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Defined Benefit Arrangements

Assignment 4 Notes

(Part 4 – Scheme Funding and Investment Strategy)
Recommended Time: 3 hours

1. **The Projected Unit Method is more appropriate for performing valuations of schemes which are open to new members. Demonstrate your understanding of this by comparing the following features of the Projected Unit Method with those of the Attained Age Method:**

   - **The Standard Contribution Rate**
   - **The Modified Contribution Rate**

20 marks

Your answer must describe and contrast the two features, drawing out the following:

The Standard Contribution Rate under the Projected Unit Method represents the contribution needed to fund benefits expected to accrue over the year following the valuation date, based on projected earnings. To be stable, the profile of the membership needs to remain reasonably constant, i.e. as members leave or retire, new members join.

In contrast, under the Attained Age Method, the Standard Contribution Rate represents the average rate of contribution needed over the future pensionable service of the membership as at the valuation date, making no allowance for new members. This is more appropriate for schemes that are closed to new members.

The Modified Contribution Rate under the Attained Age Method is the Standard Contribution Rate adjusted to eliminate the difference between the Target Fund (equal to Past Service Liabilities allowing for the Projected Earnings of members) and the asset value over a specified period, e.g. five or ten years. This is usually a shorter period than under the Projected Unit Method, where the average future lifetime of active members may be the period chosen.

(The relevant sections of the Study Manual are Part 4, Chapter 1.1.2 and Chapter 1.1.3.)

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2. **You are the actuary for a scheme. A newly appointed trustee has asked you to explain the relevance of the Statutory Funding Objective (SFO) to the valuation of the scheme. Write a letter to respond to the trustee's question and outline the responsibilities of trustees in relation to the SFO.**

20 marks

Use correct letter format and include the following points:

- Background to include the introduction of the SFO by the Pensions Act 2004, to apply to all valuations with an effective date of 22 September 2005 onwards. The operation of it is overseen by the Pensions Regulator, based on the principles in the Pensions Act 2004 and the detail and guidance set out in the Pensions Regulator's Code of Practice on Funding Defined Benefits

- SFO requires schemes to have the resources to meet their technical provisions, ie the value of members' accrued benefits

- Trustees' responsibilities: obtain a full valuation once every three years, with annual actuarial reports produced between valuations; prepare a Statement of Funding Principles within 15 months of the valuation date; prepare a Schedule of Contributions (certified by the scheme actuary); prepare a Recovery Plan if the SFO is not met which must be sent to the Pensions Regulator along with the Schedule of Contributions and a summary of the valuation; prepare and issue annual summary funding statements to all members within three months of the latest date for receiving a formal valuation report or annual actuarial report; choose prudent valuation assumptions

- The valuation itself: actuarial assumptions are not prescribed for the SFO so trustees must seek actuarial advice and, depending on the scheme rules, consult or formally agree assumptions with the employer. The actuary must use an accrued benefits funding method such as the Projected Unit or Attained Age method

- Trustees are required to make an assessment of the employer's covenant: an objective assessment of the employer's financial position and its legal obligations to continue to fund the scheme. The strength of the covenant will influence the trustees when setting assumptions and deciding on a recovery period and should be considered within an integrated risk management framework

(The relevant section of the Study Manual is Part 4, Chapter 3.)

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3. **Colourboxx Holdings Limited has informed the trustees of the Colourboxx Final Salary Plan that it has agreed to sell a subsidiary company which employs members of the Plan. The members will be transferred to a scheme run by the new owner. You are the consultant for the scheme and a trustee has asked you to call him to explain how the transfer values for the transferring active members might be calculated.**

   Prepare some notes before making the call.

20 marks

Include the following points:

- As a large group of members would be transferring together, special terms might apply to the transfer values. This is because the members concerned would not be leaving the scheme at their own request and it is generally accepted that they should not be disadvantaged by the transfer

- Although the members concerned will move to a different scheme they would not be viewed as leaving the employer's service, therefore alternative approaches to the normal leaving service transfer value basis may be considered

- The alternative transfer value bases (the 'past service reserve' and the 'share of fund' bases) generally produce a higher transfer value than the normal leaving service basis

- Under the past service reserve basis, the transfer value calculation includes an allowance for future salary increases and the value represents the liability that would exist for the transferring scheme if the members concerned were assumed to continue in service

- Under the share of fund basis, the transfer value is calculated along the lines of:

$$\frac{\text{Liability for transferring members}}{\text{Total scheme liabilities}} \quad \text{X} \quad \text{Value of scheme assets}$$

  although there may be variations on this formula. For example, some assets and liabilities may be excluded

- The share of fund basis is suitable when the transferring scheme has a surplus / deficit and a share of this surplus / deficit is to be passed to the receiving scheme

(The relevant section of the Study Manual is Part 4, Chapter 5.4.)

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4. **Write short notes on the treatment of incoming transfer values.**

5 marks

Include the following points:

- Benefits granted on receipt of a transfer value into a scheme must be determined using methods and assumptions which are consistent with those used by a scheme to calculate outgoing transfer values
- In schemes which grant added years of service in return for a transfer, one further assumption - an allowance for salary increases - is needed
- No legal requirement for schemes to provide transferred in benefits in a particular form
- Some schemes provide added years of service / fixed pension / DC benefits
- Scheme members do not have a legal right to transfer benefits in to an occupational pension scheme. Many employer/trustee bodies no longer accept incoming transfers

(The relevant section of the Study Manual is Part 4, Chapter 5.3.3.)

5. **You are the consultant to a DB scheme. A member of the investment committee has asked you to summarise the key factors affecting investment strategy decisions**

10 marks

Key factors affecting investment strategy decisions to include the following points:

- Investment strategy is long term allocation of assets to specific asset classes

- Size of the scheme. Small schemes generally invest in insurance contracts where insurance company assumes responsibility for investment strategy; when scheme assets grow, start to consider alternatives and take on responsibility for the strategy; size of the scheme in relation to the sponsor (larger the scheme in relation to the sponsor, larger potential financial impact so less likely to take investment risk)

- If the scheme is in surplus, aim to maintain small surplus and cushion unexpected funding shortfalls as large surpluses hold little value. Use surplus to take less investment risk and improve member security

- If the scheme has a small deficit/just enough assets to meet liabilities/weak employer covenant, may try and match liabilities; addition of return seeking assets could be used to generate returns to close the funding gap. Large deficit can lead to a less matched investment policy in pursuit of higher returns to correct the deficit but need to be aware of the risk implications

- Strength of the employer's covenant (ie ability of scheme's sponsoring employer to meet funding obligations)

(The relevant section of the Study Manual is Part 4, Chapter 6.1.)

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6. **You are the consultant to a DB scheme. A member of the investment committee has asked you to summarise how liability driven investment could be used to meet the pension scheme's liabilities.**

10 marks

Description of liability driven investment (LDI) should include the following points:

- An approach that aims to ensure that as the value of liabilities changes due to changes in interest rates and inflation, there is a corresponding change in the value of assets held

- There are essentially two key components to an LDI strategy: one that seeks to match liabilities (core) and one that aims to generate growth

- The core component - designed to replicate the profile of a scheme's liabilities, in particular their sensitivity to changes in interest rates and inflation. This uses a combination of fixed income and index linked bonds, together with interest rate and inflation swaps, gilt repurchase agreements and total return swaps

- The growth-seeking component - invests across a diversified range of asset classes, markets and strategies to generate long term investment returns to help reduce any funding deficit. It is prudent to aim to be overfunded in order to avoid future shortfalls as a result of changing projections, such as mortality rates

- LDI does not remove all investment risk. It reduces risk arising from the difference in sensitivity to interest rates and inflation between a scheme's assets and its liabilities. It doesn't remove the risk that longevity may be different to that assumed in the value of the scheme's liabilities

(The relevant section of the Study Manual is Part 4, Chapter 6.8.1.)

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7. **Describe, including examples, the two major asset allocation techniques that can be used to drive investment returns.**

15 marks

There are two main types of asset allocation techniques – strategic and tactical.

Strategic asset allocation should include the following points:

- Long term suitability of different asset types, such as equities, bonds, property and cash, to meet a pension scheme's liabilities
- Historically, UK pension funds have skewed their asset allocation towards equities. The risks associated with high weightings of equities were highlighted during the prolonged period of weakness in equity markets between 2000 and 2003 (and between 2007 and 2009), which had a significant impact on funding levels. Although equities offer higher returns than other asset classes over a long time period, the asset class also has a higher volatility of returns
- Changes in regulation have aimed to address the lack of focus on a scheme's liabilities when making decisions on strategic asset allocation. More responsibility has been put on pension scheme trustees to ensure that they have sufficient knowledge and understanding to make the relevant decisions and to take advice
- The policy regarding strategic asset allocation decisions has to be laid out by the trustees of a pension scheme in its Statement of Investment Principles (SIP)

Tactical asset allocation should include the following points:

- The day to day management of the portfolio's asset mix, which is usually delegated from the trustees to one or more investment managers
- Tactical decisions can be made to deviate from a portfolio's strategic or long term asset mix to take advantage of short term investment opportunities based on economic or market developments. For example, a manager could choose not to rebalance a portfolio to the benchmark following a period of strong growth if they anticipate that there will be further strong returns
- Trustees can provide instructions regarding the implementation of the asset allocation for the investment managers in an Investment Management Agreement. They will usually specify ranges around the benchmark allocation for each asset class along with risk and return expectations. The manager is then able to make tactical asset allocation decisions around the benchmark
- This is one area where the law allows trustees to delegate their responsibility to make decisions. They must however ensure that the managers are suitable to carry out the investment business of the scheme on their behalf
- The investment managers must be authorised to carry on investment business under the Financial Services and Markets Act (FSMA) 2000

(The relevant section of the Study Manual is Part 4, Chapter 6.9.)

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