Registered office:

6th Floor

9 Appold Street

London

EC2A 2AP

T: +44 (0) 20 7247 1452

W: www.pensions-pmi.org.uk

Core Unit 4

Financing and Investing for Retirement Provision

Assignment 3

*(Part 3 – Defined Benefit Finance and Investment and Part 4 – Defined Contribution Finance and Investment)*

*Recommended Time: 2 hours..*

1. **Explain the features of a buy-in and a buy-out, and how both of these impact various risks to which a pension scheme may be exposed.**

**15 marks**

Relevant section of the manual is Part 3 Chapter 2.7.

Format: descriptive

Answer should cover:

* Buy-in – scheme invests in bulk annuity, members remain scheme members, insurer pays scheme, scheme pays member benefits
* Buy-out – annuities purchased in member’s names, scheme membership ceases, wind-up
* Risks reduced/removed by insuring them
1. **List some of the key advantages and disadvantages of:**
2. **Using DC benefits to purchase an annuity at retirement**
3. **Drawing down DC benefits at retirement**

**15 marks**

Relevant section of the manual is Part 4 Chapter 2.3.

Format: bulleted list

Answer should cover:

* Value for money. an annuity may provide better value for money if the member lives to an advanced age (longer than the average age assumed by the insurance company issuing the annuity). There is a general tendency to consider this less important than value for money on early death, as people tend to underestimate their longevity.
* Guarantee of income
* Impact of longevity
* Investment risk. An annuity involves paying money over to an insurance company and thereafter not needing to manage the investments. Insurance companies adopt a very cautious investment strategy with those monies in view of the guarantees they are providing.
* In contrast, with drawdown the investments need to be managed according to personal risk tolerance. For those with a moderate- to high- risk tolerance, drawdown may be attractive, as there are prospects of achieving a better return than on the annuity, as illustrated in the chart earlier. This is provided there is capacity to take the downside risk also illustrated on the chart. For those with a very limited risk tolerance, an annuity may be the better option. For those who select drawdown but envisage buying an annuity at a later date, recognition is needed of the impact of ‘mortality drag’. This is the cost of delaying participation in an annuity’s mortality pooling. Mortality drag increases with age, as the probability of death is larger, and the required investment return to compensate grows accordingly. For this reason, it is generally considered optimal, from a purely mortality drag perspective, to purchase the annuity at around the age of 75, given the prospects before that age of achieving sufficient investment returns to more than compensate for the effect of mortality drag. However, this strategy will not work for those with a low appetite for investment risk when an immediate purchase of an annuity may be more appropriate. Also, delaying the annuity purchase may not prove optimal if market movements and changes in annuity rates act unfavourably.
1. **The goal of all DB pension schemes is to achieve self-sufficiency, known as the Long-Term Objective (LTO). Briefly outline the following:**
2. **The three main options available to trustees when deciding how a scheme can achieve its LTO**
3. **The level of investment risk that would apply to the LTO**

**15 marks**

Relevant section of the manual is Part 3 Chapters 1.2 and 3.3.

Format: explain/describe

Answer should cover:

* Scheme continues on a self-sufficiency basis. The long-term plan will provide for less reliance to be placed on employer covenant. This is achieved by a combination of contributions and gradual reduction in the level of investment risk, such that over time the scheme becomes substantially or totally self-sufficient.
* Buy-out – transferring the liabilities to an insurer
* Pension superfund. This can be thought of as a pension scheme consolidator, which can receive the entire assets and liabilities of a number of schemes, pooling assets, and liabilities and assuming future responsibility for paying the benefits due.
* Low level of investment risk, reducing over time to help achieve the LTO
1. **List 5 options available to DC members aged 55 or over under the Pension Freedoms.**

 **5 marks**

Relevant section of the manual is Part 4 Chapter 2.1.

Format: list

Answer should list 5 from:

* Annuity purchase
* UFPLS
* Single lump sum
* Cash to 25% plus flexi-access drawdown
* Social infrastructure – how it operates, how it is financed
* Combination of different options
* Leave the funds invested
1. **Briefly outline the considerations when deciding a DC investment strategy, including how the type of scheme affects who decides the strategy and the main fund categories.**

**10 marks**

Relevant section of the manual is Part 4 Chapter 1.2.

Format: descriptive

Answer should cover:

* Contract-based schemes, individual members are usually entitled to access the provider’s full investment suite (typically this can range from 50-100 funds).
* Trust-based schemes the trustees will determine the range of funds to be made available to the members
* Growth funds. aim for good long-term performance. Equity funds are traditional examples (UK and overseas), whilst nowadays other options have also become popular including diversified growth funds, which invest in a wide range of asset classes typically including some derivative type investments
* Defensive funds aim to preserve capital or purchasing power. Examples are cash, fixed interest, and index-linked bonds
* Balanced funds include a mixture of growth and defensive assets. These may be referred to as managed funds.
* Investment risk
1. **Write a Report detailing investment risk and ways to combat it, making particular reference to**
* **Interest Rate Risk**
* **Inflation Risk**
* **Risk from Growth Assets**
* **Impact of Growth Assets in Actuarial Valuations**
* **Liability Driven Investment**
* **Cashflow Driven Investment**
* **Longevity Swaps**

 **40 marks**

Relevant Sections of the Manual are Part 3 Chapters 2.1, 2.2, 2.3, 2.4, 2.5 and 2.6

Format – Report

Answer should cover

* Interest rate – example of the effect of interest rates on capital including scenarios such as amounts payable in different numbers of years, or assets pay out in 2 years but liability 5 years away plus explanations. Is it rewarded?
* Inflation risk – Scenarios again using different rates of inflation over different numbers of years plus an explanation.
* Risk form Growth Assets – used for diversification, such as equities. Volatility in the short-term. Long-term returns.
* Impact of Growth Assets in Actuarial Valuations- higher discount rates in a reduction in the calculated present value of the liabilities and is a fixed addition to the risk-free rate.
* Liability Driven Investment – hedging, interest rate and inflation swaps, collateral, leverage or gearing and counterparty risk
* Cashflow Driven Investments – contractual income, normally a supplement to LDI
* Longevity Swaps – the risk of living too long. Provides protection against longevity risk. Examples of ways to mitigate this risk.