme when compared to a standard DC scheme:

- the investment returns should generally be higher ... [½]
  - ... as there is less need to move into cautious investments in the period leading up to retirement [½]
- removes the need for members to make investment decisions, decisions which they may feel uneasy with, ... [½]
  - ... as they are made by the trustees / scheme managers [½]
- has less exposure to fund-value fluctuations for members as they approach retirement [½]
- may have more predictable benefits at retirement for members [½]
- assuming CDC scheme benefits are not bought out with an insurance company, CDC scheme members may expect:
  - higher benefits as insurer charges do not need to be met [½]
  - less volatility in benefits as there is less exposure to the fluctuations in insurers' annuity prices. [½]

A CDC scheme when compared to a DB scheme:

- may have more secure benefits as they will be 100% funded, and there is no reliance on the sponsor covenant to meet any deficiency [½]
- may have more benefit flexibility for members if they can choose to tailor the form of benefits to their own circumstances, *eg* by taking a single life benefit. [½]

**Disadvantages**

A CDC scheme:

- when compared to a DB pension scheme:
  - is riskier for the members, who are exposed to investment and longevity risk [½]
  - has less predictable benefits ... [½]
    - ... *eg*, assuming benefits are paid from the scheme and not bought out with an insurance company, post-retirement benefits will be less predictable [½]
- when compared to a standard DC pension scheme:
  - may offer members less control over investment strategy [½]
  - may offer members less benefit flexibility and choice [½]
- benefits may be difficult to understand. [½]

**(b) Company***Advantages*

A CDC scheme:

- when compared to a DB pension scheme:
  - may have lower benefit costs if the target benefits are lower [½]
  - is lower risk (in terms of longevity, inflation and investment risk) [½]
- when compared to a standard DC pension scheme:
  - allows the company a better chance of providing targeted retirement benefits at an acceptable cost [½]
  - provides larger and more uniform member benefits [½]
- when compared to a DB pension scheme:
  - leads to more predictable contributions if take up is stable [½]
  - leads to a more stable accounting balance sheet [½]
  - may have lower exposure to legislative risk. [½]

*Disadvantages*

A CDC scheme:

- when compared to a DB pension scheme and/or competitors' schemes, may cause difficulties in attracting and retaining staff as the benefit value may be, or perceived to be, lower ... [½]
  - ... which may lead to requests for pay increases as compensation [½]
- when compared to a standard DC pension scheme, has more complex and costly administration ... [½]
  - ... particularly as it is intended to provide target benefits instead of individual funds at retirement [½]
- may lead to inequity across different categories or generations of members ... [½]
  - ... increasing reputational risk ... [½]
  - ... if target benefits are not provided (although possibly not to such an extent as in a standard DC scheme) [½]
  - ... leading to pressure to increase company contributions [½]
- has significant costs and complexity in managing benefit variations, compared with a standard DC scheme [½]
- may be more difficult to communicate to, and understand for, members than a standard DC scheme. [½]

[Maximum 11]

(iv) **Considerations in designing the scheme**(a) **Company objectives***General*

The company needs to consider its objectives in establishing the scheme in light of:

- the employee profile and the anticipated turnover of staff [½]
- the likely take up / opt-out rate. [½]

The scheme should be consistent with any global policy on benefit provision. [½]

The company needs to consider its whole remuneration package and, in particular, how the proposed scheme fits in with this. [½]

The company will want to take advantage of any tax concessions available, allowing for any restrictions. [½]

*Cost and risk*

The company will consider:

- its cost and risk tolerances [½]
- how much employees should contribute as this could: [½]
  - reduce the cost to the company [½]
  - increase the benefit that can be targeted. [½]

*Needs of employees*

Employee needs and expectations with regard to benefit provision should be considered. [½]

The company's policy on recruitment and retention should be considered ... [½]

... in light of what competitors are providing ... [½]

... which may lead to the company paying contributions above any legislative minimum to attract and retain staff. [½]

Consider the definition of earnings that should be used for pensionable salary ... [½]

... eg if this includes overtime and bonuses *etc* it may better meet the needs of those who rely on these payments. [½]

**(b) Benefit design***Overall targeting*

The CDC scheme is designed to provide a target benefit at retirement ... [½]

... eg based on a DB-type arrangement such as a final salary scheme. [½]

The company could design its benefits allowing for the availability of, and integration with:

- other benefits, for example State benefits [½]
- any other flexible benefit options. [½]

The company may also want to target different categories of employee by considering: [½]

- providing more than one level of target benefit provision [½]
- offering different member contribution requirements ... [½]
- ... which may result in different company contributions, subject to a maximum. [½]

To continue to meet the company's aims, the benefit design may need to be periodically reviewed. [½]

*Contributions*

To assess the contribution requirements, ... [½]

... the company could consider the net replacement ratio it wishes its employees to achieve ... [½]

... and hence the appropriate benefit target for the scheme, taking account of factors including:[½]

- other sources of retirement income for its employees [½]
- the importance to the company of employees achieving the net replacement ratio ... [½]
- ... and the scheme benefit target [½]
- affordability for the company and members [½]
- the benefits offered by competitors. [½]

*Eligibility*

Eligibility requirements for the scheme, and any categories of membership, need to be set (subject to legislative constraints). [½]

*Specific benefit elements*

Specific elements of benefit design should be considered, including:

- options or flexibility available to members before, at or after retirement [½]
- spouses' and dependants' benefits ... [½]
- ... payable on death in service, deferment and retirement [½]
- indexation of benefits both before and after retirement. [½]

**(c) Legal and practical issues***Legal issues*

Consider any legislative restrictions, *eg* to provide a minimum level of benefit. [½]

Consider whether to establish the scheme under trust or contract. [½]

If the scheme is to be set up under trust, consider who will act as the trustees. [½]

If the scheme is to be set up under contract, consider what provider to use. [½]

Consider the governance arrangements for the scheme ... [½]

... and set up processes to review and monitor compliance. [½]

Consider the level of administrative, investment and actuarial support that is needed to operate the scheme. [½]

*Practical issues*

There may need to be a trade-off between the desire to offer a sophisticated design and the cost of administration. [1]

The company should consider:

- who will administer the scheme and how costs will be kept to a minimum [½]
- how, and from whom, members will receive information [½]
- how charges and expenses will be met ... [½]
  - ... *eg* directly by the company or through the scheme's assets [½]
- how the scheme will be integrated into the payroll system [½]
- how to establish procedures to measure and monitor investment performance. [½]

[Maximum 16]

[Total 43]



## Solution X5.2

### Comment

*This question tests your ability to recall and apply the material in Chapter 22 (Corporate activity – general) and Chapter 23 (Corporate activity – calculations).*

(i) ***The likely rationale behind the method and basis proposed***

Any relevant provisions from the trust deed and rules will have been taken into account when setting the terms. [½]

Company X and Company Z will have both been trying to negotiate the best financial outcome in terms of the overall deal from their own point of view ... [½]

... which will include the best financial outcome in terms of benefit provision. [½]

For example, Company X will have been aiming to minimise the FSTVs relative to the liabilities transferred, ... [½]

... assuming that the purchase price of Company Y will not be adjusted to reflect differences between the FSTVs and the value of the transferring members' (TMs') DB liabilities ... [½]

... and as long as the terms do not damage the company's reputation ... [½]

... or lead to members refusing to transfer (since each transfer extinguishes benefit risk within Scheme X for Company X). [½]

Company Z is not taking on any DB pension liabilities or benefit risk, so will not be directly financially impacted by the FSTVs ... [½]

... however, it will wish to avoid reputational risk ... [½]

... and ensure the TMs are happy and hence productive ... [½]

... and so it is in Company Z's interest to negotiate for TMs to be offered fair transfer values. [½]

The assumptions to be used are important and have a major bearing on the size of the FSTVs. [½]

Individual transfer values (TVs) for deferred pensioners are normally calculated on a best estimate basis ... [½]

... and it is difficult to justify offering an FSTV that is less than the minimum TV which would be paid from the FS Section if a member were to take an individual TV as a deferred pensioner ... [½]

... and, in practice, the trustees of the FS Section will act in TMs' interest and so object if this did appear likely to occur. [½]

A fair transfer value should include some allowance for the salary linkage on the TMs' FS Section benefits, which they would retain if Company Z were not purchasing Company Y. [½]

The extent of the allowance for salary linkage will depend on the assumption for withdrawal in the best estimate basis (as salary linkage will cease on withdrawal) ... [½]

... and this should reflect expectations. [½]

In addition, when members are deciding whether to transfer, they should take independent financial advice ... [½]

... and such advisers will not recommend that members transfer if they are likely to be worse-off. [½]

The constraints above lead to a bulk transfer amount that reflects a best estimate of the expected cost of the pension benefits. [½]

In this case, this may be achieved by each FSTV equalling the value of liabilities to be extinguished from the FS Section ... [½]

... on a best estimate basis ... [½]

... allowing for some projected salary increases by using the value of accrued benefits method. [½]

If the assumed rate of salary increases exceeds the assumed rate of statutory revaluation in a standard minimum TV (and all other things are equal), the FSTVs will be larger than standard minimum TVs. [½]

[Maximum 6]

(ii) ***Why the funding basis is stronger than best estimate and impact on the funding level***

*Why the last funding basis is stronger than the proposed best estimate basis*

The trustees are primarily concerned about the security of accrued benefits ... [½]

... and will have used deliberately prudent assumptions for the funding valuation of the FS Section ... [½]

... so as to minimise the probability of adverse experience compromising benefit security or requiring additional contributions, perhaps at short notice, from Company X. [½]

In the short term, prudent assumptions generally result in a lower funding level, which may have resulted in Company X being advised to pay higher contributions to meet any deficit than if a best estimate basis were used for funding. [½]

However, this does not usually mean that the FS Section is more expensive – it only affects the pace at which the benefits are funded. [½]

An exception to this would be if any surpluses generated are shared with members in the form of benefit improvements. [½]

In time, favourable experience and hence a surplus will be expected to emerge ... [½]

... leading to an improved funding level. [½]

It may be that any surplus can be used by Company X to meet its contributions to the DC Section. [½]

If FSTVs equivalent to the value of the accrued benefits on a prudent valuation basis were paid, then the value of the realistically expected future surplus will be transferred to the members' DC accounts in the DC Scheme. [½]

In other words, the vendor's scheme will be overestimating the value of the accrued benefits, and hence will effectively be giving money away. [½]

However, if some surplus was expected to be used to finance benefit improvements, TMs may feel that they have an entitlement to this surplus ... [½]

... and that it should be included in the FSTVs, either explicitly or implicitly (by the use of prudent valuation assumptions). [½]

The figures disclosed in the company accounts in relation to Scheme X will have been calculated using a realistic basis. [½]

The assumptions to be used for the FSTVs may have been chosen to be consistent with the assumptions for accounting, so that the FSTVs do not result in an accounting strain. [½]

The financial assumptions to be used in the FSTVs may differ from the funding basis to reflect differences between the FS Section membership as a whole and the TMs. [½]

For example, if a more aggressive investment approach is used for the TMs because they are younger, a higher discount rate could be used. [½]

Demographic assumptions could also have been changed to allow for the individual features of the TMs. [½]

For example, more withdrawals may be assumed in the FSTV basis since the valuation basis may deliberately and prudently underestimate withdrawal rates ... [½]

... also it is common for many employees to leave a company when the employer changes. [½]

The TMs may be likely to experience different mortality or promotional salary increases vs the FS Section membership as a whole and the FSTV basis could allow for these differences. [½]

Company X may not be prepared to include a promotional salary scale if it does not think that Company Z is likely to make similar salary increases. [½]

When setting the FSTV basis, Company X may be anticipating changes to the scheme funding basis at the next valuation ... [½]

... *ie* the scheme funding basis at the next valuation may be weaker than at the last valuation. [½]

*Likely impact on the Scheme X's funding level*

Assuming that the FS Section is not underfunded, the *disclosed* FS Section funding level will improve if the FSTVs are calculated on a weaker basis than the funding basis ... [½]

... which will lead to an improved funding level for Scheme X assuming, as is likely, that the DC Section is fully funded ... [½]

... although the increase in the overall funding level will be lower than the increase in the FS Section funding level, as it will be diluted over the greater fund. [½]

Even if the FS Section is less than 100% funded on the funding basis, the disclosed funding level of Scheme X will improve ... [½]

... provided that the FSTVs do not exceed the TMs' share of fund. [½]

If the funding level improves, Company X may be able to reduce any deficit recovery contributions. [½]

The extent of the improvement in the funding level depends on factors including:

- the size of the liabilities transferred compared to the overall liabilities ... [½]
  - ... the greater the relative size of the liabilities transferred, the bigger the impact on Scheme X's funding level [½]
- the difference between the FSTVs paid and the TMs' share of fund on the funding basis. [½]

Similarly, the discontinuance position of the FS Section may improve, such as the buy-out position, particularly as the FSTVs are likely to be calculated on a much weaker basis than the buy-out basis. [½]

[Maximum 10]

(iii) ***Increase FSTVs because the receiving arrangement is defined contribution***

The trustees of Scheme X need to consider the best interests of both the TMs and remaining members ...

[½]

... and may believe that since the TMs have not left Scheme X voluntarily, they should not be penalised as a result of the transaction.

[½]

If the FS Section is in surplus, the trustees may want the FSTVs to include the TMs' share of surplus ...

[½]

... and this surplus to be used to enhance the TMs' benefits.

[½]

As the FSTVs are to be paid to the DC Scheme, then the higher the transfer payment, the greater the benefit to the TMs ...

[½]

... *eg* any surplus transferred will be used to enhance DC accounts for the TMs ...

[½]

... unlike the situation on transfer to a DB arrangement, where a higher transfer payment may simply improve the funding level of the receiving scheme.

[½]

The trustees may wish to be more generous in the FSTV terms ...

[½]

... to reflect the transfer of risk to the members from Company X ...

[½]

... *eg* the investment, inflation and longevity risks ...

[½]

... particularly if Company X has a strong covenant.

[½]

Bigger FSTVs could result from the use of more prudent assumptions than best estimate.

[½]

The trustees need to consider the impact of increasing the FSTVs on benefit security for the remaining members ...

[½]

... since an increase in the FSTVs is likely to lead to a lower funding level for Scheme X than would otherwise be the case (all other things being equal).

[½]

The trustees should also consider their obligations and powers under trust law, legislation and scheme documentation ...

[½]

... and Company X's views about this suggestion.

[½]

[Maximum 4]

[Total 20]

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