Pensions Management Institute

Learning

Financing and Investing for Retirement Provision Core Unit 4 Study Manual

About the PMI

THE PENSIONS MANAGEMENT INSTITUTE (PMI)

Founded in 1976, the Pensions Management Institute (PMI) is the UK's largest and most recognisable professional body for employee benefit and retirement savings professionals, supporting over 6,500 members in 32 countries.

PMI's members, represented in 9 regions, are responsible for managing and advising some of the largest institutions in the world accounting for £1trillion invested in pensions. We promote excellence through a range of services for the benefit of members, the wider economy and with over six million now saving as a result of automatic enrolment, society as a whole.

The purpose of the Institute is *"To set and promote standards of excellence and lifelong learning for employee benefits and retirement savings professionals and trustees through qualifications, membership and ongoing support services".*

To achieve this, PMI:
- Promotes and embeds professional standards, setting the benchmarks for best practice
- Produces qualifications that have a reputation for excellence and ensure that employee benefits and retirement savings professionals, whether they are scheme managers, consultants, administrators or trustees, are educated to the very highest standards and the latest legislation
- Provides continued lifelong learning designed to strengthen the knowledge and skills of employee benefit and retirement savings practitioners in performing to the best of their ability
- Plays a pivotal role shaping the industry, working with Government and collaborating with other bodies on research and thought leadership on key issues
- Presents an annual conference and a wide range of technical seminars from entry-level to those forhighly experienced professionals
- Provides industry-leading insight, including Pensions Aspects, PMI TV, Expert Partner insights, newsletters and blogs to keep practitioners abreast of the very latest developments in a rapidly-changing industry
- Proactively has a voice in mainstream and social media with a presence on Twitter and LinkedIn

www.pensions-pmi.org.uk

The Pensions Management Institute
Registered Office:
Devonshire House, 60 Goswell Road, London EC1M 7AD
Telephone: 020 7247 1452
Facsimile: 020 7375 0603

Published by The Pensions Management Institute,

Authors

Stephen Hyams, BA, MSc, FIA
Stephen is a qualified actuary having more than 35 years' pension experience. During a long career, Stephen acted as a Scheme Actuary and client relationship manager, providing advice to both trustees and corporates. He has extensive experience of advising on defined benefit scheme funding (including the use of contingent assets and assessing the strength of employer covenant), benefit changes and closure to future accrual, as well as corporate pension accounting and mergers and acquisitions. Financial risk management lies at the heart of an actuary's work and Stephen is also experienced in such matters as de-risking "flight paths" and liability management. Stephen has advised on the design and implementation of defined contribution pension schemes and been actively involved in the selection of the range of investment funds and design of lifestyle strategies. The DC work carried out by Stephen's actuarial working party formed the basis of the IFoA's policy briefing 'Savings Goals for Retirement' issued in October 2019.

Andrew Riley, APMI, DRRA, FCA
Andrew Riley has specialised in pensions regulatory and governance frameworks since 1994. He works as auditor and consultant to a wide range of DB and DC pension schemes, pension administrators, and professional trustee firms. As well as advising on and reviewing good governance, Andrew has written articles for Professional Pensions, Pensions Age, FT Financial Adviser and PMI magazine. Andrew is Director of his own ICAEW registered firm Resilient ESG Governance Services Ltd, and is a qualified Chartered Accountant with PMI qualifications in DC governance Diploma in Regulated Retirement Advice, and the Award in Pension Trusteeship (APT Unit 1). As a member of the ICAEW Assurance Panel since 2006, Andrew reviews all assurance technical releases and has taken part in working groups in emerging governance good practice with the ICAEW, the Pensions Regulator and the Pensions Research Accountants Group (PRAG). Andrew is a member of PMI London and has a keen interest in driving forward the Environmental, Social and Governance agenda in pension investments.

Foreword

PMI was formed in 1976 to promote professionalism amongst those working in the field of pensions. Today, we are acknowledged as the institute for pensions professionals. We have developed study and examination facilities leading to a nationally recognised qualification – the Advanced Diploma in Retirement Provision. This embraces all aspects of law and practice relating to the management of workplace pension arrangements. The Advanced Diploma is a comprehensive and in-depth qualification for retirement benefit professionals. It is the qualification component for Associateship (APMI) of the Pensions Management Institute (PMI).

The structure of the Advanced Diploma was comprehensively revised for first examination in 2016. This revision was to ensure that the syllabuses were up to date and the qualification continues to meet the needs of users. The Advanced Diploma framework comprises five core units and seven specialist units. To complete the Advanced Diploma students will need to complete eight units as set out below.

The foundation of the qualification is formed of four core units. These compulsory units cover all aspects of retirement provision in the UK, including regulation, administration, financing and investment. There is an additional option covering international employee benefits. The core units are assessed by a two hour examination. The core units are then followed by specialist units. Students choose either, or both, of the Tier 1 specialist units - Defined Benefit Arrangements or Defined Contribution Arrangements as most appropriate for them. Depending whether both or just one of the Tier 1 specialist units are selected either one or two further specialist units can be selected from the Tier 2 specialist options including Reward, Retail Pensions or International Employee Benefits. These choices allow the students to select those areas that best fit their current work or future career aspirations. Finally the Professionalism and Governance Unit must be completed by all Students. All of the specialist units are assessed by 3 hour written examinations.

There are several Diploma level qualifications comprised of units from within the structure of the Advanced Diploma for those who do not want or need to complete the Advanced Diploma. These have also been revised as part of the changes to the Advanced Diploma.

The Diploma in Retirement Provision (DRP) includes all four UK focussed core units and either of the Tier 1 specialist units (Defined Benefit Arrangements or Defined Contribution Arrangements).The DRP would be completed by all those who proceed to complete the Advanced Diploma.

The Diploma in Employee Benefits and Retirement Savings (DEBRS) is ideal for those who need to understand pensions in the wider savings and employee benefits context, and consists of two of the core units and the Tier 2 specialist Reward unit.

The Diploma in Regulated Retirement Advice (DRRA) consists of two Tier 2 specialist units: Taxation, Retail Investment and Pensions; and Retail Advice and Regulation. It is an appropriate qualification for the FCA regulated activity “Advising on Packaged Products” which includes pensions and retirement planning and advising on pensions transfers.

The Diploma in International Employee Benefits (DipIEB) consists of the two internationally focussed units: the Foundation in International Employee Benefits core unit and the Tier 2 specialist unit - Managing International Employee Benefits. These units have been developed in partnership between PMI and the International Employee Benefits Association.

Those who wish to complete the Advanced Diploma can opt to take the units that comprise the DRP, DEBRS, DRRA and/or DipIEB on the way to becoming Associate Members of PMI. Alternatively, those who only wish to sit those Diplomas can become Diploma Members of PMI on completion.

There are many benefits to be gained from studying for, and attaining, these qualifications. These include the body of knowledge and understanding gained and its application to practical situations, a demonstrated commitment to learning and development, and enhanced status, confidence and opportunities for career progression.

Undertaking this rigorous professional qualification places demands on students and we are committed to supporting studies with quality learning provision. Under the banner “Shaping the pensions professionals of tomorrow” we are delighted to be working with some of the UK’s leading companies and firms within the pensions industry who have taken on the role of study support partners. In each unit the study material comprises a study manual and access to a web-based distance-learning course designed to prepare students for the examinations.

Core Unit 4 Financing and Investing for Retirement Provision seeks to provide an overview of how employers and employees pay for workplace pensions and distinguishing between defined benefit and defined contribution arrangements and including an appreciation of:

- the factors which will influence the funding strategy, including the taxation regime
- risk appreciation and management
- financial regulation
- accounting and tax issues
- investment, investment management, investment strategy and governance

Further details on the other units that comprise the Advanced Diploma and the work of the PMI can be found on the website. We hope you will enjoy studying for the Advanced Diploma. We welcome feedback and this should be directed to the Qualifications Department at PMI, e-mail: qualifications@pensions-pmi.org.uk

Preface

This unit aims to provide you with an understanding of financing and investing for retirement provision and is relevant to both defined benefit and defined contribution workplace pension schemes.

In Part 1 we look at the types of pension scheme, why employers typically choose to fund in advance for pensions and how contributions are determined. Finally, we consider the tax treatment of pension schemes which are registered with HMRC, including the Annual and Lifetime Allowances and the treatment of authorised and unauthorised payments.

In Part 2 we move on to investments. This Part reviews the different types of investment, starting with equities and bonds which form the core investments for most schemes. Chapter 3 looks at other asset classes including property, cash, currency, private equity, commodities and infrastructure. We finish in Chapter 4 by examining derivatives (such as swaps) and investment strategies involving a combination of asset classes, including absolute return funds and some insurance products (with-profits and deposit administration).

In Part 3 we focus on defined benefit (DB) finance and investment. Chapter 1 considers the importance of employer covenant to provide the required contributions to meet benefits due, and then how funding and de-risking plans are intended to reduce reliance on employer covenant over time as a scheme moves towards its Long Term Objective. Chapter 2 looks at investment and mortality risks and how these can be managed, such as through Liability Driven Investment. Chapter 3 discusses how to review and implement investment strategy.

Part 4 considers defined contribution (DC) finance and investment. In Chapter 1 we look at the accumulation phase; determining how much to contribute and the investment strategy to pursue. Chapter 2 looks at the complexity of choice at retirement, drawdown as an alternative to buying an annuity and how to develop a decumulation strategy to match one's objectives.

In Chapter 1 of Part 5 we examine the key legislative background to the financing of pensions, including the Financial Services and Markets Act 2000, the Pensions Act 2004 and regulations on self-investment. We also look at the role of the Pensions Regulator and the Pension Protection Fund. In Chapter 2 we explore how trustees are required to maintain financial records and prepare an annual report and accounts. We finish by briefly considering provider independent governance committees for contract-based DC schemes, authorisation and supervision of DC master trusts and the treatment of pensions in a company's annual accounts.

We finish Part 5 with investment governance, starting with the Statement of Investment Principles for documenting trustees' investment arrangements. We then look at the investment governance principles laid down by the Investment Governance Group and finish with corporate governance including ESG.

Part 6 considers investment management. In Chapter 1 we look at active versus passive management, pooled versus segregated management, different manager structures and delegated decision-making including fiduciary management. Chapter 2 looks at the selection and implementation of managers, and in Chapter 3 we look at how the performance of managers should be monitored.

When you have finished your study of this manual, you should have an understanding of both the financing and investing for retirement provision, including particular features pertinent to DB and DC arrangements as well as those common to both types of arrangements.

Contents

Syllabus

Aim:
To provide an overview of how employers and employees pay for workplace pensions and distinguishing between defined benefit and defined contribution arrangements and including an appreciation of:

- the factors which will influence the funding strategy, including the taxation regime
- risk appreciation and management
- financial regulation
- accounting and tax issues
- investment, investment management, investment strategy and governance

1. **demonstrate an understanding** of the principal reasons why retirement benefits are financed
   analyse *the following:*
   - *security*
   - *stability and cash flow*
   - *taxation*
   - *accounting practices*

   explain *the funding of public sector schemes*

2. **understand** how workplace pension schemes are financed
   describe *employer and employee contributions*
   outline *the features of:*
   - *salary sacrifice*
   - *Additional Voluntary Contributions (AVCs)*

   describe *unfunded schemes*
   understand *the risks and how they can be managed*

3. **demonstrate an understanding** of the tax regime and allowances
   explain *the tax relief/charges for/on the following:*
   - *contributions*
   - *payments*

   describe *the taxation of Employer Financed Retirement Benefit Schemes*

4. **understand** the different types of investments available to pension funds, explain their differences and suitability for different types of retirement provision
   analyse *the nature of equities:*
   - *UK*
   - *overseas*
   - *new issues and underwriting*

   analyse *the nature of bonds:*
   - *fixed interest – government/corporate, overseas, high-yield and emerging market debt*
   - *index linked*
   - *new issues and underwriting*

   outline *the other assets available:*
   - *property*
   - *cash*
   - *currency and currency hedging*
   - *derivatives*
   - *private equity*

- *commodities*
- *absolute return funds, including diversified growth funds*
- *infrastructure*
- *insurance policies*
- *stock lending/underwriting*
- *buy outs/ins, with profits, annuities*

5. **understand** the financial regulation of workplace pension schemes
   explain *the impact of/for the following:*
   - *Financial Services and Markets Act 2000 (FSMA)*
   - *Pensions Act 2004*
   - *The Pensions Regulator*
   - *Pension Protection Fund*
   - *Self investment*

6. **describe** the financial administration and governance of workplace pension schemes
   explain *the following aspects:*
   - *contribution management*
   - *cash flow management*
   - *accounting for tax*
   - *investment records*
   - *scheme accounts*
   - *accounting standards*
   - *audit*

7. **describe** the tax treatment of scheme investments
   analyse *each of the following:*
   - *investment income/capital gains*
   - *property*
   - *i nsurance policies*
   - *overseas investments*
   - *income from trade*
   - *withholding tax*

8. **explain** the considerations when an individual is determining their investment strategy for and during retirement
   analyse *the impact of the following:*
   - *life expectancy*
   - *income needs and shape in retirement*
   - *expected retirement age*
   - *size of existing fund and future contributions*
   - *investment funds available including lifestyle, target date and default and the need to review these on a regular basis.*
   - *attitude to risk*
   - *role of regulation and legislation*
   - *future economic conditions*
   - *costs and charges*

9. **demonstrate an understanding** of the roles and responsibilities of employer and trustees in the provision of investment options for defined contribution schemes including master trusts

__explain__ the following:

- *implications of size and type of scheme*
- *default funds*
- *retirement ages outcome assessment*
- *charges*
- *member education*
- *master trust*
- *advice*

10. **describe** what factors should be taken into account when determining a trust-based defined benefit scheme's overall investment strategy

__analyse__ the impact of the following:

- *member demographics*
- *size and type of scheme*
- *strength of employer covenant*
- *role of regulation and legislation*
- *employer and trustee attitude to risk*
- *Statement of Investment Principles*
- *de-risking strategies*
- *diversification*
- *economic conditions*

11. **distinguish** between the various approaches to investment management and outline how, why and which size and type of scheme each might be used

__analyse__ and __evaluate__ the following:

- *segregated and pooled funds*
- *active and passive management*
- *manager structures*
- *multi manager funds*
- *in house management*
- *delegation and fiduciary management*

12. **outline** factors taken into consideration when selecting, monitoring and changing investment managers

__explain__ each of the following:

- *manager selection process*
- *custody and title of assets*
- *fee structure*
- *setting performance targets*
- *ethical and socially responsible investment*
- *investment management agreements*
- *administration*
- *transition management*
- *frequency of monitoring and governance*
- *multiple managers*
- *transition risk*

PART 1

FUNDING AND TAXATION

OVERVIEW

In this Part we look at the background to how pensions are financed and taxed.

In Chapter 1 we start by considering the reasons why pensions are funded in advance rather than on a pay-as- you-go basis. We then look at the two main types of pension scheme, occupational schemes and contract- based arrangements, and also small self-administered schemes and employer-financed schemes. We finish the Chapter by looking at how employer and employee contributions are determined.

Retirement savings schemes qualify for tax privileged treatment if registered with HM Revenue and Customs (HMRC). The current system was introduced on 6 April 2006 ('A-Day') as a simplification of the old system for so-called 'approved' schemes.

In Chapter 2 we examine the tax treatment of registered schemes, including tax relief on contributions and tax on investments and on benefits. Tax relief is provided only on those contributions which do not exceed the Annual Allowance. When benefits are drawn, 25% of the value can be taken as a tax-free cash pension commencement lump sum and the rest of the pension is subject to Income Tax. However, any pension benefits that exceed the Lifetime Allowance are subject to a further tax charge.

CHAPTER 1
Funding

INTRODUCTION

This Chapter considers why employers normally choose to fund in advance for employees' retirement benefits, examines the different types of pension scheme and considers the arrangements made for employer and employee contributions.

1.1 REASONS WHY PENSIONS ARE FUNDED

1.1.1 Scheme Design

In defined contribution (DC) schemes (also known as money purchase schemes) the employer promises to pay a defined level of contributions on behalf of the employee, which are invested and in due course used to purchase retirement benefits for the employee. It is essentially implicit for such schemes to be funded in advance.

In defined benefit (DB) schemes the employer promises employees a defined level of pension, which is most commonly dependent on the length of service and amount of salary when service terminates (final salary schemes). A variation is where the pension depends on average salary over the period of service (career average revalued earnings or CARE). The overall cost of providing the pension, to which the employees make some contribution, is uncertain and this is considered further in Part 3. While most DB schemes are funded in advance, a few (mainly in the public sector) are unfunded.

There are scheme designs which have elements of both DB and DC and are termed hybrids. One example is a cash balance scheme, where the employer promises a defined level of cash at retirement (typically dependent on period of service and salary) which is used to purchase retirement benefits.

1.1.2 Security

A major reason for funding in advance is to provide security for members by building up a fund of assets in advance, which should enable a scheme to meet the cost of benefits promised to members.

The funds are held in a trust which is separate from the employer who is financing the scheme, providing an additional level of security. The accumulated fund remains available to finance benefits even if the employer goes out of business.

The level of security depends on the size of the fund relative to the liabilities in respect of benefits that members have built up in the scheme and which are payable sometime in the future. The benefits promised are more likely to be paid in full if the size of the fund matches or exceeds the liabilities; this will always be the case for a DC scheme but may not be the case for a DB scheme.

1.1.2 Stability and Cash Flow

If benefits were not funded in advance they would have to be paid by the employer as they fell due. For a DB scheme this could lead to large variations in the cost for the employer from year to year, which could cause problems. For example, a growing company with a young workforce would have very little outgo initially, but the cost of providing benefits would increase in later years as members of the initial workforce began to retire. A declining company could face difficulties if its retirement commitments became large relative to its available cash flow.

1.1.3 Taxation

Both employer and employee contributions made to a registered pension scheme (see Chapter 2) currently receive tax relief when they are paid. Registered DB schemes must be funded in advance. This does not necessarily mean that funded arrangements are more tax efficient for the employer though, since benefit payments made from unfunded arrangements generally attract company tax relief when they are paid.

Funding the benefits in advance changes the timing of tax relief for a company rather than necessarily offering a tax advantage.

1.1.4 Accounting standards

One of the fundamental principles of accounting is that liabilities should be provided for as they fall due. The accounting requirements of the sponsoring employer provide a strong reason for funding benefits, because any pension promise that is not fully funded must be reflected in the company accounts (see Part 5, Chapter 2.7).

1.2 TYPES OF PENSION SCHEMES

Broadly, there are two main methods of providing workplace pensions in the UK: occupational pension schemes and contract-based arrangements, collectively known as 'workplace' pension schemes. Occupational pension schemes are established by an employer for the benefit of its employees. Contract-based arrangements are individual contracts entered into between an individual and an insurer and are always DC in type.

1.2.1 Occupational Pension Scheme

Most occupational pension schemes are established by the creation of a trust. A trust can be established by:

- a trust deed which is made between the employer and the initial trustees; or
- a declaration of trust by which the employer appoints itself as trustee.

Some occupational pension schemes are not set up as trusts. Unfunded schemes and retirement annuity contracts often take the form of a contractual arrangement or promise.

Many public sector occupational pension schemes are unfunded, although the employer (and in some cases the employees) pay contributions to the Government and the Government pays out the benefits due to members (the "pay as you go" system). These schemes are covered by an underlying guarantee from the Government that benefits will be met. One exception to this is the Local Government Pension Scheme, which is a funded scheme.

The statutory schemes are now primarily the Principal Civil Service Pension Scheme and other nationwide schemes such as those for the armed forces, teachers, police, fire fighters and the National Health Service Superannuation Scheme, all unfunded but often contributory.

Also, there are statutory occupational schemes for public sector employees which are set up by legislation and which do not take the form of a trust.

1.2.2 Contract-based Arrangements

Contract-based arrangements are contracts between the provider and the individual and are collectively known as personal pensions, While usually not having any practical consequence for the individual, the governing documentation can be set up under irrevocable trusts or, if the provider is an authorised insurance company or friendly society, can be established by board resolution or deed poll.

Stakeholder pensions are a type of personal pension originally set up as a low-cost employee financed arrangement where the employer did not provide any alternative. Group personal pension plans are set up by an employer for their 'group' of employees, but are actually separate personal pension contracts between each individual and the provider.

Self-administered pension plans (SIPPs) are personal pensions that provide much greater investment flexibility than other types. A SIPP scheme member is empowered to make their own individual investment decisions, to hold investments directly, or to appoint a fund manager or stockbroker to manage investments on their behalf. Under SIPP schemes, it is possible to borrow up to 50% of assets for other investments.

1.2.3 Small Self-administered Schemes

A self-administered scheme is usually defined as 'small' when it has 12 or fewer members.

The principal attractions when compared with a 'small' insured arrangement are the wider powers of investment available compared with an insured scheme and the scope for members of the scheme to influence the investment policy. For example (subject to limits) monies from the fund can be lent back to the company or invested in the shares of the company.

1.2.4 Employer Financed Schemes

Employer-financed retirement benefits schemes (prior to 6 April 2006 known as unapproved schemes) enable the employer to provide benefits in addition to a registered scheme. They are subject to different tax rules than registered schemes which can be attractive be in certain circumstances.

1.3 CONTRIBUTIONS

1.3.1 Employer Contributions

Under a trust-based arrangement, the amount of the employer's contribution will be set out in the trust documentation. In employer sponsored contract-based schemes, the amounts that the employer and employee pay may be set out in the contracts of employment.

In the case of a DC scheme, the employer contribution will normally be a percentage of each member's salary each month (sometimes basic salary and sometimes all earnings including overtime, bonus etc.). Contributions might be flat rates, or a scale of contribution rates that goes up with age or service (but care is needed that such a scale is not illegal under age discrimination legislation). Further refinements are possible. For example, the employer might match the employee's contribution up to a predetermined limit, or it might relate to the employee's contribution in some other way (for example the employer pays double the employee contribution up to a maximum employer rate of 10% of basic salary).

For a DB scheme, the employer contribution will normally be specified as the money required to be paid in from time to time in order that the scheme remains sufficiently well-funded to meet its obligations, after allowing for contributions due from the employees.

In some public sector DB schemes, the rules governing contributions are set out in the Act by which the scheme was established (or in regulations made under that Act). While not strictly statutory schemes, the employers of members of the pension schemes of some former nationalised industries (including electricity, rail, London Transport and coal) are restricted by regulations (the Protected Persons Regulations) to the conditions under which employee contributions can be increased.

In some public sector DB schemes, the employer will pay its contribution, together with contributions deducted from employees, to central Government who in turn then pay the pensions; in other cases, the employer will pay the pension out of its own revenues, which will include the employee contributions and may include a grant from central Government.

1.3.2 Employee Contributions

Most schemes are 'contributory' which means that the member must pay contributions into the scheme if they are to receive any benefits. If the member is employed, then their employer may also contribute to the scheme. Where the scheme is the vehicle used to satisfy the Automatic Enrolment requirements of the Pensions Act 2008, then contributions will be subject to the minimum standards required under the legislation.

The employee contribution required will normally be expressed as a percentage of their salary/earnings. The same normally applies to any additional contributions the employee may be able to make in order to benefit from further employer contributions.

Any further contributions the employee makes, which will not involve further employer contributions, are Additional Voluntary Contributions (AVCs). These normally accumulate on a DC basis to provide benefits

for the member on retirement or death. In some cases, now almost exclusively in public sector schemes, AVCs in DB schemes are used to buy additional years of pensionable service.

Prior to April 2006 the trustees of a scheme were originally obliged to offer members a facility to pay AVCs. This could be to either the scheme itself (to be invested with the other assets of the scheme) or to an outside arrangement (for example, a group AVC policy set up with an insurance company). Under the Pensions Act 2004, from April 2006 this obligation was removed. However, many trustees have chosen to continue offering AVC arrangements for scheme members.

Alternatively, employees can choose to make AVCs into one or more contract-based pension arrangements of their choice.

Summary

DB schemes are funded in advance for several reasons. These include providing security for scheme members and stability for the employer's cash flow. The funds are usually held in a trust which is separate from the employer so that they are available to fund the benefits even if the employer goes out of business. DC schemes can be either occupational scheme or contract-based arrangements such as Stakeholder pensions.

Self-Test Questions

- Explain how funding a scheme in advance helps to make benefit promises more secure
- Explain how the funding arrangements for some public sector schemes differs from private sector schemes
- What is a small self-administered pension plan?

CHAPTER 2
Tax Treatment of Pensions

INTRODUCTION

All retirement savings schemes must be registered with HMRC to qualify for tax privileged treatment.

Although registered schemes benefit from significant tax exemptions, they are not wholly exempt from tax. Trustees and administrators are required by law to tell HMRC when they are liable to pay tax and to pay that tax. Trustees are required to complete a self-assessment tax return.

Registered status may be withdrawn for serious breaches of the scheme rules (e.g. payment of excessive or unauthorised benefits), use of the scheme for tax avoidance and persistent failure to provide information to HMRC or to meet the scheme's tax liabilities.

Small self-administered schemes enjoy the same tax advantages as any other registered scheme.

When they were excluded from Inland Revenue control in 1970, an undertaking was given that statutory schemes would be kept broadly in line with approved schemes. Because they are unfunded and the employers are non-trading, the investment income relief and Capital Gains Tax exemption have no application. From 6 April 2006, these schemes were automatically registered.

2.1 TAX REGIME AND ALLOWANCES

On 6 April 2006 (known as A-Day) HMRC introduced the tax simplification changes that were a complete change from the regime prior to that date. The previous limits on pension benefits and contributions were replaced in their entirety by a new set of limits, as described below. The previous system of tax approval was replaced by one of registration; schemes that were approved by HMRC before 6 April 2006 were automatically registered on that date.

It was possible for a scheme to retain the old rules, and a few chose to do so. In any event, all schemes will be subject to their own rules, which could be more restrictive than those imposed by the statutory framework (e.g. in respect of retirement age).

The minimum age at which a member of a registered scheme can start to draw benefits is 55. The member can take a maximum tax-free pension commencement lump sum of 25% of the fund that is being 'crystallised' (coming into payment). The rest of the fund can be used to provide a pension or purchase an annuity, or kept invested as a 'crystallised fund' from which the member can 'draw down' income.

From 6 April 2015 a DC scheme member can access the whole of their pension fund as a single lump sum. The amount that exceeds the maximum tax-free amount will be subject to Income Tax. From that date, there is no longer a requirement to annuitise at any age (there used to be a requirement to do so by age 75).

A member may have one or more arrangements within a pension scheme, so they may choose to crystallise only part of the funds available at any time.

The tax rules specify the conditions that need to be met for payments to be authorised. Any payment that doesn't meet these conditions is an unauthorised payment. The tax treatment of unauthorised payments differs from that of authorised payments, as explained in Chapter 2.4.

2.1.1 Annual Allowance

Tax relief is provided on pension contributions to registered schemes provided they do not exceed the Annual Allowance (AA). For the 2020/21 tax year the AA is £40,000, except for the tapered reduction for higher earners.

Prior to 2020/21 the tapered reduction applied for those whose 'threshold income' (taxable income less employee gross pension contributions plus those made through salary sacrifice) exceeded £110,000 and whose 'adjusted income' (taxable income plus employer pension contributions) exceeded £150,000. Taxable income includes that from investments but any taxed lump sum death benefits are deducted. The reduction in AA was £1 for each £2 by which adjusted income exceeds £150,000, the maximum reduction being £30,000. Hence the AA was £10,000 for those with adjusted income of £210,000 or more.

From 2020/21, the threshold and adjusted incomes were increased to £200,000 and £240,000 respectively. The reduction in AA is £1 for each £2 by which adjusted income exceeds £240,000, the maximum reduction being £36,000. Hence the AA is £4,000 for those with adjusted income of £312,000 or more.

The AA applies across all schemes to which an individual belongs and includes contributions paid by the employer as well as the individual. In most circumstances it is possible to bring forward any unused AA from the previous three tax years, to reduce the AA charge to a lower amount or to remove it completely.

If contributions exceed the AA, the excess contribution is subject to Income Tax. If the tax charge exceeds £2,000 a member can ask for the pension scheme to pay the charge from their benefits, as detailed in Chapter 2.4.

For DB schemes, the amount to be tested against the AA is the amount by which the value of pension has increased over the year. For this purpose, pensions are multiplied by a factor of 16 to derive a value, and allowance is made for the effect of inflation on the start-year pension to offset the increase in value.

The period over which the AA is measured is the Pension Input Period (PIP). From 6 April 2016 the PIP is the tax year for all schemes. Previously schemes could elect a PIP; some chose the tax year and others the scheme anniversary date.

A lower, so called Money Purchase Annual Allowance (MPAA) applies for members of DC schemes who have (a) taken flexible benefits which include income, such as an 'Uncrystallised Funds Pension Lump Sum or flexible drawdown with income and (b) withdrawn more than the 25% tax free pension commencement lump sum. It is not then possible to carry forward prior years' unused AA. For the 2020/21 tax year, the MPAA is £4,000.

2.1.2 fetime Allowance

The Lifetime Allowance (LTA) is the total amount of pension benefits that an individual can draw from their pension arrangements without incurring an extra tax charge.

The LTA was introduced in 2006 at a level of £1.5 million. After increasing to £1.8 million in 2010 it was subsequently reduced in stages to £1million. Each time the LTA was reduced, there were transitional arrangements available for people to protect their LTA at their existing level, provided they made an election by a specified date. In 2020/21 the LTA is £1,073,100.

For a DB scheme, the pension is multiplied by a factor of 20 in order to derive a value for the pension that is tested against the LTA plus any separate lump sum benefit. The maximum tax-free pension commencement lump sum that can be taken from a DB scheme is 25% of the value of pension using the same factor of 20.

When an individual's benefits from a scheme exceed the LTA, the excess is taxed as explained in Chapter 2.4.

2.2 TAX RELIEF ON CONTRIBUTIONS

As explained earlier, tax relief is provided on contributions that do not exceed the Annual Allowance.

Tax relief will usually be given on both employer and employee contributions to a private pension scheme. For individuals who are UK taxpayers, assuming a basic rate of Income Tax of 20%, every £100 that goes into a pension costs £80 (based on the tax year 2020/21). For those who pay Income Tax at the higher rate of 40% or the additional rate of 45%, every £100 that goes into their pension fund costs them £60 or £55 respectively (based on the tax year 2020/21).

There are two ways in which tax relief on employees' contributions can operate: relief at source and the 'net pay' arrangement.

Under relief at source, a contribution is paid out of net (post tax) pay to the provider who then reclaims tax at the basic rate from the government which is then allocated to the member's pension fund account. For higher rate tax payers, the member must reclaim the higher rate tax via a self-assessment tax return. For example, the member contributing to a personal pension and paying basic rate tax might pay £80 out of post- tax pay. The personal pension provider will then reclaim £20, leading to a total amount invested of £100.

Under the net pay arrangement, contributions are deducted from an employee's gross pay before the deduction of tax. Here, if the basic rate tax-payer wanted to invest £100 as above, the gross contribution of £100 would be deducted from pay before tax was calculated. This would mean that the take-home pay would only reduce by £80 (so the same end result as the personal pension contributor).

Most occupational schemes operate on a net pay basis. All contract-based schemes use relief at source.

Salary Sacrifice: Some employers allow their employees to enter into 'salary sacrifice' (or salary exchange) arrangements. Under such an arrangement, the employee agrees in advance to give up, or 'sacrifice', part of their salary or bonus. In return, the employer provides additional pension benefits. This is more efficient from a National
Insurance viewpoint, since the lower the salary/bonus that is paid, the lower will be the employer's and employee's NI cost.

For similar reasons of NI efficiency, some schemes are set up on a non-contributory basis - members do not pay contributions, but receive a commensurately lower salary and the employer then pays in a corresponding amount to the scheme. If the scheme was used for Automatic Enrolment purposes, the employer would need to pay at least the total minimum contributions required for that purpose.

2.3 TAX CHARGES ON INVESTMENTS

The general principle is that investment income and capital gains are tax exempt provided they relate to the investing of assets for the purposes of providing benefits under the pension scheme.
If the investment income or capital gains arise from activities that are deemed to be trading in investments, then the tax exemption does not apply. HMRC may (but does not necessarily) consider any trading activity as being inconsistent with the registered status of the scheme and may therefore remove such status.

Pension schemes are unable to reclaim withholding tax on dividends from UK shares.

The tax exemption extends to stock lending, futures, options and swaps if used for investment purposes. Investment types are discussed in Part 2.

2.3.1 Overseas Investments

The tax exemption also applies to overseas investments. Some countries may seek to tax investments by UK pension funds made in their country, for example by means of withholding tax on interest. Whether a UK pension scheme will obtain any tax relief in that country will depend on the country involved and the nature of the investment.

2.3.2 Property

Rental or capital gains arising from investment in property will be treated as tax exempt. However, a pension scheme considering investment in property would be wise to consider the VAT implications of the investment before undertaking such an exercise.

Where a registered pension scheme receives income or capital gain as a member of a property investment Limited Liability Partnership, the normal exemptions do not apply and they will be liable to Income Tax or Capital Gains Tax, respectively.

2.3.3 Insurance Policies

The tax treatment of insurance policies is complex and outside the scope of the syllabus.

2.4 TAX CHARGES ON PAYMENTS

Income tax is deducted at source on pensions in payment under PAYE procedures, using the member's tax code provided by HMRC. Pensions commuted on grounds of triviality are also taxed under PAYE.

Tax on other authorised payments is levied on the scheme, which normally recovers the tax through deduction from benefits paid. Scheme Administrators must submit a quarterly Accounting for Tax return to HMRC if they have any tax to pay. Examples of tax due are as follows:

- Contribution refunds for short qualifying service (2 years for DB schemes and 30 days for DC schemes) are taxed at 20% on the first £20,000 and at 50% on any excess
- For benefits in excess of the LTA, tax is charged at 25% if taken in pension form or are part of a transfer to a qualifying recognised overseas pension scheme (QROPS), and at 55% if taken as a cash sum
- Lump sum benefits paid on the death of a member on or after age 75, or if outside the 2-year period following death, are charged at the member's marginal rate
- Since 9 March 2017 a transfer to a QROPS attracts a 25% tax charge if outside of the European Economic Area, not to an occupational scheme and the member does not live in the same country as the QROPS after the transfer has taken place. The charge can be made up to 5 years later if the member then changes their circumstances in a way that would not have made them exempt to the charge.

If a scheme makes an unauthorised payment, both the scheme and the recipient will be subject to tax charges as follows:

- the person receiving the unauthorised payment will be taxed at 40% (and in some cases 55%) of the amount of the payment.
- the scheme making the payment will also have to pay tax of 40% of the unauthorised payment. This is called the scheme sanction charge. However, this is reduced to 15% if the person receiving the unauthorised payment has paid their tax charge to HMRC by the time HMRC come to issue the tax invoice to the scheme. To ensure the tax charge is reduced to 15%, the scheme can ask the member to sign a mandate authorising it to pay the member's tax charge and deducting the tax from the benefit paid.

Unauthorised payments must be reported to HMRC on the event report (Part 5, Chapter 2.2).

Scheme Pays – Annual Allowance charge

Where the value of a member's pension exceeds the applicable AA in that year, the member is taxed at the marginal rate of income tax on the excess - the AA charge. The reduction in the AA from 6 April 2011 and further reduction from 6 April 2014, along with the introduction of the MPAA, has meant that many more members are potentially subject to the AA charge. These charges could be significant and members affected may find it difficult to pay them out of their current income or savings.

HMRC have, therefore, introduced legislation requiring the member's pension scheme to settle the member's liability for this charge if requested, provided that the charge exceeds £2,000. This is known as 'scheme pays'. The scheme must reduce the member's benefits to reflect the charge paid.

A member wishing to make use of scheme pays must make an irrevocable election and send it to the scheme no later than the second 31 July following the end of the tax year to which the AA charge relates.

A scheme may also pay an annual allowance charge voluntarily on a member's behalf even though they are not obliged to do so under HMRC legislation, but the deadline for any voluntary payments is 31 January following the end of the tax year to which the charge relates.

Summary

Pension schemes must be registered with HMRC to qualify for tax privileged status. Contributions are eligible for tax relief if below the Annual Allowance. Up to 25% of the pension value can be taken as a tax- free lump sum and the rest is subject to Income Tax. However, any benefits that exceed the Lifetime Allowance are subject to a further tax charge.

Registered schemes are eligible for UK tax exemption on income from investments and capital gains arising from the disposal of assets where these arise from investment purposes.

Self-Test Questions

- What is the earliest age from when a pension can commence?
- How does salary sacrifice work and what are the benefits?
- How is a DB pension taken valued for the purposes of the Annual Allowance and the Lifetime Allowance?
- What is an unauthorised payment?

PART 2
INVESTMENT TYPES

OVERVIEW

In the following Chapters, we consider the types of investment available to pension schemes, their features and uses. As different asset types react differently to changing market conditions, pension schemes can reduce the volatility of their returns by investing in a diverse portfolio of asset types. Gains in one asset class can offset losses in another.

Pension schemes typically hold the majority of their assets in equities and bonds, so we discuss these in detail in Chapters 1 and 2. In Chapter 1, we look at both UK and overseas equities and how we can determine which equities represent better value than others. We cover the different types of bonds available and outline those factors that influence them, in Chapter 2.

In Chapter 3, we outline the various other asset classes that are available to pension schemes, including property, cash and commodities. These asset classes can offer attractive returns and provide diversification from the more typical asset classes.

Instead of holding an explicit asset, schemes can use derivatives and multi-asset strategies. Some schemes can hold insurance and many schemes might have particular benefits they might want to cover in this way. In Chapter 4 we outline these including pension contracts offered by life companies.

CHAPTER 1
Equities

INTRODUCTION

Companies issue shares (equities) to fund their business. To gain access to a large number of investors, companies may seek listing on a stock exchange, which allows their shares to trade in a stock market. Holders of shares in a company (known as shareholders) collectively own the company and are entitled to a number of shareholder rights.

Depending on the class of shares, shareholders may have the right to vote on key decisions and receive the payment of dividends as their share of the company's profits. However, there are two main reasons why most investors choose shares:
- The potential for share price appreciation, which produces capital gains and,
- The attraction, over the long term, of dividend income.

Demand for shares is likely to increase if the issuing company is expected to grow profits and dividends, although this may be reflected in a rise in the share price. However, share prices may fall, reducing the value of investment and, ultimately, if the company fails shareholders could lose all the money they invested.

Over the long term, equities have produced higher returns than investments in bonds or cash. However, they are also the most volatile of these asset classes. The biggest long-term influences on a company's share price are economic growth and the company's individual ability to generate good returns on capital invested. In the short term, events such as takeover bids, political risk and crowd psychology can result in share prices deviating from 'fair value'. However, the long-term historic direction of share prices has generally been upwards, although past performance is not a guide to the future.

1.1 TYPES OF EQUITIES

Ordinary Shares
Owners of ordinary shares generally have the right to vote in general meetings on various issues affecting the running of the company. Day-to-day management of the organisation lies with the firm's management team, but there are some issues that should be put to the shareholder vote.
These include mergers and takeovers, board appointments and raising new share capital.

A company's ordinary shares rank below all other forms of loan capital and share capital in a company's capital structure. In other words, all commitments to holders of debentures, loan stocks and preference shares must be met before ordinary shareholders become entitled to dividends or repayment of capital.

Preference Shares
Preference shares have various debt-like qualities. For example, preference shares do not usually carry the right to vote at a company's meetings. However, preference-share owners can expect a fixed rate dividend payment, which is usually based on a percentage of the nominal value of the share. For example, the holder of a 6% £1 preference share can expect to receive 6p per year. As the name suggests, dividends for preference shareholders are paid before ordinary shareholders (and they are also repaid before ordinary shares in the event of company liquidation). However, as with all dividends, payment is made at the discretion of the company directors.

Preference shares are often cumulative: if a dividend is not paid one year it will be rolled over until the next, and so on. If no dividend is paid for a certain period of time, preference shareholders are often subsequently afforded voting rights.
Other features of specific types of preference shares:

- Participating shares have a right to a proportion of profits if they exceed a certain level
- Those with conversion rights can be converted into ordinary shares at specified dates
- Some preference shares have redemption dates.

1.2 EQUITY MARKETS

UK and Overseas Markets
Within the UK market, there are various equity indices, measuring the fortunes of the stock market. The most commonly referenced index is the FTSE 100, which consists of the 100 largest companies by market capitalisation (total value placed by the stock market price on the shares in issue) quoted on the London Stock Exchange. These larger stocks are considered less risky
investments than the shares of smaller companies ('small caps'), which are generally less well scrutinised by equity analysts, less liquid and, given their size, more susceptible to business failure. The 'FTSE' name comes from when it was owned 50/50 by the Financial Times and the London Stock Exchange (LSE) and began 3 January 1984 with a base level of 1,000. Its highest closing value was 7,877.45 on 22 May 2018.

A company may not choose to list its shares in the country it is headquartered, primarily for the reason that the major stock exchanges (e.g. London, New York Tokyo) provide the company with access to a larger and wider base of investors. Shares may also be dual or multiple listed on two or more different exchanges.

Equities in developed countries are usually considered less risky than those in emerging markets and generally display less volatility because of the larger relative size of the market in more industrially developed countries as well as other factors. Meanwhile, investors should also be aware of the implications of currency fluctuations when investing in overseas equities.

Primary and Secondary Markets
Shares in publicly listed companies can be bought and sold on stock exchanges. The primary market is the market for new issues of shares that enable companies to raise new capital. This usually requires the approval of existing shareholders, as the new issue would dilute the value of their shareholding. The secondary market is where investors can buy and sell shares already in circulation.

The London Stock Exchange (LSE) is itself a publicly listed company, which provides a market place for shares to be traded. For the equity market to work efficiently, investors will only buy shares in the primary market if they can be assured that they can sell them on to other investors to realise their gains. Therefore, the secondary market is essentially a forum for the buying and selling of second-hand shares.

As well as running the 'main market' for shares with over 1300 of the world's largest companies from 60 different countries i.e. the LSE provides a marketplace for trading in the shares of newer and smaller companies. Known as AIM (Alternative Investment Market), this market has less stringent regulatory requirements than the main market for companies wishing to be listed on it.

10 of the largest stock exchanges listed in the World Federation of Exchanges in November 2018 were Bombay India ($2.1 trillion), Toronto Canada($2.1 trillion), Shenzhen China ($2.5 trillion), London UK ($3.8 trillion), Euronext Netherlands ($3.9 trillion), Hong Kong ($3.9 trillion), Shanghai ($4.0 trillion), Tokyo ($5.7 trillion), NASDAQ USA ($10.8 trillion which include the world's largest technology companies, and New York USA ($22.9 trillion).

1.3 NEW ISSUES AND UNDERWRITING

Companies that wish to raise capital by issuing shares in the primary market can issue shares in five ways:

- Offer for subscription: A company issues shares directly to the public. This is rare, as most companies do not have the expertise or resources to carry out such an operation.
- Offer for sale: An issuing house (often a broker) is appointed to manage the process, from advertising the shares to paying the proceeds back to the issuer (minus a fee).
- Placing: A company simply hands its shares to a broker, which then sells them to its clients. If more than one broker is used, this is known as an 'intermediaries offer'.
- Introduction: This is not designed to raise money for the issuing company, unlike the above methods, but involves bringing the shares already held by shareholders to the market place.
- Rights issue: A company with existing shares in issue may issue new shares to raise capital, giving existing shareholders right of first refusal ('pre-emption rights').

There are two approaches to pricing.

- **Fixed Price Offer**: The issuing house will establish a price for the stock based on similar shares that are already trading in the marketplace. Offer prices are often artificially low to ensure investor interest, given that an immediate rise in share price can be predicted.
- **Tender Offer**: Investors are required to state the price that they are willing to pay and the number of shares that they want to buy. These potential buyers are ranked in order of who is willing to pay the most and apportioned accordingly. The price will usually be set at the point on this list, moving down from the highest price offered, at which the offer is fully subscribed. As in the fixed price offer, the final 'strike' price will usually be below this level to facilitate an immediate uplift to the share price.

The issue process is lengthy and adverse market developments may occur during this period. Underwriting is a means of guaranteeing a minimum level of proceeds from a share issue. To protect itself the company issuing a share can pay a fee, known as underwriting commission, to financial institutions that are willing to 'underwrite' the issue. These institutions guarantee to take up any shortfall and to pay the agreed price. There is no limit to the number of underwriters who can participate in an underwriting syndicate.

1.4 EQUITY ANALYSIS

To assess whether the current share price is reasonable, investment professionals evaluate it against the issuing company's earnings prospects, dividend payments and assets base, often within the context of a particular industry group or market to which the company belongs.

However, there are a whole host of other factors that can influence a company's share price, as we mention briefly in the introduction.

Investment professionals use a variety of methods to value a share from the information they can readily access. The following methods are among the simplest and most common valuation techniques:

- **Return on invested capital:** profits divided by the amount of capital (equity and debt) required to generate the profit. A number that is high, and above the return available from a building society, may indicate a successful company that turns out to be a good investment.
- **Price to earnings ratio**: share price divided by historic or prospective earnings per share. A stock's price to earnings (P/E) ratio will be judged in relation to the ratios of other companies in the same type of business. If the ratio is higher than those of its peers, the stock could be overvalued, or it may be that its growth prospects are thought to be superior. Earnings forecasts are often used to value the current share price against anticipated earnings growth.

- **Dividend yield**: dividend per share divided by share price. This shows the return that the annual dividend per share represents in relation to the current share price. The higher the yield, the more attractively valued the stock, assuming that the dividend payment is sustainable.
- **Price to book ratio:** share price divided by net book value (shareholders' equity) per share. This compares the current share price with the company's break-up value.

Summary

Shareholders collectively own the company in which they have equity; and have certain voting rights on important issues affecting that company.

Investors primarily invest in equities for capital growth; and this is often supplemented by regular and growing dividends paid from company profits.

Equities have a high-risk profile, in that returns can be volatile and investors may not recoup the full sum that they have invested if the company performs poorly. However, over the long term, equities have historically delivered stronger returns than either bonds or cash investments.

Self Test Questions

- In the event of company liquidation, where do ordinary shareholders rank in terms of repayment?
- What factors should an investor consider when investing in overseas equities?
- What are the primary valuation techniques used to judge whether a company's shares may be overvalued relative to other stocks?

CHAPTER 2

Bonds

INTRODUCTION

Bonds, also referred to as fixed income or fixed interest securities, are a way for governments and companies to borrow money through the debt market. Bonds are considered a lower risk investment than equities, as they promise to pay a fixed income and to return capital on maturity. In this Chapter we look more closely at the terminology surrounding bonds, the factors affecting bond prices and yields, and the different types of bonds available.

2.1 BOND CHARACTERISTICS

What is a Bond?
Bonds are simply a type of IOU issued by governments and large corporations to borrow money. An investor hands over capital to the bond issuer for an agreed period. In return, the investor receives a specified rate of interest or 'coupon' over that period.

At the end of the period, the bond issuer repays the capital to the investor (this is also called the 'redemption payment'). Bonds can offer a steady and predictable income stream, as well as security of capital if held to maturity and there are no defaults by the issuer. Used in a portfolio, bonds can help offset the short-term volatility of shares, while still providing income.

Factors Affecting Bond Values
Although bonds typically pay out a fixed coupon over a known period of time and a fixed refund of the principal amount at maturity, the capital value of a bond changes during its lifetime as investors trade it. Factors affecting the capital value or price of a bond are:

- **Interest rates**: Both actual and expected changes in interest rates. If interest rates (on a deposit/saving account) rise or are expected to rise, the fixed coupons offered by bonds look less attractive. The market will then adjust the price of a bond so its yield looks fair compared to the rates of interest on other investments.
- **Inflation**: Both actual and expected changes in inflation. Inflation can erode the 'real' value of the fixed income on bonds. If inflation rises, bonds tend to fall in value to reflect this.
- **Economic outlook**: A strong economy tends to lead to higher interest rates and/or higher inflation. It also provides a more favourable backdrop for equities, which can reduce investor demand for bonds, and hence bond prices.
- **Credit environment**: Corporate bond issuers need to pay investors a higher yield than government issuers in order to compensate for the additional risks involved as there is a higher probability of a company defaulting on an interest payment or repayment of capital than a government). Corporate bond prices will fall if the issuer becomes less likely to be able to repay the capital and vice versa. Market fundamentals, such as corporate earnings and default rates, will also affect the price of a corporate bond. In a favourable credit environment, companies do not need to offer as much reward to investors than during periods when the risk of default is high. As corporate bond yields decline, their prices rise and vice versa.
- **Supply and demand**: A mismatch between supply and demand leads to price fluctuations. Future supply depends on government balances and corporate borrowing needs. Demand has recently been affected by pension schemes' needs for longer maturity bonds to match the duration profile of their liabilities.

Bond Yields and the Yield Curve
The return on a bond investment is typically measured by its yield. Specifically, the performance of a bond from purchase to its maturity is stated as its yield to maturity. This is the bond's internal rate of return, which takes into consideration all interest payments during the life of the bond and its maturity/redemption payment. The yield has an inverse relationship with the price of a bond: when a bond's price rises, its yield falls and when a bond's price falls, its yield rises. The total return on a bond consists of two components: the income return (the income generated by the bond holding) and the capital return (the gain or loss on the initial investment).

The following yield measures are widely used by bond investors:
- **Nominal yield**: Reflects the overall income generated by a bond as a proportion of its nominal value.
- **Income or running yield**: Reflects the overall income generated by a bond as a proportion of its current market value.
- **Redemption yield**: Also known as yield to maturity. Reflects the income generated as well as the capital loss or gain on the bond, if the bond is held to the maturity date.

The difference in yields across bonds of different maturities is reflected in the yield curve. Long maturity bonds usually yield more than short maturity bonds, as there is a greater risk of default and greater uncertainty over economic and inflationary developments over the longer time period. A normal yield curve would therefore slope upwards along the maturity spectrum. However, there are periods in bond markets where the yield curve can invert, with short-term yields exceeding long term yields. This can happen when the market anticipates a fall in interest rates in the medium to long term, but still prices in interest rate rises in the short term.

Duration
Duration is discussed in Part 3 in connection with interest rate risk. There are two interpretations of a bond's duration:
- Macaulay duration is a time measure with units in years.
- Modified duration is a derivative or price sensitivity and measures the percentage rate of change of price with respect to yield.

The longer the duration of a bond or bond portfolio, the more sensitive it is to changes in interest rates. When interest rates rise, the price of long duration bonds is likely to fall by more than that of short duration bonds and vice versa. Fund managers can use duration to make a bond portfolio more or less sensitive to effects of interest rates changes on bond prices. When interest rates are expected to rise and bond prices thus likely to fall, a fund manager is likely to reduce the duration of the bond portfolio. When interest rates are expected to fall and bond prices likely to rise, a fund manager is likely to extend the duration of the bond portfolio.

2.2 TYPES OF BONDS

Government Bonds – Sterling and Overseas
Government bonds, issued by the central governments of countries (such as UK gilts, US Treasuries, German Bund), are traditionally considered the 'safest' type of bond, as they are backed by government guarantees and there is a very low risk of default, except for financially unstable countries.

Bonds issued by supranational agencies, such as the World Bank or the European Investment Bank, are considered as safe as those issued by central governments.

Bonds are also issued by lower levels of government (provincial, state or local authorities) and government agencies (such as the US Federal Home Loan Mortgage Corporation, also known as Freddie Mac). However, these are generally not considered to be as safe as government bonds.

Index-linked Government Bonds
Governments issue both conventional bonds, with a fixed coupon, and index-linked bonds, where the coupon and the redemption payment are linked to a measure of inflation (such as the consumer price index (CPI) or retail price index (RPI) in the UK). This provides protection for the original investment against the effects of price inflation.

In response to growing demand from pension schemes for assets to match their inflation-linked liabilities, the range of maturity dates has been expanded in recent years, with ultra-long dated bonds of a 50-year maturity now available.

Corporate Bonds – Investment Grade
Corporate bonds are bonds issued by companies. They are sometimes referred to as ‘credits’. Corporate bonds carry a higher yield than most government issued bonds, as companies need to offer greater rewards to investors to compensate for the additional risk of default involved. However, a company’s bond is still less risky than its shares because if a company becomes insolvent, bondholders rank above shareholders as creditors.

Although less secure than gilts, most corporate bonds are rated by independent credit ratings agencies to give some measure of the level of security that they can find in a particular issue. The main rating agencies include Fitch Ratings, Moody’s and Standard & Poor’s. Corporate bonds with a high credit rating are called ‘investment grade’. The highest rating is AAA/Aaa (‘triple A’), which indicates that a company is viewed as financially very strong and highly unlikely to default on its payments to bondholders. The lowest rating within ‘investment grade’ is BBB/Baa.

High Yield – Non Investment Grade
High yield corporate bonds cover the higher risk segment of corporate bonds, in particular those rated as non-investment grade. This segment includes bonds rated BB/Ba and below. High yield issuers have to offer greater rewards than investment grade corporate bond issuers, due to the higher risk of default.

Emerging Market Debt
Emerging market debt includes bonds issued by governments and corporations of less developed countries. They tend to offer higher returns to compensate for the increased economic and political risks compared to developed countries. Some of the largest issuers in the emerging market debt segment are Brazil, Mexico and Russia.

2.3 NEW ISSUES AND UNDERWRITING

Government Bonds
In the UK, the Debt Management Office (DMO) (dmo.gov.uk), an executive agency of the Treasury, issues gilts using an auction process. Bids above £500,000 are made on a competitive basis, stating the amount and price. Competitive bids are ranked in descending order of price and bonds are sold to those whose competitive bids are at or above the lowest price the DMO is prepared to accept. Bids for less than £500,000 are made on a non-competitive basis. Successful non-competitive bids are accepted in full at the weighted average price at which competitive bids have been accepted. Overseas government bonds are usually also issued using an auction process, although the way auctions are conducted differ. The institutions responsible for issuing government bonds also differ by country. Some governments have a debt management office, while in other countries responsibility for issuance lies with the ministry of finance or with the central bank.

Corporate Bonds
Corporate bonds are usually issued through a placing, whereby a company appoints a lead manager who is responsible for negotiating the terms and conditions (e.g. coupon, maturity, what happens in the event of a default) and the price. New issues are usually priced by reference to a yield margin or spread over that of a gilt of the same maturity. The lead manager will often also choose an underwriter to guarantee the whole issue.

Summary
Bonds are considered a lower risk investment than equities, as they promise to pay a fixed income over the term of the bond and they also return capital on maturity. Governments, supranational agencies, and corporates issue bonds.

The capital value of a bond changes during its lifetime as investors trade it. Factors such as interest rates, inflation, and supply and demand lead to fluctuations in the capital value of bonds.

The capital and income return on a bond are captured by its redemption yield. Riskier bonds need to offer investors a higher level of income and therefore a higher yield, to compensate the investor for the higher risk of default.

Self Test Questions
- How do interest rates, inflation and supply and demand affect the capital value of bonds?
- What does a bond's yield reflect and how does it relate to a bond's price?
- Why do corporate bonds offer higher yields than government bonds?

CHAPTER 3
Other Asset Classes

INTRODUCTION

Trustees of pension schemes (or individuals in the case of their own pensions) need to achieve a satisfactory balance between risk and return when making decisions about their investments. Pension schemes will seek to achieve a more favourable risk/return trade-off by spreading their investments across a broad range of assets; this is known as diversification. Different asset types do not react in the same way to any particular set of economic and market conditions. Gains in one asset class can offset losses in another (and vice versa).

Although pension schemes typically hold the majority of their assets in equities and bonds, this Chapter gives an overview of a number of other asset classes used for diversification purposes: property, cash, currencies, private equity commodities and infrastructure.

3.1 PROPERTY

Property investments are 'bricks and mortar'. For UK pension schemes property investment allocations tend to mostly consist of exposure to UK orientated commercial property. European, global and residential funds are less common but are also available.

Although investors will naturally be more familiar with residential property, it is a very different asset class from commercial property, both in the way it behaves and the returns it generates. Pension scheme investments in residential property are less common but can offer additional diversification benefits.

Ways to Invest in Property
Pension schemes can invest both directly and indirectly in property. Direct investment tends to remain the preserve of larger schemes, since costs per unit are high. It may also be less liquid than an indirect approach.

Smaller schemes may find an indirect route more appropriate as buying and selling units can be easier and quicker than trading individual properties. Indirect investment can be achieved through:

- **Property shares**: Investing in the shares of a property company is a more liquid means of gaining proper exposure, since shares can be bought and sold easily. However, the performance of property shares tends to have a greater link to the performance of the equity market than a direct property investment. This is also true of investing in a fund of property shares.

- **Real Estate Investment Trusts "REITs"**: REITs were introduced in the UK at 1 January 2007.The key advantage of REITs, which can invest in both commercial and residential property, is that they are not liable for corporation tax. Property companies – or companies with significant property assets – can convert to REIT status, subject to meeting a number of requirements, in order to avoid paying corporation tax on the profits of property sales. However, a REIT must distribute 90% of its net profits to shareholders as a dividend, paying no more than 10% of its dividend to any one shareholder. To become a REIT, a company must be listed on a recognised exchange. The company must also pay an entry/conversion charge equating to 2% of the gross market value of its properties, which can be paid immediately or spread over four years. Offshore property companies also distribute income to investors gross of tax.

- **Unit trusts**: Unit trusts that invest directly in property tend to have a lower correlation to the stock market but may be less liquid. Investors pool money to buy properties and each unit represents an equal share of the underlying assets. As the value of the properties changes (after deduction of the relevant expenses for maintaining the property portfolio by the managers), so does the value of each unit.

- **Limited partnerships**: Investing through a limited partnership is an option, but these typically set minimum investment periods of several years.

Types of Commercial Property

The UK commercial property market is broadly divided into three main sectors: retail, offices and industrials:

- Retail: Retail is the largest of the three sectors. It includes not only shops and shopping centres, but also out- of-town developments and retail warehouses. The key driver of the sector's performance is consumer spending.
- Offices: The office sector includes standard offices and business parks and tends to be more cyclical than retail, since its performance is driven by the strength of the business environment, particularly in London.
- Industrials: With the trend towards outsourcing industrial production overseas, property used for manufacturing purposes accounts for a relatively small proportion of the industrial sector. Industrial property is increasingly used for logistics, storage, retail or quasi retail activity. As a result, drivers of the sector's returns are varied and include both the state of the manufacturing sector and retail activity.

Attractions of Commercial Property

The main component of overall returns of commercial property has been capital growth. In addition to the potential for capital growth, of which there are no guarantees, commercial property investment offers other attractions:

- **Regular income**: An investment in property provides regular income, achieved through rents received from tenants. Rent is usually received exclusive of rates, insurance and repairs, all of which are paid for by the tenant. Since most leases allow upward only rental reviews, there is potential for income growth.
- **Security**: UK commercial property leases tend to be long term, typically lasting ten years or more, providing a high degree of income visibility and security, regardless of market conditions. Property also has an advantage over both equities and bonds in that, if a tenant fails financially, the investor will still own the property, which he/she can sell or re-let. In the case of equities and bonds, the investor can lose everything if the company fails
- **Diversification benefits**: Commercial property returns have historically had a low correlation with return from equities and bonds, since the asset class does not necessarily react to market or economic conditions in the same way. Therefore, it offers a means to increase diversification within a balanced portfolio. The asset class itself offers significant scope for diversification.
- **Equity and bond characteristics**: Property has characteristics in common with both equities and bonds. Equity characteristics include the expected growth in capital value which can be linked to economic growth and an income stream which can sometimes be linked to inflation. Bond characteristics include a stable rental income, a high yield and lower volatility than many riskier assets.

Risks and Other Factors

While the potential benefits are compelling, there are naturally a number of risks and other factors that investors need to consider when considering commercial property:

- **Liquidity constraints**: commercial property is a relatively illiquid investment.
- **Costs**: Relative to other asset classes the related expenses for property investments are high. Such expenses include high entry and exit costs as well as ongoing management costs and maintenance and refurbishment costs.
- **Management and maintenance:** Actively managing commercial property requires specialist skills.
- **Economic influences**: Commercial property operates in a cyclical market

- **Valuation**: There are no daily listings of market prices for properties, merely expert opinions as to the likely value of certain standardised types of property
- **Government intervention**: The Government's tax policy on rental income will affect the overall value of property investment. Other factors, such as projects to build motorways or high-speed railway lines, may have a bearing on the value of a property.
- **Overseas property**: Practices and traditions in other countries can be quite different from the UK and local advice should always be sought when considering an overseas property purchase or sale.

Property Management
It is advisable for a pension scheme to seek specialist advice when investing in property and the two most common practices followed are to appoint chartered surveyors or specialist property investment managers.

For the largest pension schemes, the economies of scale are such that they can afford to employ their own individual surveyors to supervise this work and to be responsible for all investment management.

3.2 CASH

Cash is a suitable investment for those looking for a secure, short-term home for their capital. In light of the low risk profile of cash investments, the returns are also lower than most other investments.

Future returns from cash are highly correlated to interest rates set by the relevant central bank. The pricing mechanism through the banking system generally results in short term deposit rates that are close to, and track, the official rate.

Beyond short-term deposits, there are a number of other money market instruments for investors seeking liquidity and security. Typical investments may include Certificates of Deposit, Commercial Paper and Treasury Bills. These financial instruments pay interest in a variety of ways, which we explain below.

Like fixed income products, rates of return on cash investments will usually vary depending on the maturity of the instrument (how long your money is tied up) and the credit rating of the issuer.

Money Market Instruments
- **Treasury bills**: T-bills in the UK are promissory notes issued by the government, pledging to repay a set sum of money at a specified date, usually not more than three months in the future. Issued through a weekly auction, T-bills trade at a discount to par (their face value). For example, an investor might pay £9,500 for a £10,000 T-bill. In other words, rather than paying a coupon or interest, the difference between the purchase price and the face value represents the yield. The minimum size of a trade is conventionally £25,000.
- **Commercial paper**: Companies with high credit ratings can issue short-term debt securities that are very similar to T-bills and are known as commercial paper. With a usual period to maturity of up to 270 days, commercial paper can be either discounted or interest bearing and is generally held to maturity.
- **Certificates of deposit**: A certificate of deposit (CD) is an interest-bearing savings certificate. Normally with a period to maturity of one year or less, CDs have a fixed interest rate, which is paid on maturity. CDs are usually issued by highly rated banks and other financial organisations and can be traded. The smallest denomination CD is usually £100,000.
- **Floating rate notes**: Floating rate notes (FRNs) are debt securities that pay a variable rate of interest. These instruments may be attractive to investors as they offer protection against a rise in interest rates. A FRN usually pays coupons (interest) on a quarterly basis and may include a spread (an amount of interest above the reference rate) over the money market index that it tracks, for example three month LIBOR. The interest rate is reset periodically, often every six months, rather than tracking its index on a daily basis. Some FRNs have maximum and minimum coupon limits.

Cash Management
Cash management techniques for companies and pension schemes have developed significantly over the past decade. While it may still be appropriate in many cases simply to make short-term deposits, this has drawbacks. The level of interest rates is not always particularly favourable and inflation is constantly eroding the value of the investment. If you are willing to commit to a fixed term deposit, the rate will improve but the immediate access to your funds disappears.

Nonetheless, treasurers need ready access to cash to meet everyday business running costs, as well as one off or more unexpected calls for funds. Meanwhile, pension schemes and insurance companies have to be prepared for regular and irregular outgoings, such as redemptions or insurance pay-outs. This need has seen the development of money market funds that, in turn, have evolved into distinct products designed to meet clients' liquidity needs.

Liquidity funds essentially offer investors the benefits of security, liquidity, competitive returns and operational simplicity. The first European liquidity funds were launched in the mid-1990s and were developed in line with successful US liquidity funds. The combination of same day access, competitive returns, AAA credit rating and straightforward operation has resulted in liquidity funds becoming an accepted home for short-term cash. While liquidity funds can provide an attractive alternative to bank deposits for short-term cash, they do not always offer a good match for all of a cash investor's requirements. Many treasurers are managing cash to a three to six month benchmark and have cash that is effectively long term and will be sitting on the balance sheet for the foreseeable future. They would like to achieve higher returns (over the medium term) from this cash, while still keeping a focus on the preservation of capital and liquidity.

These requirements have traditionally been met by treasurers investing directly in money market securities and term deposits. This approach has the disadvantage of being relatively illiquid (as cash is tied up in term deposits) and potentially costly if cash is needed unexpectedly at short notice. As a result, asset managers have been developing enhanced cash funds, which aim to better match the investor's requirements for longer-term cash.

One of the key differences between liquidity funds and enhanced cash funds is that liquidity funds have a constant net asset value, but most enhanced cash funds have to be marked to market daily (because of their longer weighted average maturity).This, combined with their longer duration and potentially greater exposure to credit, therefore results in a greater volatility in returns both daily and over longer periods. This may cause problems for a treasurer if he is tracking returns against a benchmark on a daily or even monthly basis. Adverse market conditions may also cause an enhanced cash fund to underperform a liquidity fund in the short term.

Despite these potential drawbacks, enhanced cash funds offer some major benefits. These include:
- The ability to benefit from longer duration while remaining relatively liquid
- The opportunity to benefit from investment manager expertise
- The economies of scale that come from being part of a pooled fund.

3.3 CURRENCY

Currency risk has become increasingly relevant as investors seek to benefit from diversifying their portfolios. In the same way that pension schemes have begun to invest in alternative asset classes, such as property, private equity and hedge funds, so too have they expanded their equity and bond exposure beyond the UK market. While this diversification makes a good deal of sense in terms of general risk reduction, the risk of adverse currency movements is accentuated.

If an investor wants exposure to the US equities, for all intents and purposes he must buy those stocks in US dollars. The implications of this are clear if you compare the returns from a benchmark index such as the S&P 500 (stock market index of Standard & Poor's 500 Index of 500 largest USA publicly traded companies) in local currency terms against the returns in sterling during a period of exchange rate volatility. For example, if the S&P 500 index rises 10% over the course of a year, but the dollar weakens against sterling by the same margin, the net result for UK investors is a 0% return.

Currency Management Styles
Broadly speaking, currency risk is managed either on an active or passive basis.

Passive currency management is more often referred to as hedging. This strategy does not seek to enhance returns from the portfolio but simply aims to remove the risk in holding securities based in another currency. In effect, it removes the uncertainty concerning which direction exchange rates might move. Hedging is usually achieved through using derivatives, such as a forward, a currency option or a currency swap.

Active currency management actually seeks to profit from trading in currencies by exploiting changes in exchange rates. Uniquely among financial markets, this puts it at odds with the majority of participants in the market who do not seek a profit through buying and selling currency. Among the biggest traders of foreign currency are central banks, which may enter the market to limit volatility in the exchange rate. Other participants, such as tourists or companies and institutional investors hedging their currency risk, are also not seeking to generate profits.

- **Active management techniques**: Managers adopting this strategy use a number of techniques to predict the course of currency movements. They may attempt to determine the economic fair value of a currency and exploit this by selling those currencies that appear overvalued and buying those that appear cheap. Alternatively, analysis of past currency movements can be made to predict future patterns. Of course, interest rates have a huge bearing on currency movements and the 'carry trade' supports currencies in countries with higher interest rates. The 'carry trade' describes the process by which money is borrowed in currencies where interest rates are low and invested in assets, such as bonds, in a currency where interest rates are relatively high. Derivatives will also be used along the same lines as in passive currency management, but possibly in a more aggressive way.

- **Currency overlay**: The phrase 'currency overlay' means that the management of currency is carried out separately from the rest of the portfolio through the use of derivatives. Overlays are generally utilised by institutional investors, such as pension schemes. The currency overlay is often made up of positions based on the existing assets in the main portfolio but this is not always the case. An overlay may also be managed actively or passively, and may be managed by a different team or company to that which manages the main portfolio.

3.4 PRIVATE EQUITY

Private equity investment involves investing in unquoted companies, and also includes acquiring more mature businesses (buy outs) and financing debt. Private debt is another type of investment, which you may hear mentioned and is similar to private equity.

Since private equity (or venture capital) investment requires specialised skills in such matters as assessing start-up businesses, helping develop these businesses and managing/restructuring mature businesses, investors usually make indirect investments through private equity (including venture capital) funds or funds of private equity funds. However, wealthy individuals – often entrepreneurs, friends and relatives – might buy shares in private companies.

Private equity investments include:

Venture capital: investments in unquoted companies with undeveloped products or marketing, aiming to make profits by selling their holdings into the stock market through initial public offerings. Stock markets usually require companies to satisfy certain size and earnings criteria in order to grant listing and therefore, venture capital firms help the management of unquoted companies they invest in to grow their business to achieve these criteria.

There are three stages of these developing companies.
1. Seed stage: providing financing for research and assessment of an initial business concept before start-up.
2. Start-up stage: provides financing for product development and initial marketing for companies that have not sold their products commercially and so have not yet been profitable.
3. Expansion stage: finance provided for business growth for companies that are profitable or breaking even.

- **Replacement capital**: where an investor purchases shares from another investor to reduce the debt level via refinancing.
- **Buy out**: where an investor acquires a majority of shares in mature companies, subsidiaries or business units.
- **Special situation**: includes investing in assets such as distressed debt, project finance and other one-time opportunities. ‘Mezzanine debt financing’ invests in subordinated debt.
- Investing in private equity tends to offer the investor the opportunity to generate higher absolute returns, while improving portfolio diversification. Managers of private equity funds seek absolute returns and are highly motivated towards achieving net cash returns to investors.

3.5 COMMODITIES

Commodities are increasingly becoming a part of an institutional investment portfolio, such as that of a pension scheme. As well as providing potentially attractive returns for investors, commodity prices are largely uncorrelated to those of other investments, facilitating an extra layer of diversification in a portfolio.

Commodities can be broken down into two main groups: ‘hard’ and ‘soft’. Hard commodities include precious metals, industrial metals, oil and coal. Soft commodities refer to agricultural produce, such as wheat, coffee, sugar and cotton.

Investment in these assets is rarely done directly, given the impracticalities of taking delivery of such goods and selling them on. Instead, most money is invested through commodity derivatives, particularly in the futures market.

Commodity prices are broadly determined by supply and demand pressures and can be volatile and hard to predict. Soft commodity prices, for example, can be severely affected by adverse weather or other climatic influences. Meanwhile, oil prices are affected by global economic activity, and perceptions of geopolitical concerns, while gold is linked to inflation, political uncertainty and the activities of central banks in relation to their reserves.

3.6 INFRASTRUCTURE

Infrastructure investment provides, or facilitates, the provision of essential services. These services support economic growth, increase productivity, and underpin society. The growing reliance on private sector finance by governments faced with austerity and increased budgetary constraints has presented increased investment opportunities in this asset class. The main attractions for Trustees are the long-term stable cash flows and typically lower volatility than many other asset classes. Infrastructure has both bond-like and equity-like characteristics with a vast array of differing investment opportunities.

Ways to invest in infrastructure
Infrastructure investment was traditionally undertaken via an equity or debt stake in a project or business that owned, operated, and/ or developed such assets. Typically, only larger pension schemes were able to take such stakes on a direct basis. However, increasing interest and understanding of the benefits have given rise to many developments that have significantly improved the opportunity available to those looking to invest smaller amounts of capital.

Many trustees now utilise the indirect market route to benefit from the experience and expertise offered by infrastructure investment managers who invest either directly or indirectly. For example, a fund could take a number of direct stakes in projects, and thereby provide investors direct exposure. However, funds can also take indirect exposure and invest in underlying specialist infrastructure funds (known as ‘fund of funds’). Both methods tend not to be particularly liquid with funds valued and priced on a one to three- month basis.

Another method to gain direct access is to purchase shares in a listed infrastructure company, which invests in underlying infrastructure projects and is listed on a stock exchange. The company’s share price will move based on the underlying demand and supply for its shares, which will lead the share price to trade at a premium or a discount to the ongoing net asset value (‘NAV’) of the company. The NAV is based on an independent valuation of all the assets the company has acquired, less the value of its liabilities. Investors will be able to acquire shares on the primary market when the company issues more shares to purchase more infrastructure assets, or on the secondary market by exchanging with sellers. Such a structure offers daily liquidity.

Characteristics of infrastructure investment
Infrastructure can broadly be categorised into two distinct types: Economic and Social.

Economic infrastructure facilitates the operation of an economy and stimulates growth. It is often privately owned (though sometimes operates with public concessions or even in partnership), is highly-regulated and operates as monopolies. Sectors include transport, utilities, communication and renewable energy.

Social infrastructure refers to public assets that benefit society and are typically financed by the private sector then leased and operated by the public sector. Historically, social infrastructure has been financed in the UK through private finance initiatives (often referred to as ‘PFI’) which was developed as a way of creating public- private partnerships.

Summary
Although equities, bonds, and property remain the core components of most pension schemes, many schemes have chosen to invest a proportion of their funds in alternative assets such as commodities, private equity and types of hedge fund. These asset classes can provide attractive returns in their own right and offer diversification benefits.

Property provides both an income, derived from rental payments, and the possibility of capital growth. Investment can be made both directly in bricks and mortar and indirectly through the shares of property companies.

Cash investments make a useful short term home for capital and can be utilised to manage funds that cannot be tied up for an extended period of time. The level of interest rates set by the Bank of England largely dictates the returns from cash investments.

Private equity (also known as venture capital) groups raise money from private investors in order to invest in or acquire private or publicly listed companies. This is generally done with a view to improving operating performance (and therefore the value of the target companies) and eventually selling them on at a profit.

Commodities are raw materials, often in their pre-production state, such as crude oil. Investment in such assets is usually made through derivatives, given their cumbersome physical attributes. Infrastructure investment provides or facilitates the provision of essential services. As an investment it provides long-term stable cash flows with volatility that is typically lower than many other asset classes.

Self Test Questions

- What are the two key constraints in terms of investing directly in property as opposed to investing in the equity of property companies?
- Rank the following asset classes in terms of their absolute risk characteristics, from lowest risk profile to highest: property, equities, bonds, cash.
- Give an example of a ‘soft’ commodity?
- What is currency overlay?

CHAPTER 4

Derivatives and Multi Asset Classes

INTRODUCTION

The previous Chapters have looked at single asset classes. In this Chapter we consider investment strategies which involve multiple asset classes, and also derivatives, which are rather different in characteristic, as explained below.

4.1 DERIVATIVES

Derivatives are a type of financial instrument that derive their value from the price of an underlying asset, such as an interest rate, equity, commodity or currency. Instead of having to buy or sell the underlying asset, a fund manager can buy or sell a derivative linked to the underlying asset, often at a lower cost, and still take advantage of movements in the underlying asset. Derivatives are not only linked to single assets. They also provide exposure to a market or sector.

Many different types of derivatives exist. Common ones are:

Futures and Forwards
Futures are contracts where a buyer agrees with a seller to purchase an asset at a specified date in the future, at a price agreed upon today. Futures are standardised products, traded on an exchange.

Forwards are contracts similar to futures, but they are customisable and traded 'over the counter' (OTC) i.e. through private agreements rather than via an exchange.

Options
Options are a type of derivative that gives the buyer the right, but not the obligation, to buy (a 'call' option) or sell (a 'put' option) an underlying asset at an agreed price on a specified future date.

Swaps
Swaps are contractual agreements where two parties agree to exchange (swap) either single payments or a series of payments in the future. While some swaps are highly complex, the vast majority of contracts involve the swap of a fixed payment for a floating series of payments. Swap contracts can be tailor made to each investor's specific requirements. They are not traded on an exchange, but OTC, like forwards. Financial organisations, such as banks and other money market institutions, are the main operators in the swaps market.

Interest rate and inflation swaps were discussed in Part 3, Chapter 3.4 in relation to Liability Driven Investment. The following further types of swap are widely used (noting inflation swap is a type of index swap):

- **Index swaps**: This type of swap involves the exchange of one index return for another index return or for a floating interest rate. The buyer pays the return on a money market deposit in exchange for the total return on an index, such as the FTSE 100.Total return swaps are a type of index swap.
- **Currency swaps**: Counterparties exchange a pre-agreed amount of foreign currency now and re-exchange them at a certain specified date in the future.
- **Credit default swaps (CDS)**: A type of swap whereby one party buys protection ('insurance') from another party against the default of a third party, usually a corporate bond issuer(s). The seller of protection is in a very similar position to an investor in the underlying bond – they will receive regular interest payments but will be left with a bond that could be worth substantially less than face value if the corporate issuer defaults.

Contracts for Difference
A contract for difference (or CFD) is a contract between two parties, whereby the seller agrees to pay the buyer the difference between the value of an asset now and its value at the contract expiry. This enables fund managers to benefit from changes in the price of an asset without actually owning it.

4.2 ABSOLUTE RETURN FUNDS

The inherent volatility of equities has led to increasing investor demand for funds with more predictable returns. Investors wanted an investment vehicle that could generate consistent, positive returns, regardless of whether the underlying markets were rising or falling, and one that could do so at lower levels of risk than traditional funds. These risk/return characteristics are those typically offered by absolute return funds.

An absolute return fund aims to generate positive returns in all market conditions. This contrasts with a traditional equity fund, which seeks to generate returns relative to the equity market. The concept behind absolute return funds is that they seek to mitigate these fluctuations and so aim to give investors a clearer idea of what absolute returns they might expect.

Of course, merely generating a positive absolute return is not enough to entice most investors. Therefore, an absolute return fund will often have an annual target that it aims to achieve, or exceed, which is typically set at 2-4% above the cash rate, or above inflation. The cash rate in this case is usually measured by LIBID, the wholesale deposit rate.

Absolute Return versus Relative Return
On the surface, it is the focus on a target absolute return that distinguishes absolute return funds from their traditional – or relative return – peers. Whereas the former aims to achieve a defined target on an annual basis, the objective of the latter is to outperform a benchmark index that most closely encapsulates their investment universe. For example, a fund that invests in UK equities will, usually, aim to match, or beat, the returns from the FTSE All Share index. This traditional approach means investors may experience either positive or negative returns, but this is largely dependent on the direction of the markets. While outperforming the market can deliver strong returns when equities are rising, outperforming in a falling market may seem a fairly meaningless measure of success for an investor.

Absolute return funds, however, generally aim to offer a positive return and some form of capital (or downside) protection.

How Absolute Return funds aim to achieve their objective
Absolute return funds come in various guises. Some are based largely on fixed income assets, while others mainly invest in equities and equity derivatives. There are also those that use asset allocation methods to achieve their goals. This may be done through the use of alternative assets, including currencies.

To produce positive returns in all market conditions, the fund manager has to have the flexibility to use investment techniques beyond those used by traditional 'long-only' fund managers. Long- only funds are those that invest in assets on the basis that they will go up in value. Absolute return funds may allow managers to benefit from short selling, which in effect means positioning to benefit from a fall in value of a particular asset, asset class, sector, market, etc.

The use of derivatives may imply greater risk in the eyes of some investors, but these instruments are often used to hedge certain risks out of portfolios for example, adverse currency movements when investing in overseas assets. At the same time, derivatives can be used to add value to a fund if a particular currency, asset, sector or market falls in value. Absolute return funds often take both long and short positions in order to isolate risk and maximise returns.

For example, if a portfolio has exposure to equities, the fund manager may seek to hedge some of this risk by taking a short position in a particular market where he feels that stocks are overvalued and liable to fall. If equities around the world rise, the fund benefits from its long equity positions but suffers a limited negative impact from the short position. If equities fall, the short will give a profit, and will offset some of the losses experienced from the long positions. A combination of long/short positions gives the fund manager greatly increased flexibility, as undervalued stocks may be bought in expectation of a price rise, but those that are thought to be overpriced can be sold short. A long-only fund manager, by comparison, has fewer tools at his disposal and is exposed to a falling equity market.

Another potential benefit of using derivatives is that they can reduce the costs of trading in the portfolio. For example, if a fund manager wants exposure to a particular equity sector he can purchase one derivative, such as a future, rather than buying a basket of stocks. This in turn means that tactical asset allocation changes can be implemented swiftly, maximising any potential gains derived from this portfolio rebalancing.

We consider below three strategies commonly adopted – multi-asset/asset allocation, long/short and equity market neutral.

Multi-asset or asset allocation approach
Investors have long appreciated that diversifying a portfolio helps spread the risks associated with any one class of investment. Funds that provide diversified sources of return are often called diversified growth funds.

Multi-asset or asset allocation funds seek to meet their objective by investing in a broad range of assets. In addition to the traditional asset classes, such as equities, bonds and cash, these products may invest from time to time, or on a structural, sustained basis, in commodities, property, currencies and structured products – often using funds or vehicles managed by other providers.

Investment risk may be further diversified through varying investment across a number of regions. The manager is able to achieve a positive return in all market backdrops because the returns from these assets have a low correlation or are completely uncorrelated. This means the prices of these underlying assets do not move in tandem, for example a sell-off in equities might prompt a rally in bond prices, as investors seek safer investments. Meanwhile, commodity prices are linked to completely different supply and demand pressures from equity, bond or property prices.

Asset allocation funds tend to have unconstrained investment strategies, meaning that managers have complete freedom to move between asset classes to achieve the optimal blend of investments for different market conditions. Managers depend on a combination of market returns, asset allocation and management skill/timing to achieve their objective. These funds often have a predominantly long exposure, meaning that they are exposed to the direction of the underlying markets.

Long/short funds
Traditionally, fund management has been based on identifying assets that are expected to appreciate in value, thereby realising a gain for the investor. However, as financial markets have developed, investors have devised new ways of incorporating disfavoured stocks into an investment strategy, either as a means of generating profit or hedging risk. This technique is generally known as ‘short-selling’ or ‘shorting’, whereby an investor can use various techniques to benefit from a fall in an asset’s value. A long/short fund combines long and short positions individual companies’ securities and thereby seeks to exploit both rises and falls in asset prices.

There are various ways to achieve a short position. The purest form of shorting is to borrow a security from counterparty, such as a broker, index fund, or custodian, and sell it to a third party with an agreement to buy it back at a later date and return it to the counterparty. Thereby, a profit is made if the stock falls in value from the point when it is sold to the point when it is bought back again. Of course, there is a risk that the reverse happens and the fund manager has to buy the stock back at a greater price than he sold it. The possible loss is limitless, whereas the maximum gain will be the difference between the sale price and zero (if the share becomes worthless). However, there are various controls a fund manager can put in place to manage such risks (see below).

One such strategy is to invest in a balanced combination of long and short positions, which are known as pair trades.

For example, a fund manager may go long in Pharmaceutical Stock A, which appears undervalued or has a catalyst for positive share price momentum. At the same time, he might short Pharmaceutical Stock B, which has a valuation that looks stretched. Alternatively, the fund manager may take a long position in Stock A but hedge some of this risk by buying a derivative (such as a future or swap) that will deliver a profit if the pharmaceutical sector, or perhaps the FTSE 100 index, falls.

The net result of these types of trade means that the effects of general market movements are minimised, while the performance of one stock relative to another (or the sector/index) is enhanced. This type of strategy allows for greater investment precision, by isolating solely the risk that a fund manager actually wants.

A directional long/short strategy involves taking a net long or short position in a market, reflecting the manager's view on which direction that market will move. A net long position (whereby the manager holds more long positions than short positions overall) benefits from a market rise, while a net short position (where more short positions are held than long) will benefit from a decline.

Equity market-neutral funds
In contrast to directional strategies, equity market neutral funds are relatively low risk, given that they seek to neutralise as much market risk as possible.

This type of fund is particularly suitable for investors, for example pension funds, who want a relatively low volatility way of reaching their investment targets, while maintaining some equity risk.

4.3 INSURANCE POLICIES

The with profits approach seeks to provide a good level of return from a mixed pool of assets, but without the investor being exposed to the volatility associated with direct investment. With profits policies aim to smooth the returns over the life of the policy by keeping back a reserve in good years and providing a bonus in weaker years.

Traditionally, with profits policies that were used to fund defined benefit (DB) schemes started from the premise that in return for a premium, a given amount of either pension or cash was guaranteed. A policy that offers a guaranteed pension is called a with profits deferred annuity.

That was followed by the unitised with-profits approach, which sought to emulate the features of unitised funds. It enables contributions and investment terms to be varied. There are a number of methods of allocating values to individual investors. In principle, they all increase the value of the with profits fund unit by any guaranteed interest under the contract and bonuses as they are declared.

Irrespective of how the approach is applied by a particular insurance company, there are certain fundamental objectives common to all with profits investments:

- Contributions, less expenses, paid by all with profits investors are accumulated in a single investment fund
- The fund is managed on a basis common to all investors
- The asset mix of the with-profits fund will be determined by the views of the investment manager and will vary over time. A proportion of the assets will generally be invested in gilts (government bonds) in order to match any guarantees given
- The returns achieved by the fund will be distributed to investors by way of bonuses
- These have the effect of smoothing out the extremes of performance of the underlying assets. The bonuses declared every year, often known as reversionary or regular bonuses, have the effect of increasing the guaranteed amount within the policy and are underwritten by the insurance company. These are designed to provide steady growth in the fund over a period of time.

A final share of profits or terminal bonus is often added when benefits are due to be paid under the contract. The amount of terminal bonus can be varied by the provider at any time and is not guaranteed.

In setting rates of reversionary and terminal bonuses, the insurer has to strike a balance between investing in assets with the potential for higher returns and achieving the promised level of guarantees. If a high proportion of the relevant assets are required to provide the guaranteed levels of benefits, this could lower investment returns and consequently lower pay outs to policyholders.

Opponents of with profits investments would point out that this approach provides a costly form of smoothing whereby the guarantees only apply automatically at a member's normal retirement date or prior death. A member may need to withdraw money from the fund before the normal retirement date, for example on early retirement or transfer to another scheme. The price of the units to be sold may be different from the market value of the member's share of the investments in the fund at that time. If the price is higher than the share of the investments, a market value reduction is likely to be applied. This is so the member does not take more than his or her fair share of the fund and penalise those that remain. The reduction is likely to be applied following a large or sustained fall in stock markets or after a period where investment returns are regularly below the level the insurer anticipated.

Under a deposit administration contract (also known as cash accumulation), contributions, net of expense charges, are accumulated in a cash pool to which interest and usually bonuses are added periodically. A major advantage of deposit administration type policies is that the insurer is spared the complicated administration process involving the application of premiums to individual scheme members. The number of deposit administration contracts has declined on the back of stricter pension scheme regulation, with its increased focus on scheme specific funding requirements.

Summary
Derivatives derive their value from the underlying asset classes and can be an inexpensive and efficient way of gaining exposure to a particular asset class, without having to own the underlying asset. Derivatives are often used for hedging purposes – taking some of the risk or uncertainty out of a particular investment – as well as to augment returns.

Absolute return funds aim to deliver positive returns on an annual basis, regardless of the market backdrop. This contrasts with relative return funds, which simply aim to outperform a benchmark, such as the FTSE All Share index, whether this measure is rising or falling. Absolute return funds generally aim to achieve these returns through diversification or through derivatives.

With profits policies aim to smooth the returns over the life of the policy by keeping back a reserve in good years and providing a bonus in weaker years.

Under a deposit administration contract (also known as cash accumulation), contributions are accumulated in a cash pool to which interest and usually bonuses are added periodically. The proceeds are applied to provide individual pensions and other benefits as they become due.

A managed fund is an investment contract by means of which an insurance company offers participation in one or more pooled funds.

Self Test Questions
- What is a swap?
- What is the objective of an absolute return fund and how is this achieved?
- What are the fundamental objectives of with profit investments?

PART 3

DEFINED BENEFIT FINANCE AND INVESTMENT

OVERVIEW

In this Part we consider how defined benefit (DB) pensions are financed and invested.

In Chapter 1 we firstly consider the importance of employer covenant, which represents the ability of the sponsoring employer to provide sufficient contributions to meet all the benefit as they fall due. It is essential for trustees to form an objective assessment of employer covenant, to understand the risks and allow them to take mitigating action if necessary.

Schemes are soon to be required to adopt a Long Term Objective (LTO) which will make them far less dependent on employer covenant in the longer-term, through a combination of funding and adopting a low level of investment risk. Actuarial valuations determine employer contributions over the shorter-term, aiming to achieve full funding relative to the so-called 'technical provisions' (TPs), but with the longer-term aim of achieving the LTO.

Chapter 2 considers the investment and mortality risks. Interest rate and inflation risks are regarded as being unrewarded and reflect the risk that the sensitivity of the scheme's assets to movements in interest rates and inflation respectively is different to that of the liabilities. There is no expectation of being rewarded for taking such risks, and so it is logical to mitigate them, which is the purpose of Liability Driven Investment (LDI).

Assets which do not aim to match movements in the value of liabilities are held with the expectation of achieving higher investment returns over the medium to longer-term. These include equities and other so-called 'growth' assets. There is always a risk that the assets will not perform as expected, especially in the short-term, but this is a risk many schemes take because there is an expected reward by way of improved investment performance and scheme funding in the longer term. We explain how an LDI investment strategy does not preclude the holding of growth assets, when LDI is implemented using derivative instruments such as swaps.

We consider how Cashflow Driven Investment (CDI) is becoming more important as schemes mature. This involves matching future benefit payments with contractual income derived from a scheme's assets. CDI is often accompanied by LDI, to deal with the cashflows which cannot be matched, mainly at the longer durations.

Longevity swaps enable a scheme to hedge the mortality risk, i.e. the risk that members will live longer than expected.

Finally, insurance buy-ins and buy-outs enable a scheme to insure all or part of the scheme's liabilities.

In Chapter 3 we consider investment strategy. This involves setting the risk budget, i.e. how much investment risk the scheme is prepared to take, having regard for the employer covenant.

The next step is to consider how to 'spend' the risk budget. An efficient investment strategy is one which maximises the expected return for a given level of risk. A strategic asset allocation is thereby derived, which is the trustees' chosen asset allocation.

In implementing the investment strategy, the trustees can set a tactical asset allocation, which permits the selected investment managers to deviate away from the strategic position to a specified degree if they feel that is appropriate. Automated de-risking strategies can be agreed, to help meet the scheme's LTO.

CHAPTER 1

Funding Risk and Strategy

INTRODUCTION

DB schemes rely on the sponsoring employer to make sufficient contributions to allow scheme benefits to be paid over time, which is the essence of employer covenant. With most DB schemes closed to future accrual, along with changes in legislation, schemes are gradually reducing their reliance on employer covenant with the aim of being substantially self-sufficient – the Long Term Objective (LTO).

Actuarial valuations determine the contributions payable. These will reflect the strength of the employer covenant and the investment strategy adopted, while aiming to achieve the LTO over the longer-term.

1.1 EMPLOYER COVENANT

Most DB schemes are funded, with monies being set aside under trust, separated from the sponsoring employer. Ideally, at any given date there will be enough assets in the scheme to provide for the benefits promised under the scheme rules that have accrued prior to that date. If there are insufficient assets, otherwise known as a deficit or shortfall, then the scheme is reliant on the employer to make up the shortfall by way of future contributions.

This presents a risk to the scheme and lies behind the concept of employer covenant, which the Pensions Regulator (TPR) defines as the ability and legal obligation to provide for the pension benefits under the scheme. TPR are responsible for the supervision of the funding of DB schemes, which is discussed further in Part 5, Chapter 1.3.

The reference to legal obligation is important, because many sponsoring employers are part of complex organisations, which may have changed over the years. Identifying which companies within a group are legally responsible for funding the scheme is essential. There might also be companies that are no longer part of the group but which have retained responsibility for some scheme members. TPR expects trustees to carry out an audit to ensure they fully understand where the legal obligation lies.

Most DB schemes currently have funding shortfalls and therefore rely on the employer covenant to pay the required contributions in the future to achieve full funding. For this reason, employer covenant has been a key focus in scheme funding although, as discussed in Chapter 1.2, TPR expects that schemes should anticipate a gradual reduction in reliance on employer covenant in the future.

Trustees are expected to assess the strength of employer covenant and to monitor this on an ongoing basis. They are expected to assess if they have sufficient expertise to make the assessment themselves, or to consider whether to seek professional advice.

A covenant assessment would be expected at the time of an actuarial valuation every three years, with regular reviews in between, and if there is a significant employer event, such as a takeover. The impact of Covid-19 has been wide ranging and will have required a reassessment of employer covenant.

Assessing covenant strength involves gathering appropriate information. Published data about historic company performance is helpful to some degree, but much more important will be management information provided by the employer (on a confidential basis) about past performance and forecasts of future performance.

The following considerations are relevant to an assessment of employer covenant:

- **Scheme size**: The size of the pension scheme in relation to that of the employer is an indicator of covenant strength. If the scheme is large in relation to the employer, then it is financially more significant and that may be a sign of covenant weakness when combined with other factors
- **Profitability**: The history of profits and future profit forecasts will indicate if the employer has a sound ongoing business
- **Cash flow**: Profits are only part of the story. The pension scheme needs cash funding and the ability of the employer to generate sufficient cash for its business needs as well as for the pension scheme is important
- **Balance sheet**: the availability of assets to fund the shortfall in the event the employer goes out of business (after allowing for other creditors with higher priority) will be important only if the trustees have serious concerns about the future viability of the employer. It is rare for an employer to have sufficient assets in such circumstances, but the extent of the shortfall indicates the proportion of scheme benefits that are at risk.

There are various ways in which the strength of employer covenant can be improved, thereby reducing covenant risk. Some common examples are as follows:

- **Charge on assets**: For example, land or buildings: the trustees would take ownership under specified circumstances, normally in the event of employer insolvency. The ability and willingness of an employer to offer such a 'contingent asset' will depend on the specific circumstances.
- **Parent company guarantee**: the parent company may be much larger than the sponsoring employer but would normally have no legal obligation to finance the scheme. A legally binding guarantee would commit the parent company to provide financial support up to a pre-agreed level in specified circumstances, again typically in the event of the sponsoring employer insolvency, or if the employer were unable to meet its agreed funding commitments to the scheme.
- **Escrow account**: the employer places money in a separate account, to which it has access only in specified circumstances. The trustees will then have access to the money held on escrow in specified circumstances, such as employer insolvency.

These are just a few examples, and there are a number of others which can be explored, depending on the specific circumstances.

Some of these arrangements (e.g. charge on assets or parent company guarantee) can be recognised by the Pension Protection Fund (PPF) and used to reduce the levy paid to the PPF. As explained in Part 5 Chapter 1.4, the PPF exists to provide compensation to members of eligible DB schemes in the event that a scheme's sponsoring employer becomes insolvent and is unable to make the payments due from it to the scheme.

1.2 FUNDING STRATEGY

Long-term reliance on employer covenant is uncertain, as the fortunes of companies can change over time. It has therefore become increasingly common for trustees to plan for a future where reliance on employer covenant is removed, or reduced to a low level. 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.

This ultimate goal has often been referred to as the 'end game', but is now called the LTO and will become a requirement under legislation to be introduced under the Pensions Bill 2020. The path to the LTO is often called the 'journey plan'.

The drive for self-sufficiency is partly influenced by the fact that most private sector DB schemes are now closed to future accrual, having been replaced by defined contribution schemes. Employers and trustees have a mutual interest in planning a future where such legacy arrangements can substantially manage without ongoing support from the employer.

The LTO could envisage that the scheme continues until all benefits have been paid, on a substantially self-sufficient basis. This would imply continuation of the scheme for many years though, with the need to maintain governance arrangements and a residual degree of risk. Such a scenario is likely to be feasible only for very large schemes.

For most schemes, a more likely LTO is to transfer the liabilities to a third party to assume future responsibility, following which the scheme would be wound-up. Traditionally this would be achieved by way of a 'buy-out', where the scheme purchases immediate and deferred annuities for all members with an insurance company.

A further option that has recently become available is a 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. Superfunds are not subject to the same regulatory supervision and reserving requirements as insurance companies and aim to provide a cheaper way of offloading pension scheme liabilities, and possibly a stepping stone to an insurance buy-out later when that becomes more affordable. It is very early days for superfunds, and it remains to be seen how that market develops.

Actuarial valuations, which are normally carried out every three years, are governed by the Statutory Funding Objective established by the Pensions Act 2004, which requires that a scheme should have sufficient assets to cover the 'technical provisions', which means the value of the liabilities according to the approach adopted by the scheme, on the advice of the actuary. If there are insufficient assets, as is commonly the case, then a 'recovery plan' must be put in place to make good the shortfall over an agreed period. It will be a requirement that this funding plan is consistent with the LTO, such that over time the technical provisions will seamlessly transition into the liabilities implied by the LTO.

All completed actuarial valuations must be submitted to TPR, which is responsible for ensuring that the funding plan agreed between the trustees and employer is reasonable. This includes forming a view of whether the scheme is receiving an equitable share of the employer's resources, having regard for affordability while permitting the sustainable growth of the employer, and whether the scheme is taking on an appropriate level of risk having regard for the employer covenant and investment strategy. TPR adopts a risk-based approach, whereby its resources are targeted at those schemes which it deems to represent a higher level of risk.

Some of the factors to consider are whether the technical provisions have been calculated using an appropriate set of assumptions, and whether the recovery plan is over an appropriate length of time. It has become increasingly common for employers to offer contingent assets (explained earlier in this Chapter) as a way of reducing the scheme's risk, thereby permitting greater flexibility, e.g. in the level of cash contributions or investment risk.

TPR's supervisory approach is set out in its Code of Practice no. 3 – Funding defined benefits, and it is currently consulting on a revised version due to be released in 2021. One change TPR is proposing is a 'fast track' option; a scheme which follows this route can expect minimal supervision by TPR but will be required to follow very specific guidelines when carrying out the actuarial valuation such that TPR expects the scheme to impose a low level of risk. Schemes will still be able to adopt a bespoke approach, but can then expect closer supervision and potential challenge if TPR believe the approach taken is inappropriate.

TPR is particularly concerned about so-called 'zombie schemes' where the employer is too weak for there to be any realistic prospect of the scheme becoming fully funded. Trustees are expected to judge at an early state if this situation has been reached and if so to ensure that the problem is addressed early before it gets orse. Such schemes are likely to end up applying for entry to the PPF.

Summary
Employer covenant lies at the heart of scheme funding, as a DB scheme relies on the employer to make good any funding shortfall. Schemes are now required to set a LTO which aims, over a period of time, for the scheme to have a greatly reduced reliance on employer covenant. A scheme's funding is set as part of an actuarial valuation, and these are supervised by TPR.

Self Test Questions

- What is meant by employer covenant?
- Name two methods of strengthening employer covenant by use of contingent assets
- What is meant by Long Term Objective?
- What are technical provisions?
- What role does The Pensions Regulator play in scheme funding?

CHAPTER 2

Investment and Mortality Risks

INTRODUCTION

Pension scheme liabilities are sensitive to movements in interest rates and inflation. Assets that match the movement in liabilities are therefore called 'matching' assets and remove interest rate and inflation risks. That is the purpose behind Liability Driven Investment (LDI). Assets that do not aim to match the liabilities in this way are held with the aim of achieving higher investment returns; equities and other 'growth' assets. Finally, Cashflow Driven Investment (CDI) aims to hold assets which generate contractual income to match the payment of future scheme liabilities (or cashflows). Longevity swaps can be used to hedge mortality risk, while buy-ins and buy-outs do the same as well as being matching assets that protect against interest rate and inflation risks.

2.1 INTEREST RATE RISK

To understand interest rate risk, we first need to consider how to place a value on a pension that has fixed interest characteristics.

For ease of discussion suppose our pension scheme had a single member who was due to receive a lump sum of £100 in 5 years from now. How much money must we put aside now to provide for this benefit? The answer will depend on the interest rate we can achieve over the 5-year period e.g. if the interest rate is 5% per annum, the amount required would be £78.35, which will grow at 5% per annum compounded to £100 in 5 years' time. The table below shows this and other examples.

	£100 payable in 5 years' time			£100 payable in 2 years' time		
Interest rate p.a.	3%	5%	7%	3%	5%	7%
Amount needed now	£86.26	£78.35	£71.30	£94.26	£90.70	£87.34
Difference versus 5% p.a.	+10.1%	-	-9.0%	+3.9%	-	-3.7%

Points to note:

- The amount of money we need to put aside today represents the present value of the liability to pay £100 in the future
- This liability depends on the interest rate, reducing as the interest rate increases, and vice versa
- The liability also depends on the period until payment is due, which is known as the duration
- The sensitivity of a liability to changes in interest rate increases with duration
- The interest rate in this context is otherwise referred to as the discount rate, as a future payment is discounted to a value today.

If we held an investment which made a single payment of £100 in 2 or 5-years' time, its market value would have the same sensitivity to changes in interest rates as the liability of the same duration. Our liability would thereby be fully matched and we would no longer be exposed to interest rate risk.

On the other hand, if our asset paid out in 2-years' time but the liability was 5-years away, we would not have a matched position. If interest rates were to fall, our liability would increase more than our asset, resulting in a shortfall (as we would be required to set aside more capital today to meet the future liability), i.e. we are exposed to interest rate risk. Of course, if interest rates rise then we would gain (as we would be required to set aside less capital today to meet the future liability).

Of course, in practiceassets and liabilities are far more complex, but duration remains an important concept. For example, the 'Macaulay Duration' of a bond is the weighted average term to maturity of the cash flows from the bond, where the weight of each cash flow is determined by dividing the present value of the cash flow by the price. Similarly, we can calculate the Macaulay Duration of pension scheme liabilities.

Interest rate risk is regarded as an unrewarded one, meaning that there is no expectation of being rewarded for taking such risk and so it is logical to seek to minimise it as far as practicable, by holding assets which display the same sensitivity as the liabilities to changes in interest rates. We will discuss later how this can be achieved.

2.2 INFLATION RISK

Inflation risk can be considered in a similar way to interest rate risk, as illustrated in the table below showing the current liability for £100 due in 5-years' time, but which increases each year by inflation e.g. with 3% p.a. inflation the amount due in 5-years' time will have grown to £115.93. The table shows the liability based on the same three alternative interest rates, and for each of these for two alternative inflation rates.

£100 indexed due in 5 years	Inflation 3% p.a.			Inflation 1% p.a.		
Interest rate p.a.	3%	5%	7%	3%	5%	7%
Amount needed now	£100.00	£90.83	£82.65	£90.66	£82.35	£74.94

Points to note:

- Where the interest rate is the same as inflation (at 3% p.a. in this instance) the liability remains at £100. This is because the difference (interest rate less inflation) is 0% p.a. and so there is zero discounting. We refer to 3% being the 'nominal' interest rate and 0% as being the 'real' interest rate.
- The liability for interest rate of 7%/inflation 3% is almost the same as for interest rate of 5%/inflation 1%. This is because they are both based on a real return of 4% p.a.

The same principles apply as for interest rate risk, except that the liabilities are impacted by changes in the real rate of interest rather than the nominal rate. Matching assets, which have the same sensitivity to changes in real rates as the liabilities, will eliminate inflation risk. Like interest rate risk, inflation risk is regarded as unrewarded, and so it is logical to seek to minimise it as far as practicable.

In practice, DB schemes will have a mixture of fixed interest and inflation-linked liabilities, so there will be both interest rate and inflation risks to consider.

2.3 RISK FROM GROWTH ASSETS

As discussed above, matching assets are those which mitigate interest rate and inflation risks. Examples are fixed interest and index-linked (i.e. inflation-linked) bonds; other options are considered in 2.4 below.

In practice, most pension schemes invest in other types of assets, in order to obtain more diversification and with the aim of achieving higher investment returns in the longer term. Equities are the most common examples, although there are a number of others as explained in Part 2. These can be referred to collectively as 'growth' assets.

Since the value of growth assets is largely unrelated to the value of a scheme's liabilities (i.e. growth assets are not matching assets), growth assets introduce a different type of investment risk.

Such volatility need not be an issue provided the markets recover and perform adequately in the longer term. However, there is inevitably scrutiny of the short-term position for a DB scheme, not only by trustees but also by current and prospective shareholders of the sponsoring employer owing to the way in which pensions are valued within company accounts (see Part 5 Chapter 2.1). This can cause issues, especially when the sponsoring employer is going through financial difficulties.

On the other hand, use of growth assets is important for most DB pension schemes, which are relying on the anticipated higher investment returns to provide for the scheme's long-term financial viability. In this sense, holding growth assets is regarded as a rewarded risk, meaning that there is expectation of being rewarded for taking the risk, although of course that is not guaranteed. This contrasts with interest rate and inflation risks which are regarded as unrewarded.

It is possible to reduce the risk from holding growth assets by means of diversification, while maintaining the anticipated level of future investment return. This can be through investing in a wide range of equity markets (UK and overseas) and a wide range of equity holdings within a given market across different sectors. In addition, nowadays there are various types of investments that offer growth potential while being uncorrelated to equity markets, which thereby provide further diversification. Examples such as absolute return funds are discussed in Part 2 Chapter 4.2.

Selecting the proportions of growth assets and matching assets for the scheme is one of the most fundamental investment strategy decisions for trustees since this is a key determinant of the level of investment risk.

Impact of growth assets in actuarial valuations
We explained earlier how future pension payments are discounted to derive a present value of the liabilities. The starting point will be a value calculated by discounting at the interest rate achieved from a matching asset (or risk free) portfolio; for this purpose, the interest rate is typically the gross redemption yield on long-dated government bonds (gilts). In an actuarial valuation, it is then common for the scheme actuary to make a fixed addition to the risk-free discount rate, to reflect the anticipated additional investment return from the growth assets being held. This has the following implications:
- The higher discount rate results in a reduction in the calculated present value of the liabilities compared with using the unadjusted risk-free rate, which in turn leads to a reduced assessment of the future contribution requirements. Investment returns from the growth assets in excess of the risk-free return are expected to make up the difference.
- The higher discount rate is usually a fixed addition to the risk-free rate, which results in the value of the liabilities retaining the same sensitivity to changes in interest rates as adopting the risk-free rate.

The extent to which liabilities are reduced in this way is an important consideration in actuarial valuations. Key factors will be the proportion of growth assets held, the additional return expected from the growth assets and the extent to which it is considered prudent to anticipate such returns in advance (noting these are not guaranteed). A higher discount rate represents greater risk to the scheme, and the trustees would need to decide if the strength of the employer covenant was sufficient to support such additional risk.

2.4 LIABILITY DRIVEN INVESTMENT (LDI)

An investment strategy which eliminates interest rate and inflation risks is called the least risk portfolio. This lies at the heart of what is known as Liability Driven Investment, or LDI; an investment strategy focussed on reducing or eliminating interest rate/inflation risks.

A term that is used when discussing LDI is **hedging**. This is a generic term to mean the purchase of something to limit the financial risk associated with another purchase. It is akin to insurance, such as taking out travel insurance as a 'hedge' against something going wrong with the holiday you have bought. In the investment world, a hedge is the purchase of an investment that serves to limit the potential loss on another investment. There is a cost associated with hedging, but that is the price for controlling the risk.

With LDI, the hedge ratio indicates the extent to which interest rate and inflation risks have been hedged; 100% means fully hedging, while 50% means only half the liabilities have been hedged.

One component of an LDI investment strategy will be a bond portfolio – typically a mixture of nominal and index-linked bonds - but that alone has shortcomings. Firstly, bonds are unlikely to have a sufficiently long duration to match the duration of the scheme's liabilities, resulting in an ineffective hedge, or low hedge ratio. Secondly, a bond portfolio ties up scheme assets that could otherwise be used to generate higher investment returns.

A solution, used by many DB schemes, is to employ derivative instruments, which were discussed in Part 2, Chapter 4.1.

For example, **swaps** are very common, although not essential, components of an LDI strategy. They are contractual agreements where two parties (the counterparties) agree to exchange (swap) either single payments or a series of payments of equal value in the future. Swaps enable a much better hedge to be achieved than bonds, as they can more closely match the long duration of the scheme's liabilities.

The two types of swaps described below are usually combined in practice.
- **Interest rate swap**: the pension scheme pays a variable rate of interest, usually measured by reference to an index such as Sterling Overnight Index Average (SONIA) in exchange for receiving a fixed rate of interest. When interest rates fall the value of the swap rises, while when interest rates rise the value of the swap falls
- **Inflation swap**: the pension scheme pays a fixed rate of interest (equal to the expected rate of inflation) in exchange for receiving a variable rate of interest linked to an inflation index, such as the Retail Prices Index (RPI). When the rate of inflation rises the value of the swap rises, while when the rate of inflation falls the value of the swap falls.

If interest rates fall (or if the rate of inflation rises), the increase in value of the swap compensates for the increase in value of the liabilities. If interest rates rise (or the rate of inflation falls) the lower value of the swap is offset by the reduction in value of the liabilities.

In practice, the only exchange of money that takes place is the difference in value of the two cash streams in any period, i.e. the profit or loss. This enables the scheme to hedge interest rate and inflation risks on an essentially unfunded basis (i.e. without the need for additional capital payments). Swaps require only a modest amount of cash to fund them; referred to as **collateral** (meaning something pledged as security for repayment of a loan or to meet a potential financial obligation).

This approach is also referred to as **leverage** or **gearing**; these are alternative terms for the same concept, whereby a relatively small amount of capital is committed to achieve a disproportionately greater impact. In this instance, commitment of a modest amount of collateral enables a high hedge ratio to be achieved.

Through gearing, the scheme can achieve a high hedge ratio while retaining the freedom as to how to invest the bulk of the scheme's assets. This presents an opportunity to maintain some exposure to growth assets, with a view to seeking a higher investment return than bonds and thereby improving the scheme's funding position.

Swaps contain an element of counterparty risk – where the other party to the transaction defaults on its obligations. This risk can be mitigated to exchanging collateral at regular intervals to reflect the then current value of the contract. Bonds also carry risk, especially corporate bonds. There is the risk of default and of a downgrade in credit rating. Credit default swaps (CDS) provide some protection against defaults, as explained in Part 2, Chapter 4.1

Pooled LDI products, which seek to hedge the liability profile of a typical pension scheme (rather than the actual liability profile of the scheme), has made LDI accessible to smaller schemes as well as the larger ones.

2.5 CASHFLOW DRIVEN INVESTMENT (CDI)

Unlike LDI, which is a strategy to mitigate interest rate and inflation risks, Cashflow Driven Investment (CDI) selects assets that provide contractual income to match, as far as possible, the future expected cashflow requirements of the pension scheme.

With most DB schemes closed to future accrual, they are gradually maturing and becoming cashflow negative. Interest in CDI is growing as a result.

Since full cashflow matching is unlikely to be possible, it is common to supplement CDI with an LDI strategy to hedge the cashflows which are not matched at outset by CDI. This is particularly pertinent for inflation-linked cashflows.

Another reason why a scheme may supplement CDI with LDI is to generate higher investment returns by continuing to invest a proportion of the scheme's portfolio in growth assets.

2.6 LONGEVITY SWAPS

Longevity risk is effectively the risk of living too long! Or at least, pensioners living longer than the scheme actuary has assumed in their actuarial valuation. The amount a pensioner needs at retirement will be higher when the pension is to be paid over a longer period. Longevity risk is considered an unrewarded risk and hence it is logical to minimise it as far as is practicable.

A longevity swap can provide protection against longevity risk. One form of longevity swap is designed to fully protect the scheme against longevity risk for a specified group of pensioners for a specified number of years. In effect, the scheme pays a set of pre-agreed cash flows to the other party (counterparty), and in return receives cash flows based on the actual longevity experience of the pensioners. In practice these cash flows are netted off against each other. These arrangements are especially complex to document and administer and are usually only made for large schemes.

A second type of arrangement is designed for non-pensioners and is an option for much smaller schemes. At the end of the swap contract, which is typically about 10 years, a calculation is made to compare the rate of improvement in longevity based on national population statistics against a pre-agreed assumption. If longevity has improved faster than assumed, the counterparty makes a payment to the scheme, and vice versa if longevity has improved slower than expected. This type of arrangement only provides partial protection against longevity risk as it is not specifically linked to the scheme's membership experience.

2.7 BUY-INS AND BUY-OUTS

Longevity risk can also be mitigated by the purchase of annuities, generally on a bulk basis, from an insurance company. These protect against longevity risk, as well as being matching assets that protect against interest rate and inflation risks.

Such annuity purchases are termed a buy-in. The members whose benefits are bought out remain members of the scheme, and the insurer pays the pension to the scheme which remains responsible for the ultimate payment of pension to the members. The annuities are therefore effectively scheme investments.

As an investment, a buy-in can be viewed as a type of bond, with the bonus of longevity risk mitigation. This provides substantial security for the scheme, with part of the liabilities being protected through insurance, but ties up monies which might otherwise have been used in pursuit of higher investment returns (albeit carrying risk and not guaranteed to outperform).

It is possible for trustees to purchase both annuities for current pensioners (**immediate annuities**) and for members not yet retired (**deferred annuities**). The latter are much less popular because they tie up money for longer periods at relatively low interest rates. Some schemes purchase immediate annuities for a portion of pensioners, where the trustees (after taking advice) perceive there is optimal value.

While it may be possible to surrender annuities from a buy-in, trustees normally enter into a buy-in with a view to this being a permanent investment, and which will facilitate a subsequent buy-out. A buy-out occurs when a pension scheme is being wound-up (in full or in part), and involves the purchase of annuities. The difference from a buy-in is that the annuities are in the members' names, rather than the trustees, and the members cease to be scheme members. Where annuities have been purchased through a buy-in, it is a relatively straightforward process to have the annuities assigned to the members in this way.

The cost of a buy-in or buy-out is partially dependent on the quality of the member data. By improving the accuracy and completeness of the data, the insurers face less uncertainty and therefore need to make fewer assumptions (which would be prudent from their perspective and add to the cost). Since an increasing number of DB schemes are anticipating a buy-out at some future point, there is a growing interest in improving the quality of data (and ensuring that the scheme benefits are fully clarified). Improving data quality is also being driven by TPR as part of good scheme governance.

Annuity purchases involving medical underwriting of the members concerned are also popular. By obtaining relevant information from the members through a questionnaire, the insurer has better data on which to price the annuities and this tends to lead to cheaper terms for the scheme.

A ‘synthetic’ buy-in makes use of a combination of interest rate, inflation and longevity swaps. This is more complex but has the advantage that it does not require a transfer of assets to the insurer.

Summary
Controlling risks lies at the heart of financing and investment. Interest and inflation risks are considered to be unrewarded and hence are usually hedged using LDI strategies. Growth assets present a rewarded risk that can help improve a scheme’s funding position. CDI is growing in importance as schemes mature. Longevity risk can be controlled using longevity swaps, or buy-ins/outs which also serve to hedge interest rate and inflation risks.

Self-Test Questions
- What are interest rate and inflation risks in the context of DB schemes?
- How does LDI reduce interest rate and inflation risks?
- How does CDI differ from LDI?
- What is meant by growth assets? Give examples, and explain why they are used

CHAPTER 3

Investment Strategy

INTRODUCTION

The trustees of the pension scheme have the responsibility for a scheme's investment objectives and strategy, but are required to consult the sponsoring employer before making any changes.

The trustees' ultimate objective is to ensure that the scheme's assets are sufficient to cover its liabilities. In seeking to achieve this objective, the trustees will normally choose to take some investment risk and the first, key stage in setting investment strategy is to determine how much risk to take. This is commonly referred to as a 'risk budget'.

As a generalisation, the level of investment risk being taken by pension schemes has reduced in recent years, quite substantially in a number of cases. The reduced appetite for risk has been influenced by various factors, primarily due to the closure to future accrual and large funding shortfalls (deficits) driven in particular by low interest rates.

In order to assess how much investment risk is being taken, the trustees need a benchmark against which to measure the risk. This is the least risk portfolio, which is the mix of fixed interest and index-linked assets that have the same sensitivity as the liabilities to changes in interest rates and inflation, as explained earlier in this Part.

The risk inherent within the current investment strategy can be measured in this way, and the trustees (in consultation with the employer) can then determine if the current level of risk is still appropriate or whether it needs adjusting to reflect the appropriate risk budget.

Once the trustees have chosen their risk budget, the next step of the investment strategy review is to decide how to 'spend' the risk budget. This is another key decision, and at a broad level involves a decision on the proportions of growth assets (equities etc.) and matching assets (bonds etc.). More detailed decisions are also needed regarding the composition of the growth and matching portfolios, since these have a significant impact on the overall balance of risk and return.

3.1 ATTITUDE TO RISK AND OBJECTIVES

An investment strategy without investment risk would give rise to relatively predictable funding cost but one that, for many employers, would be unaffordable. By taking investment risk, the expected funding cost is reduced but the range of potential funding costs widens. A key consideration for trustees, which should inform their decision on how much investment risk to take (i.e. in determining the risk budget) is to consider the following question. In the event of adverse investment experience, would the employer have the financial means to make good the increased funding shortfall?

Attitude to risk will depend heavily on the trustees' assessment of the strength of the employer covenant. The trustees can potentially agree to a higher risk investment strategy if the employer has a strong covenant. Where the employer is keen for a more higher risk investment strategy, one way of encouraging the trustees to agree is to offer to improve the covenant strength, e.g. through a contingent asset, or an escrow account

In assessing attitude to risk, the trustees need to consider their objectives and should seek answers to various questions:

- How much investment risk is the employer willing for the trustees to take, in anticipation of lower long-term costs (i.e. through higher investment returns), with its consequent greater risk of higher contributions from time to time?
- Is the employer's priority stability of cash contributions or of funding level?
- Is there an upper limit to the level of contribution the employer is prepared to pay or can afford?
- Is there is critical funding level, below which the funding shortfall becomes financially unmanageable? This might be expressed either as a ratio of assets to liabilities or as a monetary amount of funding shortfall
- What effect does the investment policy have on the company's accounts?

There may be conflicting objectives (e.g. risk versus return) and compromises may be needed.

Alterative investment strategies can be explored in light of the above considerations, by means of risk analysis, which will take into account both the potential upside and downside of each strategy.

The funding level might influence attitude to risk. For example, if there is a large funding shortfall and the employer covenant is strong, there may be scope to increase the level of investment risk in order to seek to reduce the shortfall more quickly, on the understanding that the employer can support the scheme if the shortfall becomes larger.

On the other hand, following a period of adverse investment experience resulting in an increased funding shortfall, appetite for risk might reduce.

3.2 SELECTING THE INVESTMENT STRATEGY

Spending the Risk Budget

Having determined the risk budget, the next step is to decide on how to spend the risk budget. This will involve an examination of various options, to compare their expected returns and the potential impact of adverse future investment experience under a range of future economic and investment scenarios.

An efficient investment strategy is one which maximises the expected return for a given level of risk.

If the scheme needs to generate income in order to meet benefit outgo (e.g. because it is mature and there is a large pensioner payroll), this might have some impact on the investment strategy. The most reliable sources of income are gilts and corporate bonds (historically also cash but not with current low interest rates). Equities are less suitable because dividend levels vary and, at an aggregate level, may yield less than bonds (although they offer increased potential for capital growth). Property can provide both income and capital growth, but the illiquid nature of the market can cause problems.

In a particularly mature scheme, where the bulk of the liabilities relate to pensioners, it may be necessary to sell investments from time to time to meet benefit payments, plus lump sums on retirement and transfer payments. Careful planning is required in these circumstances. The trustees could consider ad hoc disinvestments from their investments, or set up a regular disinvestment to meet expected cashflow needs. The trustees should consider with their investment adviser and investment managers the most appropriate assets to be sold in order to minimise any possible losses arising due to market conditions at date of sale. This may be combined with wider de-risking and the managers could, for example, move part of the portfolio into gilts close to their redemption date, as gilts nearing redemption tend to be less volatile than the rest of the bond market.

Strategic Asset Allocation
The outcome of this analysis is the selection of the strategic asset allocation, which is the trustees' decision on the risk-reward trade-off and is the most fundamental part of the trustees' investment responsibilities. The decision will have been made in consultation with the sponsoring employer, and will normally be with the employer's agreement (consultation does not of course require agreement but it will be the exception where agreement could not be reached over such a fundamental decision).

At a broad level, the strategic asset allocation will specify the proportions of growth and matching assets. It will also provide further detail on the composition of both the growth and matching assets, e.g. for growth assets the proportion of equities and other types of growth assets, as well as how assets are distributed among global markets.

3.3 IMPLEMENTING THE INVESTMENT STRATEGY

Once the strategic asset allocation has been specified, the next stage is to determine how the investments are to be managed. The trustees will then need to set relevant performance targets/ benchmarks to measure the managers' performance and establish a framework to regularly monitor the performance. Finally, the trustees will then need to amend the Statement of Investment Principles. These aspects are considered in Part 5.

Tactical Asset Allocation
Tactical asset allocation refers to 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.

Changes in economic or market conditions can lead to a short-term underperformance or out performance of one asset class over the other or of a certain sector within an asset class over other sectors.

Fund managers can take advantage of these developments by making changes to the portfolio's asset mix, by increasing or reducing the holdings in a particular asset class. Once the economic or market developments have taken their course, the fund manager can return the portfolio's asset mix to the long-term position.

Trustees can provide instructions regarding the implementation of the asset allocation for the investment managers in an Investment Policy Implementation Document (IPID). They will usually specify ranges around the benchmark allocation for each asset class. 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.

Long Term Objective (LTO)
In Chapter 1.2 we discussed the LTO and how that interacts with the funding plans from actuarial valuations, which is illustrated below.

The funding shortfall is the gap between the value of assets and technical provisions, and that will be the addressed in the actuarial valuation when agreeing on the future contributions to the scheme.

Over a period of time, the technical provisions will merge with the LTO, thereby achieving full funding according to the LTO set by the scheme.

The LTO will typically assume a low level of investment risk, and so one objective will be to gradually reduce the level of investment risk over time, which will help in the path to reaching the LTO. Designing a process that manages such gradual de-risking, ideally locking-in periods of better than expected investment growth, requires careful planning by the trustees and employer with possibly conflicting objectives, as well as the co-operation of the investment manager, with pre-agreed trigger points that result in specified actions.

Summary

The first step in setting DB investment strategy is to set the risk budget, which will reflect the attitudes to risk and objectives for both the trustees and sponsoring employer. The next step is to decide how to 'spend' the risk budget, i.e. the areas of investment where that risk is to be taken.
In implementing the investment strategy, the managers may be permitted to deviate from the core strategy to a pre-defined extent to take advantage of strategic market opportunities. De-risking strategies can be devised, in order to lock-in gains from favourable investment performance on the route to achieving the LTO.

Self Test Questions
- What is meant by a risk budget?
- What is strategic asset allocation?
- What is an efficient investment strategy?
- What is tactical asset allocation?
- What is the purpose of longevity swaps and how do they work?
- Why do schemes consider buy-in and buy-outs and what is the difference?
- How is de-risking linked to the Long Term Objective?

PART 4

DEFINED CONTRIBUTION FINANCE AND INVESTMENT

OVERVIEW

In this Part we look at the financing and investment of defined contribution pension schemes.

In Chapter 1 we consider the accumulation phase, when contributions are being made and the DC fund is building up. Firstly, we examine the considerations as to how a member should decide how much to contribute, in order to meet their retirement expectations. We then examine the range of funds that can be offered to members and how these funds are developed into investment strategies, in particular lifestyle and lifecycle approaches. Most members do not make active investment decisions, and so the design of the default investment strategy is especially important.

In Chapter 2 we consider the decumulation phase, which refers to the period after retirement when pension income is being drawn using the DC pot accumulated at retirement. Pension Freedoms introduced in April 2015 provide complete flexibility as to how a DC pot is accessed at any time from age 55. In particular there is it is no longer a requirement to buy an annuity at retirement, or by age 75 as was required previously.

The alternative to an annuity is drawdown, where the member continues to invest the monies and withdraws income each year of an amount which can be varied at the member's discretion. We consider the factors which drive both the withdrawal strategy and investment strategy in drawdown.

Finally, we explore various decumulation strategies by considering alternative member objectives and how well these are met by annuities and drawdown, as well as discussing other DC developments.

CHAPTER 1

Accumulation Phase

INTRODUCTION

This Chapter is concerned with the accumulation phase in a DC scheme, when contributions are building up to provide a DC pot at retirement. To help members plan for their retirement, it is helpful for them to consider what level of income in retirement they wish to target, and when they plan to retire. This can then enable members to determine if the current level of contributions (including the employer's) is adequate, and if not to consider increasing their contributions.

A range of investment funds is needed to cater for differing member requirements. These can be broadly split into growth funds (which seek good long-term performance) and defensive funds (which aim for capital protection), while balanced funds offer a mixture of the two.

Lifestyle and lifecycle investment strategies are commonly employed, which automatically reduce the level of investment risk as a member approaches retirement. These are usually at the heart of the default investment strategy, which caters for those members who fail to make an active investment choice (this applies to most DC members in practice). These investment strategies should position a member's DC pot for the decumulation phase according to how the member intends to draw benefits, e.g. some in cash if the intention is to draw cash at retirement.

1.1 CONTRIBUTION STRATEGY

Deciding what size DC pension pot is needed at retirement lies at the heart of the contribution strategy, and this will be driven by the target pension and intended retirement age.

Target pension

An important starting point is to determine the level of retirement income needed in order to enjoy the member's desired standard of living; like planning a journey, you need to know the destination before you can plan how to get there. This will be a personal choice based on various factors, but as a broad guide it has been popular to use a 'target replacement rate' (TRR) measure, i.e. expressing retirement income as a percentage of pre-retirement income. The Pensions Policy Institute (PPI) has suggested that, for many people, a TRR lying somewhere between 50% and 80% will be appropriate; less than 100% because typically expenditure in retirement is expected to be lower. This is consistent with the conclusions of the Pensions Commission in their important 2005 report, which suggested that the TRR is highest for those on low incomes and reduces as income rises; 67% for those on average earnings.

A more recent development is to express the target income in absolute monetary terms, rather than as a proportion of pre-retirement income. This has been the approach in Australia for some time, and is behind the 'Retirement Living Standards' (RLSs) proposed by the Pension & Lifetime Savings Association (PLSA) in 2019. Based on extensive consumer research, the RLSs show the level of income needed to fund the type of lifestyle the participants in the PLSA study identified as:

- Minimum: participating in society but with very little choice or flexibility
- Moderate: a lifestyle with some level of freedom and resilience to shocks
- Comfortable: freedom and flexibility to enjoy additional comforts beyond what is needed to get by

For example, the Moderate RLS was determined as £20,200 per year net of tax for a single person living outside London; this figure is expected to increase to reflect future inflation. Household costs for couples are significantly less than twice those for an individual, but that is of limited help in planning for retirement as household circumstances in retirement are not entirely predictable and contribution strategies are set on an individual basis.

Some people might want to use a cash lump sum from their DC pot to pay off debt at retirement, such as a mortgage, and that may be in addition to providing retirement income at a particular level. This will clearly affect the size of DC pot required.

Contributions required
Having selected the desired target pension, what contributions are needed to achieve it? Part of the answer lies in the total DC funds accumulated to date; this is where the Pensions Dashboard will play an important role, in collating information on what might be numerous pension pots for an individual to derive a single value of the accumulated funds.

Another major factor is the planned retirement age. Retiring later is cheaper, as there is longer to invest the monies, an expected shorter period of retirement to be financed, and the potential to pay contributions over a longer period before retirement. In practice, a discrete retirement age is becoming less common due to flexible working patterns, coupled with the removal in 2011 of a compulsory age when employers could require their employees to retire. Nevertheless, a specified retirement age is helpful for retirement planning purposes.

DC schemes will record the age at which it is assumed each member will retire; this will be a standard age the scheme has selected, but it is normally possible for members to vary it. In any event, the specified age is not binding, and members are not obliged to start drawing pension at that time. Schemes might specify the State Pension Age (SPA) as the standard, as that is when it first becomes more affordable to retire with the aid of income from the State pension. SPA transitioned from 65 to 66 over the tax year 2020/21, and is due to rise to 68 by 2039.

Some employers will vary their contributions depending on how much the employee pays, an approach often referred to as ‘matching’. For example, the employer might match employee contributions on a 1:1 basis up to, say, 6% of pensionable earnings. This needs to be allowed for when the employee plans how much to contribute in future, although that will need re-evaluation on changing employment when employer contributions may differ.

Employers must comply with Automatic Enrolment (AE) requirements, in offering all eligible employees a pension scheme with total contributions of at least a minimum standard, which for DC schemes is generally 8% of ‘qualifying earnings’. AE has been hugely successful in increasing the number of people in workplace pensions, but AE minimum contributions alone are unlikely to be sufficient to meet many employees’ retirement expectations.

Tax considerations may affect some people, where total pension benefits might reach the Lifetime Allowance, or to ensure that contributions do not exceed the Annual Allowance, or would cause the individual to lose any Lifetime Allowance Protection that they may have.

Employee engagement
It can be difficult to obtain employees' engagement with retirement planning, especially when their retirement is many years into the future. In addition, affordability constraints can make it hard for people to set aside money for their retirement, when they have more immediate and pressing expenditure requirements.

On the other hand, identifying early if there is a projected retirement shortfall provides more time to put it right by way of Additional Voluntary Contributions (AVC).

Pensions cannot be seen in isolation and a good communications strategy should see pensions in a wider savings context, alongside other savings vehicles such as ISAs. Some employers offer savings programs along these lines, whereby people can choose how much to save and then how to allocate their contributions between pensions and other savings vehicles.

For some people, a potential disincentive to saving into pensions is the inability to withdraw money until age 55, such as to meet unexpected expenses. Seeing pensions in a more holistic way can help in this regard, as people can choose to keep some savings in an accessible medium to meet such contingencies. This is the concept behind the 'sidecar', a cash reserve that works alongside the pension but can be accessed when needed.

Finally, people's needs can change over time, and so it is important for them to revisit their retirement planning on a regular basis.

1.2 RANGE OF INVESTMENT FUNDS

Apart from deciding on the level of contributions, DC members also have a choice of investment strategy. This in turn requires the provision of a range of investment funds to meet the varied needs of the membership.

Where DC provision is made through a contract-based scheme, individual members are usually entitled to access the provider's full investment suite (typically this can range from 50-100 funds). Some employers, after taking investment advice, might facilitate access to a restricted/tailored investment range from the provider's full offering in order to make the investment choice easier for members.

In a trust-based DC scheme, the trustees will determine the range of funds to be made available to the members. This also requires investment advice, to ensure the range of funds offered is appropriate for the varying needs of the membership. Demographics such as age, sex and occupation can be key factors in deciding on the range of funds to offer, as well as an appropriate style of communication.

The number of funds that are offered to members requires a balanced judgement; enough funds to meet varying needs, while recognising that too much choice can be hard to navigate. Also, the trustees have a duty to monitor the performance and ongoing suitability of the funds offered, which is harder when there are many of them.

Funds can be broken down into the following broad categories:
- Growth funds which 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 which aim to preserve capital, or purchasing power. Examples are cash, fixed interest and index-linked bonds
- 'Balanced' funds which include a mixture of growth and defensive assets. These may be referred to as managed funds.

Each fund will be described with an indication of its suitability for different types of investor, the target investment return relative to a suitable benchmark, and the 'volatility which indicates the extent to which the investment return might vary from what is expected and hence to indicate the level of risk. In general, higher expected returns require taking more investment risk. Funds will typically be categorised according to the level of risk, e.g. labelled as 'low', 'medium' or 'high' risk, to help members choose based on their personal risk tolerance.

Some schemes will offer a **core fund choice** comprising a limited selection of funds that will be suitable for a wide range of needs, and include both growth and defensive funds. The scheme may then offer a further range of specialist funds, for those members who might require them. For example, there may be a global equity core fund and a US equity specialist fund. The extent to which specialist funds are offered will depend on the level of interest from members.

'**White labelling'** involves the DC scheme creating its own 'funds', comprising one or more investment funds potentially selected across different managers. For example, there could be a 'UK equity fund', where the trustees select the UK equity investment manager(s) which may change over time. Another approach is to have scheme funds with names such as 'growth', 'adventurous' or 'cautious', to help indicate the fund's suitability according to personal risk tolerance, where the scheme funds are invested across a mix of asset classes which may change over time. The advantages of white labelling are that they make presentation of fund choices easier for members, while the trustees are able to make changes to the underlying investment funds without the involvement of the members.

A distinction can be made as to whether funds are actively or passively managed. This is discussed in Part 6, but in summary the difference is that:
- **Active management**: aims to outperform a particular market index or benchmark through manager skill
- **Passive management**: aims to match the returns of a particular market index or benchmark (also called index-tracking or indexing).

Scheme members may have differing views about these two approaches and hence will often be offered a choice.

Environmental Social and Governance (ESG) considerations have gained considerable prominence in recent years and some DC members are likely to want to choose funds which have a strong commitment to ESG. See Part 5, Chapter 3.3 for more discussion of ESG.

1.3 INVESTMENT STRATEGY

Experience shows that most DC members do not make active decisions on which funds to select. While every encouragement should be given to making a choice, it is essential to have a default approach where members fail to make a decision. This will comprise a **default investment strategy** that will specify into which fund, or combination of funds, the member's contributions will be invested, and this may change as a member becomes older, as explained below.

A default investment strategy is a statutory requirement if the scheme is being used as a qualifying one for automatic enrolment purposes. Furthermore, new quality standards were introduced in April 2015 that require default investment strategies to be designed in members' interests and be regularly reviewed, with the value of transaction costs and charges borne by members assessed and disclosed in the annual Chair's Statement (see Part 5, Chapter 2.4).

Choosing a suitable default investment strategy is challenging as it is trying to cater for a wide range of needs. Trustees need to take investment advice, which will have regard for the characteristics of the membership, with the aim of striking a sensible balance to reflect the range of individual circumstances. Passive management is often favoured for these purposes, as it is relatively low cost and is more easily accommodated within the default fund charge cap where the scheme is used to comply with automatic enrolment requirements.

Lifestyle Investment Strategy
A lifestyle investment strategy is one which automatically reduces the level of risk within a member's DC pot as the member approaches retirement. During the growth phase, the monies will be invested predominantly in growth assets with the aim of maximising the investment return over the medium- to long-term, while accepting that there may be significant short-term fluctuations in asset value. The consolidation phase typically begins between 5 and 10 years before the member's selected retirement date, and during this second phase the composition of assets is gradually amended so that the level of risk is reduced, enabling more control over short-term fluctuations in value which are harder to manage the relatively short period to retirement.

Lifestyling will appeal to those members who are comfortable with a de-risking strategy in the approach to retirement and would like this managed for them automatically. Lifestyling is often the approach taken for the default investment strategy, but a scheme might also offer alternative lifestyle strategies which adopt different approaches to de-risking, to reflect how the member intends to access funds at retirement (as discussed in Chapter 2.1).

Target Date Funds (or 'Lifecycle' Funds)
Target date funds work in a similar way to lifestyling, in that they aim to automatically de-risk over time. The difference is that the member remains invested in the same target date fund throughout, with the asset allocation being automatically adjusted over time, rather than the member's asset allocation being varied through differing combinations of growth and defensive funds.

The target date fund is typically aligned to the individual's projected retirement date. For example, a member retiring in 2030 would be invested in a fund with a pre-determined investment strategy where the de-risking process is completed in 2030. This offers a more personalised and flexible approach than lifestyling, but should nevertheless be monitored by the member, as a change in selected retirement age for example could mean the fund is out of line with their objectives.

Summary
Planning for retirement requires an understanding of how much retirement income is desired and from what age. A contribution strategy can then be derived. A range of investment funds is needed to cater for varying member requirements, although most members do not make an active decision and are placed in the default investment strategy, which usually operates on a lifestyle or lifecycle approach whereby the investment risk is automatically reduced as the member approaches retirement.

Self-test questions
- What are the key factors which determine how much a member should contribute to a DC scheme?
- What is the difference between a growth fund and a defensive fund?
- What is meant by white labelling?
- How do lifestyle strategies work and how are they different from target date (or lifecycle) funds?

CHAPTER 2
Decumulation Phase

INTRODUCTION

Planning how to take benefits in retirement (the decumulation phase) is complex now that Pension Freedoms provide complete flexibility on the matter and it is no longer a requirement to purchase an annuity. Guidance and advice are needed to help understand the options and select the right approach.

The DC market is polarised, and typically a DC member will need to switch providers at retirement in order to obtain the decumulation products desired.

An annuity is typically provided by an insurance company and provides a guaranteed income for life, while the alternative of drawdown provides a more flexible approach, where the member can select how much income to withdraw each year, but needs to manage the investments on an ongoing basis and does not guarantee that the same level of income can be paid for life. Annuity purchase and drawdown are not mutually exclusive, and combinations can be used to construct various decumulation strategies.

The DC market is developing. Collective Defined Contribution (CDC) schemes are being introduced which involve the sharing of investment risk between members. Uninsured longevity pooling is also a possible future development.

2.1 MANAGING TRANSITION INTO RETIREMENT

Retirement Options
April 2015 brought about the so-called 'Pension Freedoms' through the Taxation of Pensions Act 2014. Any time from the age of 55, there is total freedom over how a member may access their DC pot. Normally the first 25% of the pot is payable tax-free, while withdrawals of the remaining 75% are taxed at the individual's marginal rate of income tax. Most significantly, the new legislation means there is no longer a requirement to purchase an annuity (previously members were required to purchase an annuity by age 75).

This freedom gives rise to the following options:
1. Leave the accumulated pot untouched until a later date
2. Use the pot to purchase a guaranteed income for life, i.e. an annuity
3. Withdraw up to 25% of the pot tax-free and put the remainder into **flexi-access drawdown**, where the monies are invested and the individual chooses how much to withdraw each year which will be subject to tax
4. Withdraw monies as a series of single lump sums known as **uncrystallised fund pension lump sums (UFPLS)**. For each UFPLS, 25% will be tax-free and the rest subject to tax
5. Withdraw the entire pot as a single lump sum, where 25% is tax-free and the rest is subject to tax
6. A combination of options.

Options 3 and 4 are very similar, and might be collectively referred to as '**drawdown**'. The essential difference is one of tax treatment – for option 3 the tax-free element is taken immediately whereas for option 4 it is spread over a future period.

Guidance and advice
The flexibilities available at retirement for DC members present them with a range of complex and potentially irreversible decisions. To help assist in this regard, the Government offers a free guidance service, **Pension Wise**, to anyone over 50 with a DC pot to explain the above options and help people determine what is appropriate for them. The service is provided through the single financial guidance body, Money and Pension Service (**MaPS**).

In addition, the Pensions Regulator (TPR) suggests that trustees of workplace pension schemes may want to work with employers to facilitate members' access to financial advice. The **Pensions Advice Allowance** enables individuals to access up to £500 from their pension pot up to three times during their lifetime to pay for retirement financial advice, not just confined to pensions. Employers can refer members to free advice that is available, such as from TPR and MaPS.

Investment strategy
Lifestyle and lifecycle investment strategies, as discussed earlier, aim to achieve a smooth transition from accumulation to decumulation by automatically positioning the assets in anticipation of the member's choice at retirement. For example, where the member anticipates taking 25% of the pot as a tax-free lump sum and buying an annuity with the rest, an appropriate investment mix at retirement would be 25% cash and 75% gilts (as their price is correlated to the cost of buying an annuity). To make this effective though, members need to anticipate well in advance how they may wish to access their DC pots, so that they can select an appropriate lifestyle or lifecycle strategy; this requires effective member engagement.

Some investment funds are designed to be retained during both accumulation and decumulation, maintaining a significant exposure to growth assets throughout. This would meet the needs of those members who select options 1, 3 and 4.

However, the current DC market is generally polarised into accumulation and decumulation. Trust-based DC schemes are not required to provide any decumulation options; a significant number choose not to do so, some offer an annuity option only, while relatively few offer all the possible options. Members are therefore likely to need to move their monies at retirement to another provider which offers the decumulation options they require. In recognition of these challenges, it would be common for sponsoring employers to make some guidance available to help members make the transition. With the growth of master trusts, it is possible we will see an increase in trust-based schemes offering a good range of decumulation options.

Contract-based schemes have been similarly fragmented, but this is set to improve from February 2021 when the Financial Conduct Authority (FCA) introduces **Investment Pathways**. Before a DC pot is accessed, pension providers must ensure the customer selects one or more of four pathways that meet the following objectives:
1. I have no plans to touch my money within the next 5 years
2. I plan to set up a guaranteed income (annuity) within the next 5 years
3. I plan to start taking a long-term income within the next 5 years
4. I plan to take my money within the next 5 years

The provider must offer a default investment solution for each of the four pathways, which has been tested for its appropriateness to meet the stated objectives and which is properly communicated to the customer to facilitate an informed decision being made.

Further requirements are that customers only invest in cash if they take an active decision to do so (cash being unsuitable as a long-term investment, especially with today's low interest rates), and the provider must inform the customer of the charges levied over the previous year.

2.2 DRAWDOWN

Drawdown involves the ongoing management of a DC pot into retirement, with flexibility as to how much income is taken each year; this flexibility is one of its key attractions. There are two key considerations with drawdown:

- Withdrawal strategy
- Investment strategy

Withdrawal strategy

Withdrawal strategy refers to how much income is withdrawn each year. A number of potentially conflicting factors will influence this decision, notably:

- A desire to preserve monies for future years, e.g. to avoid running out of money in retirement, to finance later life healthcare or for inheritance planning
- Short-term expenditure needs, or to pay off debt
- For tax reasons, e.g. to avoid a higher marginal rate of tax
- To reflect other pensions, e.g. it might be decided to defer other private pensions or the State pension and take more from the drawdown fund in the interim
- To reflect other forms of income, such as from ISAs and home equity-release plans.

The first point above leads to the concept of a '**safe withdrawal rate' (SWR)**, which signifies the percentage of the fund which can be withdrawn in the first year, with the same monetary amount taken in future years adjusted for inflation, such that the fund would last for at least 30 years. For many years, the SWR was considered to be 4%, but in today's markets this is considered too high, and it has been argued the SWR should be at around the 3% level.

A SWR can also be derived for an income which does not increase each year by inflation; this will be higher than for one that is inflation-linked.

The SWR is a crude measure though, as it fails to reflect personal factors such as life expectancy and spending preferences, as well as attitude to risk. It also does not take into account the impact of future investment returns differing from what has been assumed, or for the sequence of returns being unfavourable. This last point is called '**sequence of returns risk**' and is especially relevant in the early years of retirement, when a series of poor investment returns will have greater impact than compensating good returns in later years when the DC pot is smaller owing to withdrawals.

A whole range of alternatives to the SWR have been proposed, mainly to ensure withdrawals are adjusted to reflect actual market movements. E.g. the 'floor and ceiling' strategy places a cap on spending increases (e.g. 5% more than the prior year) when market returns are high and a floor on the reduction in spending (e.g. a 2.5% reduction on the prior year) in bad years. It would be possible for providers to offer products that automatically operate such strategies, rather than them being self-regulated; no such products exist at present, but that may change as the decumulation market develops.

Investment strategy
As mentioned earlier, the investment strategy at retirement should be planned in advance as far as possible, through the lifestyle or lifecycle strategy during accumulation.

Where significant withdrawals are planned in the short-term, the monies should be invested in cash. For the rest, the investment strategy will need to provide an appropriate balance between the following objectives:

- Achieving an investment return that at least keeps pace with inflation to support the withdrawal of an inflation-linked income
- Capital protection, especially in the early years when market falls have the most impact (sequence of returns risk) and in later years.

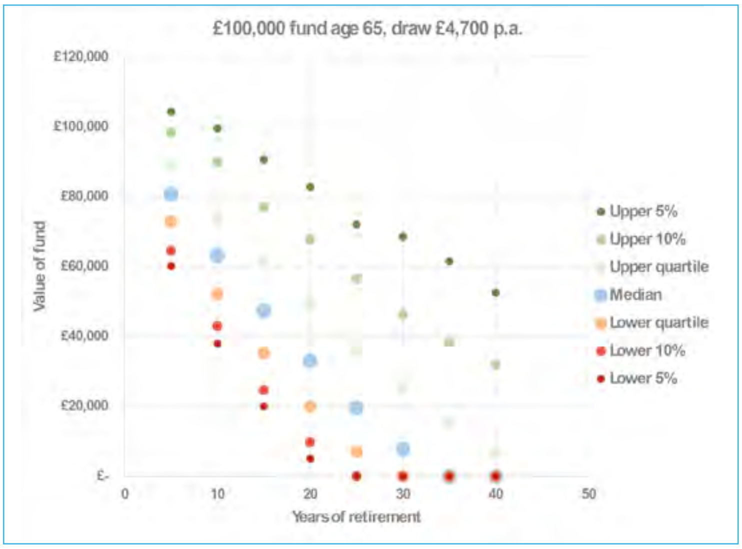
The investment strategy is likely to differ from the accumulation phase, with a shift in emphasis from growth to income in order to support planned withdrawals while minimising the need for enforced sale of investments.

2.3 DECUMULATION STRATEGIES

Devising a suitable decumulation strategy requires deciding on one's key objectives. In the section we explore various objectives, comparing how these can be met through an annuity or drawdown, or combination of the two, as well as discussing some other DC-related developments.

Income for life
Consider a member having a fund of £100,000 at age 65, which at the time of writing would typically purchase an annuity of about £4,700 p.a. (not increasing in payment, and with no benefits payable on death).

Suppose the member instead chose to use the £100,000 fund to take the same annual income through drawdown. The chart below illustrates (using stochastic modelling) the range of uncertainty arising from variable investment returns. There is a high degree of confidence that the fund will be able to support the £4,700 p.a. for 20 years, but for longer periods of retirement the risk of running out of money rapidly increases. For example, there is a 64% chance the money will last for 30 years.



If the member wants a guaranteed income for life, then an annuity provides this. Drawdown can also provide an income for life, but the annual income may need to be adjusted depending on investment performance, and could fall to an unacceptably low level if the member lives to an advanced age. On the other hand, there is a risk of excessive caution with drawdown, leading to an unnecessary reduction in the standard of living in retirement.

There are variable income annuities. These are uncommon in the UK, but have been widely used in some other countries, such as the USA and Denmark.

Value for money
A commonly expressed concern with annuities is that they provide poor value for money on early death. In the above example, drawdown provides good value for money on early death, as the residual DC pot is paid out to beneficiaries, whereas a single life annuity ceases on death.

However, 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.

The balance can be adjusted in practice though, as it is possible to purchase an annuity that provides benefits on or after death, at the expense of a lower personal income. For example, one can purchase a dependant's pension or a guarantee that the pension will be paid out for a set period such as 5 years even of death occurs in the interim. Capital (or value) protection annuities are available, which pay out on death the purchase price less the pension payments made prior to death. Compared with the single life annuity, this improves value for money on early death at the expense of that on death at an advanced age.

For those who have a clearly diminished life expectancy for health reasons, an 'impaired life annuity' can be purchased which offers a higher annual income in recognition of the shorter expected period of payment. Again, this helps to redress the perceived value for money disadvantage compared with drawdown.

Inflation protection
It is possible to purchase an annuity that provides income which rises in line with inflation (an index-linked annuity). This offers guaranteed protection against the risk of inflation eroding the purchasing power of the income, but these are less popular, as the cost of inflation protection is high.

It is also possible to withdraw income under drawdown that can be adjusted by inflation. A hybrid solution is also possible, whereby a non-increasing annuity is purchased and the inflation risk is self-insured through drawdown.

Taking 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.

Flexibility
As noted earlier, drawdown has a clear advantage over annuities in its flexibility. It can accommodate variable withdrawals including unexpected expenditure requirements. More significantly it can be used as a framework to develop more complex drawdown strategies.

One example was mentioned earlier; the delayed purchase of an annuity. To help facilitate this, some monies could be put aside each year into a separate account, for the purpose of the annuity purchase at a later date. This approach could also be used to set aside monies for later life healthcare. Another approach is to purchase a small amount of annuity each year; by spreading the purchase this reduces the risk of buying at an inopportune time.

Transfers from defined benefit (DB) schemes
It has become popular for members of DB schemes to consider transferring their benefits to a DC scheme, driven by low interest rates (which inflate the size of the cash equivalent transfer values, or CETVs) and the flexibilities offered by DC. If the CETV is £30,000 or more, there is a requirement to take advice from a regulated financial adviser as to the suitability of the transfer. While the general view is that such transfers are not usually in members' best interests, there are circumstances when they can be, e.g. if the member has a short life expectancy which would not be reflected by way of a reduction in the CETV

Risk sharing
Collective Defined Contribution (CDC) schemes are permitted by UK legislation under the 2015 Pension Schemes Act, and the secondary legislation required to enable their implementation is being introduced through the Pension Schemes Bill 2019-21 published in January 2020.

CDC has been widely used in The Netherlands, Denmark and certain parts of Canada. The essential feature of CDC is the sharing of investment risk. Under the planned Royal Mail scheme, the risk sharing will take place during both accumulation and decumulation phases, although CDC might also be employed as just a decumulation solution. CDC is a type of DC scheme in that the employer's commitment is defined in terms of the amount of contributions rather than the size of the emerging benefits. Members will receive a pension in retirement that is not guaranteed; if benefits need scaling back, this will be done first through reduced future pension increases, while a reduction in benefit will only occur as a final resort.

Sharing of investment risk is a key feature of with-profits products, which are discussed in Part 2, Chapter 4.3. Once popular, with-profits are no longer being offered for new business.

An interesting possible future development (legislation permitting) is to combine drawdown with uninsured longevity pooling. The idea is that, when someone dies, part or all of their DC pot is forfeited and redistributed to the other members according to a predetermined formula, as a 'longevity bonus'. This mechanism provides some sharing of longevity risk and is a sort of 'tontine'. Being uninsured, it does not need to comply with insurance reserving requirements, but there is no guarantee on the size of longevity bonuses. The scheme could choose to reinsure the longevity risk.

Summary

DC members have complete flexibility in how to access their DC pots in retirement. Annuities offer a guaranteed income for life and drawdown offers a flexible income. They are both suited to different circumstances, and combinations of the two are also possible.

Self Test Questions

- What is the Pensions Advice Allowance?
- What are Investment Pathways?
- What are key distinctions between annuities and drawdown?
- What is meant by a safe withdrawal rate and what are its limitations?
- What is meant by sequence of returns risk?
- What is mortality drag?

PART 5

REGULATION AND GOVERNANCE

OVERVIEW

In this Part we look at the regulation and governance of pensions; for trust-based schemes with the one exception of provider independent governance committees.

In Chapter 1 we examine the Financial Services and Markets Act 2000 (FSMA) and the role of the Financial Conduct Authority (FCA) in the regulation of firms carrying out investment business. Trustees are required to delegate investment business to someone who is authorised under FSMA.

The Pensions Act 2004 introduced a number of important changes, including the establishment of the Pensions Regulator (TPR), the Pension Protection Fund (PPF) and the scheme-specific funding regime for defined benefit (DB) schemes, and 5% self-investment regulations. We examine these in Chapter 1.

In Chapter 2 we start by looking at what trustees are required to do to maintain records for accounting purposes. We then consider the requirements for trustees to report certain events to HMRC, TPR or members. Next, we look at the financial statements the trustees must prepare each year and the audit process. The financial statements form part of the Trustees' Report and Accounts.

We finish Chapter 2 by looking at provider independent governance committees are used to provide oversight of contract-based workplace savings schemes, and the Pensions Schemes Act 2017 that introduced regulations for master trusts. We finish by looking at how pensions are recognised within company accounts.

Chapter 3 Investment Governance reviews guidance by TPR on DB and DC governance and treatment of the SIP and emerging requirements for socially responsible investment, now more commonly referred to as ESG (Environmental, Social, Governance) issues.

CHAPTER 1

Regulation of Pensions Introduction

In this Chapter, we look at the key forms of regulation that impact pension schemes.

1.1 FINANCIAL SERVICES AND MARKETS ACT 2000 (FSMA)

The Financial Services and Markets Act 2000 (FSMA) came into effect on 1 December 2001, replacing the Financial Services Act 1986 as the principal legislation for the regulation of the financial services industry. The FSMA granted statutory powers to the Financial Services Authority (FSA), the sole regulator of the UK financial services industry.

The Financial Services Act 2012 made extensive changes to the FSMA, and from 1 April 2013 two new regulators, the Financial Conduct Authority (FCA) and the Prudential Regulatory Authority (PRA) replaced the FSA in the UK. In the context of providing services to UK pension schemes the FCA is the relevant body.

UK financial services employ over 2.2 million people and contribute £65.6bn in tax to the UK economy.

Financial Conduct Authority (FCA)
The FCA is an independent non-governmental body with four statutory objectives:
a) the strategic objective to ensure that the relevant markets function well; plus
b) three operational objectives:
- to secure an appropriate degree of protection for consumers
- to protect and enhance the integrity of the UK financial system
- to promote effective competition in the interests of consumers

The objectives are supported by principles of good regulation that the FCA must consider when discharging its functions. These include using its resources in the most efficient and economical way and encouraging innovation.

A firm that is not authorised by the FCA may not carry out a regulated activity in the UK unless it is an appointed representative or has some other exemption. Otherwise a criminal offence may be committed. Regulated activities are defined as carrying out specified activities in relation to specified investments. Full details are given in the Regulated Activities Order 2001. Examples include:
- Managing investments
- Arranging deals in investments
- Safeguarding and administering investments
- Establishing and operating collective investment schemes
- Accepting deposits
- Providing and administering mortgages (although excludes advising on or arranging)
- Effecting or carrying out contracts of insurance (as principal)
- Dealing in investments (as principal or agent)
- Lloyds activities

A firm must apply to the FCA to obtain authorisation. The FCA must ensure that the firm satisfies the necessary criteria (in relation to status, location, adequacy of resources, close links and suitability) before it can grant permission for the firm to carry out a regulated activity. Once authorised, the FCA then monitors the firm and its employees to ensure that they maintain the required standards.

Since, in general, the trustees of an occupational pension scheme are not authorised it follows that all the activities that define the carrying on of an investment business must be undertaken by another authorised person. Pension law allows trustees to delegate investment decisions to an investment manager (referred to in the legislation as a ‘fund manager’) who is authorised under FSMA.

Whenever delegating day to day investment decisions, trustees remain responsible for:

- the investment strategy which the fund manager must follow; and
- ensuring that the fund manager is a suitably qualified person to carry out the scheme’s investment business.

In general, trustees will not be held personally responsible for any mistake the fund manager makes if they have made sure that the fund manager:

- has the appropriate knowledge and experience for managing the scheme’s investments; and
- carries out their work competently and in line with the trustees’ policy for choosing investments, as set out in the Statement of Investment Principles (SIP).

Each investment organisation must have a **Compliance Officer** whose duties are to establish the necessary systems for compliance with the rules of the FCA and to ensure that these rules are adhered to at all times. In addition, the FCA will make periodic visits to the firm’s premises, often with little or no notice, and will inspect client files, client accounts, the firm’s accounts and any other information or files which they deem pertinent to their compliance requirements. Any shortcomings are recorded in writing to the firm following the inspection visit.

Serious **breaches in compliance** may result in temporary or permanent suspension of authorisation and/or fines. Every employee of the firm who gives investment advice must be registered with the FCA. They will be required to demonstrate their suitability for registration either through examination or by proving an acceptable level of professional experience.

Money Laundering

Money laundering is the process by which criminals attempt to disguise the source of proceeds generated from illegal activities, such as theft, fraud, terrorist activities, dealing in drugs, illegal gambling or tax evasion.

Money laundering is illegal, as is providing assistance to another person to obtain, conceal, retain or invest funds that you know, suspect or should have known or suspected, were the proceeds of criminal conduct. Fund managers therefore have a duty to identify properly the trustees of occupational pension schemes before investment first takes place. Inspecting the formal documents of the scheme, which confirm the names of the current trustees and their addresses for correspondence, should be sufficient for this purpose.

Individual verification of each trustee is generally not required. Verification can also be based on extracts from Public Registers or references from professional advisers.

Further details on the FCA can be found at: **https://www.fca.org.uk**

1.2 PENSIONS ACT 2004

The Pensions Act 2004 sets out a regulatory framework to counteract the underfunding of pension schemes. The key points of the reform, which were introduced between April 2005 and April 2006, are:

- **TPR**: Provision for a new pension regulator with increased legislative powers to intercede in schemes that are running into underfunding issues.
- **Pension Protection Fund (PPF)**: Formation of the PPF to provide a solution to significantly underfunded pension schemes whose sponsoring employer is insolvent. In particular, the fund will pay compensation to members of such schemes.
- **Scheme specific funding requirement**: Replacement of the minimum funding requirement (MFR) with scheme specific funding requirements. This framework allows funding arrangements to take account of the particular circumstances of each individual scheme.
- **Trustee expertise**: A legal requirement that all trustees should have appropriate knowledge and understanding of funding, investment, and relevant legal and scheme specific issues.

Choosing Investments

Trustees, and fund managers to whom trustees' discretion has been delegated, are required to exercise their powers of investment in accordance with the Statement of Investment Principles (SIP). The Pensions Act 2004 also requires SIPs to adhere to the following guidelines:

- Trustees and their fund managers must exercise their powers of investment or discretion in a manner calculated to ensure the security, quality, liquidity and profitability of the portfolio as a whole.
- Assets must be managed in a manner appropriate to the nature and duration of the expected future retirement benefits payable under the scheme.
- Assets must be invested predominantly on regulated markets, with investments that are not traded on a regulated market kept to a prudent level.
- The scheme's assets must be properly diversified to avoid accumulations of risk in the portfolio as a whole.

Borrowing

The Pensions Act 2004 prohibits trustees, or a fund manager to whom any discretion has been delegated, from borrowing money or acting as a guarantor if the borrowing is liable to be repaid, or liability under a guarantee is liable to be satisfied, out of the assets of the scheme, except for the purpose of providing liquidity for the scheme and on a temporary basis.

1.3 THE PENSIONS REGULATOR

The Occupational Pensions Regulatory Authority (OPRA) was established by the Pensions Act 1995 and was replaced by TPR from 6 April 2005 under the terms of the Pensions Act 2004.

TPR is the UK regulator of work-based pension schemes and has certain objectives set out in legislation as follows:

- to protect the benefits of members
- to promote, and to improve understanding of the good administration of work-based schemes
- to reduce the risk of situations arising which may lead to compensation being payable from the PPF
- to maximise employer compliance in relation to the automatic enrolment requirements
- to minimise any adverse impact on the sustainable growth of an employer (in relation to the exercise of TPR's functions under Part 3 of the Pensions Act 2004 (scheme funding) only)

TPR works with a wide range of bodies and organisations including trustees, employers and advisers, giving guidance on what is expected of them. It has developed a large volume of guidance in a number of formats and it is worth visiting its website **http://www.thepensionsregulator.gov.uk/about-us.aspx** and **https://www.thepensionsregulator.gov.uk/en/document-library** to gain an understanding of the range of material which is available, including its links to Press releases and blog/Media hub.

TPR has a number of statutory powers, including the ability to obtain information about schemes, and is able to take regulatory action where it decides that this is required to protect the security of members' benefits. This includes the following:

- To issue an improvement notice to individuals or companies, or a third-party notice, requiring specific action to be taken within a certain time
- To take action, on behalf of a scheme, to recover unpaid contributions from the employer if the due date for payment has passed
- Where wind up is pending and members' interests may be at risk, to issue a freezing order
- To prohibit trustees who TPR does not consider to be fit and proper persons for the role
- To impose fines where breaches have occurred
- To prosecute certain offences in the criminal courts

TPR also has power to act where it believes that an employer is deliberately attempting to avoid their pension obligations, leaving the PPF to pick up their pension liabilities. To protect the benefits of scheme members, and to reduce the PPF's exposure to claims for compensation, TPR may issue any of the following:

- **Contribution notices** - these allow TPR to direct that, where there is a deliberate attempt to avoid a statutory debt or where an act or omission has material detriment to the scheme, those involved must pay an amount up to the full statutory debt either to the scheme or to the board of the PPF
- **Financial support directions** - these require financial support to be put in place for an underfunded scheme where TPR concludes that the sponsoring employer is either a service company or is insufficiently resourced
- **Restoration orders** - if there has been a transaction and TPR believes that a scheme's funds have been removed inappropriately, this would allow TPR to take action to have the assets (or their equivalent value) restored to the scheme

Given the number of schemes under its remit, TPR is not able to monitor all pension arrangements completely and it has developed a range of approaches for influencing the behavior of trustees, employers and advisers. It also uses the threat of its enforcement powers more widely than taking the actions themselves. In early 2019, following release of a 2018 White Paper, the Government announced proposals to strengthen TPRs powers so it can be more proactive, obtain the required information in a timely manner, gain redress for schemes and members when things go wrong and deter reckless behaviours.

As well as Codes of Practice, TPR has also published the web- based Trustee Toolkit which is available as a means of providing education to trustees and to assist them in meeting the Knowledge and Understanding (TKU) provisions.

TPR carries out research and analysis which include its annual report, The DB landscape and the Defined Contribution (DC) trust, a high-level snapshot of the trust-based DC and hybrid pension statistics. Examples of these can be found at:

- **https://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/db-pensions-landscape-2019.ashx**
- **https://www.thepensionsregulator.gov.uk/en/document-library/research-and-analysis/dc-trust-scheme-return-data-2019-2020**

1.4 PENSION PROTECTION FUND

The Pension Protection Fund (PPF) provides compensation to members of eligible DB pension schemes in the event that a scheme's sponsoring company becomes insolvent and is unable to make the payments due from it to the scheme.

In order for the PPF to assume responsibility for a scheme, the scheme must meet the following conditions:

1.4.1 It must be eligible (i.e. a DB scheme or a DB element of a hybrid scheme that is liable to pay the PPF's levies).
1.4.2 It must not have commenced wind up before 6 April 2005.
1.4.3 The employer must have become insolvent on or after 6 April 2005.
1.4.4 There must be no chance that the scheme can be rescued.
1.4.5 It must be unable to match the level of compensation that the PPF would pay if it assumed responsibility for the scheme.

A period of assessment is needed for the PPF to determine whether a scheme meets the latter two conditions. During this time, the trustees remain responsible for scheme administration and must continue to act in the interests of all its members. However, trustees will be monitored by the PPF, which has the right to comment on investment strategy. In addition, benefits payable will be limited to PPF levels of compensation. The assets are typically transferred to the PPF within one to three years after the insolvency event.

The PPF provides two levels of compensation:

1. Members who already have reached the scheme's normal retirement age or are in receipt of a survivor's or ill-health pension at the date the assessment period begins will receive 100% of the pensions they are being paid.
2. Members who are below the scheme's retirement age on the date of assessment will normally receive 90% of their accrued pension at the time. The maximum overall compensation that members can claim is capped at £41,161 p.a. at age 65 (as at April 2020). As the cap is applied before the compensation is reduced to 90% of our levels, the actual amount received as a capped member retiring at 65 is £37,315. (Details are given in **https://www.ppf.co.uk/news/changes-compensation-cap-2020/21**).

Paragraphs 26 and 27 of Schedule 7 of the Pensions Act 2004 set out the circumstances in which the compensation cap applies and how and when it should be increased.

The compensation cap is also used in valuation calculations required under Sections 179 and 143 of the Pensions Act 2004. You can find out more about how it's applied under these sections in Valuation guidance. (Details are given in **https://www.ppf.co.uk/compensation-cap-factors**).

The PPF obtains its funding from a number of sources, including:

- Assets retained from the schemes for which it assumes responsibility.
- Annual levies from eligible schemes.
- Returns on its investments.
- Pension debt recovered from employers.

The Board of the PPF, who are responsible for paying compensation, calculating levies and overseeing its investment strategy, runs the Fund. The Board is ultimately accountable to Parliament.
The PPF imposes compulsory levies on all eligible schemes, which currently consist of a) the pension protection levy and b) administration levy. The pension protection levy comprises the following:

- A scheme-based element, which takes account of the level of a scheme's liabilities.
- A risk-based element, which takes account of the scheme's funding level, the risk of the sponsoring employer becoming insolvent and the scheme's investment strategy. The amount a scheme pays is linked to the level of risk it carries.

The scheme-based element of the levy has reduced over time and now represents about 10% of the overall levy.

Large schemes are required to carry out additional analysis to provide a more detailed measurement of investment risk.

In addition, a fraud compensation levy is imposed on all occupational schemes that are eligible for the Fraud Compensation Fund (see below).

The PPF aims to balance the levies charged to a scheme with that scheme's ability to pay, since charging very high levies may push employers that are already in difficulty into insolvency. It does so in a number of ways:

- Rewarding schemes that are making efforts to reduce their deficits.
- Taking into account a scheme's contingent assets, such as the guarantee of financial support from the sponsor, or the right to a specific asset.
- Capping the risk-based levies at 0.5% of a scheme's unstressed liabilities. (Details can be found at **https://www.ppf.co.uk/what-risk-based-levy**).

Fraud Compensation Fund
The Fraud Compensation Fund provides compensation to occupational pension schemes that incur losses as a result of fraud. Most DB and defined contribution (DC) schemes are eligible for compensation, with the exception of those specifically excluded in the Pensions Act 2004, but it does not apply to state pensions.

Further details on the PPF can be found at https://www.ppf.co.uk/

1.5 SELF-INVESTMENT

The Pensions Act 1995 and the Occupational Pension Schemes (Investment) Regulations 2005 impose a restriction on trustees investing in the sponsoring employer of the scheme. Trustees must not:

- invest more than 5% of the current market value of the scheme's assets in employer-related investments
- invest in employer-related loans

Any such investment must be disclosed in the trustees' report. Employer related investments include:

- shares issued by the employer or any other company in the group
- land occupied or used by the employer
- other property used for the purposes of the employer's business
- units in a collective investment vehicle that holds an employer related investment
- any premiums or payments from an insurance policy that is invested in the employer.

Since 23 September 2010, this 5% limit includes investments in the sponsoring employer made by collective investment schemes. Collective investment schemes include, for example, pooled investment vehicles, limited partnerships and unit trusts. Schemes must monitor both their segregated investments and also any employer-related investment within pooled investment vehicles and full disclosure must be made in the annual report if the aggregate amount exceeds the 5% limit.

The Regulations are relaxed in the case of small member-controlled schemes, where investment no more than 20% of the market value of a scheme's investment portfolio and do not apply to one member arrangements.

Summary

The FCA monitors the provision of investment services to UK pension schemes and has wide-ranging powers to monitor those involved to ensure that consumers (including trustees) are adequately protected.

Trustees may delegate investment activities to an investment manager that is authorised and regulated by the FCA. However, trustees remain responsible for setting the scheme's investment strategy and ensuring that
the investment manager is suitably qualified to carry out the scheme's investment business.

The Pensions Act 2004 sets out a regulatory framework to counteract the underfunding of pension schemes. It provided for a new regulator – TPR – with increased powers to intercede in schemes with underfunding issues.

The Pensions Act 2004 also initiated the Pension Protection Fund to provide a solution to significantly underfunded pension schemes whose sponsoring employer is insolvent.

Self-investment regulations prohibit the amount schemes can invest in employer related investments.

Self-Test Questions

- How must trustees act to ensure their investment business complies with the FSMA?
- What are the objectives of TPR?
- Under what circumstances can a scheme become eligible for entry to the PPF?

CHAPTER 2

Financial Administration and Governance

INTRODUCTION

In this Chapter we will look at the trustees' duty to produce an annual report and accounts and the need for those accounts to be independently audited. We will also look at the trustees' duties in relation to money handling, the range of investments that a scheme may hold and how the trustees can monitor the value of those investments. Finally, we consider the requirement for providers to operate Independent Governance Committees (IGCs) since April 2015; and the requirement for DC master trusts to be authorised; and then have ongoing supervision by the Pensions Regulator since April 2019.

The financial aspects of pension administration are central to the overall running of a scheme, so it is important that trustees can demonstrate that they have followed the proper procedures and acted in the interests of the members. After studying this Chapter, you should understand the requirement for a scheme to produce an annual report and accounts, the range of investments that a scheme might hold and the various tax charges that may apply to payments made by the scheme.

2.1 SCHEME ACCOUNTING

Trustees' Responsibilities for Bank Account
Under the Pensions Act 1995 trustees of occupational pension schemes must open and maintain a trustee bank account to receive pension scheme monies. This is to keep the monies entirely separate from those of the employer. The trustee account is required:
- so that employee and employer contributions can be collected and held separately from company funds
- to receive any other payments due to the scheme such as transfer values or special employer contributions
- to pay benefits to members and beneficiaries
- to record all financial transactions for inclusion in the annual report

and accounts Trustees' responsibilities would usually be to:
- establish mandates with the bank covering authority levels and signatories required to make payments
- ensure cash flows are properly controlled
- ensure that contributions are received in line with regulatory timescales
- ensure that benefits are only paid to genuine beneficiaries.

Delegation to Third Party Administrators (TPAs) or Insured Schemes
Where the handling of finances is delegated to a TPA (or an insurer) and the TPA runs a trustee bank account to fulfil that function, the trustees' day to day duties generally pass to the TPA, although trustees retain overall responsibility.

Whether all day to day duties are delegated depends on the terms of a written agreement between the trustees and the TPA. Where some duties are retained by the trustees, the trustees may maintain their own account in addition to the TPA's trustee account.

If trustees have delegated some of their day to day financial duties, they should agree with the TPA what reporting they will receive in respect of the financial transactions. This may include receiving a summary of the scheme transactions on a periodic basis or possibly quarterly or half yearly accounts.

Day to Day Cash Management

Whoever controls the trustee bank account, the usual principles are:

- funds are held to meet day to day payments and likely short-term net expenditure, with any surplus funds being sent to the fund investment manager
- a regular (usually monthly) cash flow analysis will be prepared to:
  - determine monies required to meet benefit payments over the next month or so
  - identify monies available for investment
  - identify a need to disinvest funds
- surplus monies will only be invested in accordance with the Statement of Investment Principles signed by the trustees
- any disinvestment of funds from the investment manager will only be carried out in accordance with trustee policy.

Contributions

Schedule of Contributions / Payment Schedule

Under the Pensions Act 1995 the trustees of a DB scheme must draw up a schedule of contributions whereas the trustees of a DC scheme must draw up a payment schedule. These schedules must show:

- what contributions should be paid to the scheme
- when they should be paid

Collection of Contributions

Various methods can apply. Some examples are:

- As part of the payroll process contributions are deducted from members' pay and paid to the trustee bank account (usually monthly) along with any employer contributions due
- Where the overall contribution rate (employee and employer) is expressed as a percentage of the company's payroll, the employer will pay the set percentage to the trustee bank account once a month
- Additional Voluntary Contributions (AVCs) are sometimes remitted directly to the AVC provider to minimise delays in investment. As these transactions will not be recorded in the trustee bank account, the AVC provider's records will need to be obtained at the accounting period end to ensure the AVC figures are correctly included in the accounts

Regulatory Timescale for Payment of Contributions

Regulations under the Pensions Act 1995 require that the employer must pay any employee contributions, including AVCs, to the trustees by

- the 22nd of the month following the month in which the contributions are deducted from members' pay, if the contributions are paid electronically
- by the 19th of the following month if the contributions are paid by other means

Note that contributions must still be paid in line with the dates set out in the current schedule of contributions or payment schedule.

Late Payment of Contributions

Failure to pay contributions to the trustee bank account within the above timescales represents a breach of the regulations which, in some cases may need to be reported to TPR. Trustees must check that both the correct amount of contributions is paid and that they are paid on time. Where, for example, a TPA maintains the bank account, trustees must agree with the TPA how the receipt of contributions will be monitored and who is responsible for ensuring that the correct amount is paid.

Investment Records
Direct investment by trustees is an increasingly rare way for even large schemes to manage their investments. Specialist investment managers are now usually appointed instead (not least because this enables trustees to delegate some of their day to day responsibilities). The documentation required on the appointment of investment managers is covered in Part 6 Chapter 2.2.

Where trustees have delegated responsibility for investments, they should ensure that suitable records of the investments held are maintained and should obtain regular reports on those investments.

Whether investment is direct or indirect, trustees usually appoint one or more custodians to hold securities on behalf of the scheme. Records must be maintained and available in relation to their additional services.

Managed Funds and Unitised Investments: Under a managed fund, the investment records will show how the pension scheme's assets are divided among the available pooled funds which operate by unit trust methods. Usually the service provider, which could be an insurance company, will offer pooled managed fund investment in a range of funds, e.g. mixed, property, equity and fixed interest.

Where applicable, records should be kept to undertake performance evaluation. With managed funds, the return is generally readily ascertainable (in contrast with the problems associated with estimating the return on with profits contracts). If the scheme holds units in a range of funds, the return will be calculated for each fund and the trustees can then amalgamate the respective yields to obtain an appropriate weighted average return for their entire fund.

Property Investment: As with other asset classes, the extent of the records required depends on whether the administration is undertaken in house or by an outside manager and whether the property investment is direct (applicable to very large funds only), or through property unit trusts.

In addition to the title deeds for each property, which are often held by solicitors, the following records must be maintained:
- details of each property
- inspection records
- records of rents
- records of rent reviews
- local authorities involved
- valuations
- insurance records
- taxation records

In many cases, valuations by independent firms will also be obtained in addition to that provided by the main surveyor.

Insured Schemes: The insurer will maintain these and provide trustees with regular reports based on ongoing records:
- With profit policies
  - the premium rates used for the contract
  - the guaranteed yields that might apply
  - the length of the guarantee
  - enhanced yields from periodic bonus declarations

- Non-Profit Policies
  - Records should show the rate of interest underlying the premium rates, and on which pensions are being purchased. This can be obtained from the life office itself or estimated from the premium rates applicable to the scheme by an actuary.
  - Under both with and non-profit insured contracts, the terms being offered will contain underlying guarantees which bear a cost: the more that is guaranteed the lower the interest yield granted. With less being guaranteed under with profit contracts than under non-profit contracts, a greater yield is hoped for, and expected, on the former investment. All this information and relevant explanatory notes should be included in the investment records.

Unitised Policies: For insured schemes investing in unitised vehicles, records of the number of units held, their purchase date and price must be maintained for valuation purposes.

Tax Charges
Scheme Administrators are responsible for deducting and accounting for tax on pensions and certain other authorised payments made from the scheme. In addition, if they make any unauthorised payments, they will be liable to a tax penalty based on the amount of the unauthorised payment.

2.2 TRUSTEES' REPORTING REQUIREMENTS

Trustees have various reporting requirements, including to HMRC, TPR and the scheme members. Some of these reporting requirements are described in this section.

Providing Information to HMRC
Trustees do not usually have to submit accounts to HMRC unless they receive a 'notice to produce accounts' from HMRC. In this case, a copy of the accounts that have a period end which falls within the financial year quoted in the notice must be sent to HMRC within seven months of the end of the period covered by the accounts or 35 days after the date of the notice, whichever is later. If a 'Notice to file a Tax Return for Trustees of Registered Pension Scheme' (SA970) is issued by HMRC or the scheme has taxable income which is reportable to HMRC, the SA970 should be completed based on the same set of accounts as required by the 'notice to produce accounts'. The deadline for submission of the Return is 31 January following the end of the tax year to which the SA970 relates and penalties apply for the late submission of Returns, even where there is no tax payable. HMRC may also request schemes to submit a further return, the 'Registered Pension Scheme Return'.

Some pension schemes are registered for VAT purposes. In these cases, quarterly VAT returns must be filed on-line within one month and seven days of the quarter end to which the return relates.

The Scheme Administrator must provide an event report to HMRC giving details of certain events (which are set out in legislation and in the Registered Pension Schemes Manual - RPSM) that have occurred during the tax year to which the report relates. With one exception, the event report must be submitted to HMRC no later than 31 January after the end of the tax year to which it relates. A shorter deadline applies if the scheme has completed winding up. No report is required if there have been no reportable events. The exception relates to transfer payments made to qualifying recognised overseas pension schemes (QROPS). Schemes must report any such transfers to HMRC within 60 days of payment.

HMRC will impose a penalty on the Scheme Administrator of up to £300 if an event report is not submitted or is submitted late. Additional penalties of up to £60 per day can be imposed if there is further delay.

Examples of events that must be reported on the event report include the following:

- certain changes to the scheme, for example if the scheme becomes, or ceases to be, an occupational pension scheme
- unauthorised payments
- benefit crystallisation events where the amount crystallised exceeds the standard Lifetime Allowance where reliance is being placed on primary or enhanced protection, or fixed or individual protection (2012, 2014 or 2016)
- pension commencement lump sums of more than 25% of the member's rights, and which are more than 7.5% but less than 25% of the standard LTA
- pension commencement lump sums where reliance is made on enhanced or primary protection
- lump sum death benefit payments exceeding 50% of the standard LTA
- serious ill health lump sums for directors or persons related to the sponsoring employer

Providing Information to Members

Members and prospective members must be told that a copy of the trustees' report and accounts is available on request, as part of the basic information about the scheme. There is no requirement for the automatic provision of copies of the Annual Report and Accounts, provided that all those entitled to receive a copy are advised of their right to receive one. A copy of the latest report must be made available free of charge within two months of the request unless one has already been issued to the individual or trade union concerned.

Copies of the annual report for each of the five previous scheme years must be available for inspection on request at an accessible location and within two months of the request.

As noted in Chapter 2.4, many schemes issue to members automatically a simplified version of the trustees' annual report and accounts. The trustees' report and accounts must be signed within seven months of the end of the scheme year to which they relate. Failure to meet this deadline may result in sanctions and fines by TPR, if this is indicative of a breach of duty by the trustees which could adversely affect members' benefits or be of material significance.

Trustees are required to keep members, prospective and current beneficiaries, trade unions and other interested parties fully informed about their scheme. This information includes access to scheme documentation and the Annual Report and Accounts, as well as details of the benefits to which individuals are, or could be, entitled under the scheme.

2.3 FINANCIAL STATEMENTS AND AUDIT

Responsibility for the production and accuracy of a scheme's financial statements (accounts) resides firmly with a scheme's trustees. Expert advice is available from the scheme auditors, who will provide guidance on the compliance of financial statements. The scheme accounts should give a true and fair view of the financial transactions of the scheme during the accounting year, and of the disposition of its net assets at the year end. The pension scheme audit requires the auditors to give an auditors' opinion on the financial statements and a separate opinion on contributions.

Accounting Concepts

It is generally accepted that four concepts are fundamental, in so far as non-compliance with them would need to be stated - otherwise they are taken for granted. In the context of pension schemes, these are:

Going concern

The scheme is assumed to be continuing for the foreseeable future.

Consistency
There is a consistency of accounting treatment of like items within each accounting period and from one period to the next.

Accrual
Contributions and benefit costs are accrued, i.e. recognised for accounting purposes, as they are earned or incurred (regardless of when received or paid). Contributions and investment income for a particular year are not expected to ‘match’ the outgo of benefits, and the excess of income over expenditure (or expenditure over income for a ‘mature’ scheme) is not significant in itself.

Prudence
The pension fund accountant will only include liabilities within the accounts for events that have already occurred, and which give rise to immediate transactions. If there is a potentially significant liability but it is not certain – i.e. a contingent liability, it will be noted in the accounts, but not quantified. All the probabilistic aspects can safely be left to the actuary, including all unascertained liabilities.

The Fund Account and the Net Assets Statement
The accounts typically have two prime statements – the fund account and the net assets statement. The fund account shows the effect of the transactions that have occurred in the accounting period and is usually split into two sections with the top half of the statement showing dealings with members and the bottom half showing the return on investments. At the foot of the fund account is a reconciliation of the opening to the closing position and also to the net assets statement.

In conventional accounting terms the net assets statement is a document which shows the overall assets of the entity being reported on, at the point in time to which the accounts relate. It is a ‘snapshot’ at one point in time.

For a DB pension fund’s accounts, however, the value of the liabilities at any point in time has to be read in conjunction with an actuarially stated value of those liabilities. Reference to the actuarial position of the scheme will be included in the net assets statement. It is the actuarial valuation, reports and certificates that look at the long-term health of a pension scheme and determine whether the value of its assets exceeds the value of its liabilities, both now and in the future.

Changes in the market value of investments over the year will be identified in the fund account and the supporting notes. The notes to the accounts should also confirm the total purchases and sales of investments during the year, either in aggregate or analysed by major categories. The extent of any self-investment (including unpaid contributions) and how this has changed in the accounting period should also be included.

Further details about investments will also be shown as a note to the accounts and in the trustees’ report accompanying them.

Asset Values: SORP requires assets to be shown at their market value. The date at which the assets are valued should be as close as possible to the effective date of the accounts.

Listed Securities (Quoted): Quoted securities should be included at their closing prices. These prices may be as at the last trade date prices or bid prices, depending on the convention of the stock exchange or other market on which they are quoted.

Unlisted (Unquoted) Investments: Where investments are not quoted on a recognised stock exchange, a consistent valuation basis must be decided upon which can be followed every year. Under SORP, unquoted investments should be valued by the trustees following advice from an investment manager or other appropriate professional adviser.

Pooled Investment Vehicles (e.g. unitised funds): SORP requires unitised funds to be included at the closing bid price, if both the bid and offer prices are published. If units are single priced, the closing single price must be shown.

Property: Property valuation is a matter for expert valuers who will advise on current market conditions. As the valuation of properties may involve additional expense in professional fees, the frequency of the valuation is a matter of judgement for the trustees, subject to any specific requirement in the scheme documentation. Where properties comprise a significant proportion of total investments it is recommended that independent valuations should be carried out at the same frequency as the actuarial valuation. For intermediate years, the previous valuation is updated having regard to broad, though local, market trends.

Insurance Policies: Apart from annuities purchased to discharge trustees' liability and which have a nil value, a scheme may hold insurance policies either on their original investment merits or because the scheme has been unable to sell or surrender the policy on acceptable terms. Valuing such assets can be problematical but trustees should normally adopt an approach that is consistent every year and as far as possible, consistent with the way other scheme assets are valued. However, if a scheme is winding up different considerations will apply.

Derivatives: are financial instruments that derive their value from the price or rate of some underlying item. Underlying items include equities, bonds, commodities, interest rates, exchange rates and stock market indices. There are many types of derivatives including futures, options, forward foreign currency contracts, repurchase agreements and swaps. Derivative contracts should be valued in the accounts at fair value and disclosed separately under investments as either assets or liabilities.

Audit

Regulations under the Pensions Act 1995 require a scheme's annual accounts to be audited. The trustees produce the accounts and the auditor then expresses an independent opinion on those accounts.

The standard audit opinions, which are contained in the auditor's reports to the scheme trustees, confirm whether for the period under review:

- the accounts give a true and fair view of the financial transactions in the period
- the accounts give a true and fair view of the disposition of the scheme's assets and liabilities
- the accounts contain the information specified in the regulations
- as a separate opinion, that contributions have, in all material respects, been paid at least in accordance with the scheme's rules and the actuary's recommendations, or in accordance with the schedule of contributions or payment schedule in force during the period in question

The audit itself is an examination of the books and accounting records kept in respect of the scheme. During an audit it is not possible to check every detail of every transaction, so the auditor will undertake a variety of tests and procedures aimed at providing them with comfort that the accounts do give a true and fair view.

This work will normally include a detailed review of a sample of transactions (substantive testing). In selecting what sample to review, the auditors will use statistical sampling techniques whilst keeping in mind what is likely to be material and the risk to the scheme of a potential misstatement. Auditors must also assess the control environment that exists within the scheme and, as a result, can seek to rely upon testing these controls as part of their work (controls-based testing). In recent years, auditors have been moving more towards controls-based testing, rather than substantive testing.

Auditors have a duty to inform TPR immediately there is reasonable cause to believe there has been a breach of duty that is likely to be of material significance to TPR, i.e. to whistleblow. This is ideally done as a joint report from the actuary, auditors and trustees.

An audit may extend to a review of administration procedures to ensure that benefits are being calculated in accordance with the scheme's rules. For this reason, adequate supporting documentation must be kept in relation to each financial transaction, i.e. an 'audit trail'. In general terms, an audit trail is the ability to trace the history of a financial transaction from its initiation to its payment so that it can be reviewed and checked for accuracy at a later date. For a benefit calculation this would include the details on which the calculation is based, for instance the pensionable service and final pensionable salary used, etc. For other payments or receipts there may be an invoice, receipt or other form of authorisation.

The importance of good scheme administration and management is further emphasised by a requirement of the Pensions Act 2004 that trustees must introduce and maintain suitable internal control mechanisms to ensure that the scheme is administered and managed in accordance with the scheme rules and the law.

A code of practice on internal control mechanisms is available from the Pension Regulator's website at: **http://www.thepensionsregulator.gov.uk/docs/code-09-internal-controls.pdf**

Third party administrators can produce an Audit and Assurance Faculty 'AAF 01/20 ' Report. AAF 01/20 replaced the AAF 01/06 report and is effective for reports beginning on or after 1 July 2020. This report gives their clients and auditors assurance over the processes and controls in place and is a key document for trustees when they review third party administrators as part of their annual internal controls review. This report is often combined with the international assurance standard, 'International Standard on Assurance Engagements (ISAE) 3402 Assurance Reports on Controls at a Service Organisation'. The content of this combined Report is largely the same as the AAF 01/20 report.

An auditor need not be appointed for:
- Unfunded arrangements
- Employer financed benefit schemes
- Occupational schemes with less than two members
- Occupational schemes providing only lump sum death benefits
- Certain public sector arrangements
- DC and DB schemes where there are fewer than 12 members and all members are trustees and either all decisions are made by unanimous agreement of the members or the scheme has an independent trustee who is on the approved list by TPR.

2.4 TRUSTEES' ANNUAL REPORT

The annual report of a pension scheme falls naturally into a number of separate parts. Scheme accounts and the associated trustees' report must comply with The Occupational and Personal Pension Schemes (Disclosure of Information) Regulations ('the disclosure regulations') made under the Pension Schemes Act 1993. The disclosure regulations require the accounts to be accompanied by an actuarial statement (for DB schemes) and a trustees' report, so the annual report will contain:
- the trustees' report, giving a review of the management of the scheme and developments during the accounting period, along with a statement of trustees' responsibilities. The report should include a list of trustees and their advisers, together with a contact name and address for enquiries. The scheme's registration number with TPR should be displayed prominently.
- an investment report, reviewing the investment policy and performance of the scheme. This report should include reference to the Statement of Investment Principles together with details of custodial arrangements.

- a compliance statement, containing additional information which is either required to be disclosed by law (or is disclosed voluntarily but is not significant enough to go in the main report)
- the auditor's report
- the financial statements
- actuarial statements (not relevant for wholly DC schemes)

Since April 2015, the trustees of occupational DC schemes have also been required to prepare an annual governance statement, signed by their Chair (the 'Chair's Statement'), and trustees must confirm to TPR on their annual return that such a statement has been produced, with fines for non-compliance. A further requirement applies for year ends on or after 6 April 2018 for additional information on investment charges and core transaction costs to be made available online to members via the Chair's statement. The information must be provided free of charge on a publicly accessible website.

A new requirement for the trustees' annual report to include an Implementation Statement is explained in Chapter 3.1.

Many schemes produce a condensed version of the trustees' annual report and accounts and issue this simplified version to members automatically.

The regulations governing the required disclosure in the scheme accounts are in the Statement of Recommended Practice (SORP) issued by the Pensions Research Accountants Group (PRAG). The most recent is the Financial Reports of Pension Schemes SORP (2018). SORPs set out recommended rather than mandatory practice. However, under the Pensions Act 1995 schemes must disclose whether they have complied with the SORP and explain and justify any material departure from the SORP.
Further information on PRAG is available from their website at: http://www.prag.org.uk.

The format and content of accounts for trust-based pension schemes are governed by the requirements of:
- the SORP as revised and issued by PRAG,
- the Pensions Act 1995 and
- General Accounting Principles

Together, these set out the formal guidelines for the accounts and supporting disclosures and recommend the areas that the attaching trustees' report should cover. Apart from any actuarial statements required and the auditor's report, the trustees are responsible for the content of the annual report. The trustees' report and accounts must be signed within seven months of the end of the scheme year to which they relate.

Statements from the Actuary compared with Auditor statements
For DB schemes, the actuary's certificate or statement should include the actuary's opinion on the calculation of the scheme's technical provisions and on the sufficiency of contributions.
The auditor's report should include the auditor's opinion on the scheme's accounts and confirmation of whether or not contributions have been paid into the scheme as required.

The essential distinction is that:
- the accounts and accompanying notes, on which the auditor reports, are an historical account of stewardship of the scheme across the period covered by the report
- whereas the actuarial report gives a long-term view of the fund and looks forward into the future

The trustees' report gives useful and relevant information on the trustees' stewardship and provides a link between the accounts and the actuarial statement.

2.5 INDEPENDENT GOVERNANCE COMMITTEES

Within contract-based workplace pension schemes, in the absence of any trustee to monitor the scheme, the importance of the oversight of the provider has received more attention. This has resulted in the requirement for providers to operate Independent Governance Committees (IGCs) since April 2015.

The role of the IGC within the governance structure of a contract-based pension scheme will be to monitor, and report on, whether the members of these schemes are receiving value for money. In this regard, its main areas of focus are on default investment strategies, fund performance and core financial transactions.

Requirement to Produce an Annual Report

IGCs must produce annual reports and require providers to make these reports publicly available. The report should outline the IGC's work and include information on the level of direct and indirect costs incurred for transactions and other activities in managing and investing the pension assets of scheme members. The report is the responsibility of the IGC Chair (although not produced solely by the Chair). Reporting periods are not prescriptive and IGCs are not expected to report at the same time annually.

These reports will be accessible on the internet in contrast to trust-based annual report and accounts.

2.6 DEFINED CONTRIBUTION MASTER TRUSTS

The Pension Schemes Act 2017 introduced a definition of 'master trust' relating to multi-employer DC (money purchase) schemes that are not a public service pension scheme. Those schemes meeting the definition are required to be authorised by the Pensions Regulator, or the scheme must cease operation and wind-up. The key date for authorisation applications for existing master trusts was April 2019. That was followed by a supervisory regime set up to make sure master trusts continue to meet their authorisation criteria.

The authorisation criteria given by TPR are:

a. **Fit and proper**: All individuals being assessed must be able to satisfy us that they are fit and proper because they meet the standard of honesty, integrity and knowledge appropriate to their role.
b. **Systems and processes**: Master trusts must have sufficient IT systems and processes in place to run efficiently and have robust systems and processes to effectively govern the scheme and comply with all the relevant requirements.
c. **Continuity strategy**: Sufficient contingency planning is crucial to the effective running of a master trust and we'll be looking for a credible strategy as to how members will be protected if there is a triggering event and how a master trust may be closed down or how the triggering event will be resolved.
d. **Scheme funder**: Any scheme funder must be a body corporate or partnership and only carry out activities relating directly to master trusts (unless exempt). We will be looking for clear evidence in relation to its business activities that it is able to financially support the master trust.
e. **Financial sustainability**: The master trust needs to have enough financial support to ensure it can set up and operate on a day-to-day basis and to cover the costs subsequent to a triggering event without increasing the cost to members. A key part of demonstrating that the authorisation criteria are met is by having a business plan in place setting out the expected activities and growth of the master trust and how they will be funded. This plan will be critical in our assessment of whether a master trust meets the authorisation criteria.

The Code of Practice 15: Authorisation and supervision of master trusts was published in October 2018 to act as a guide as to how to meet the Regulator's expectations. This Code is also a useful guide to demonstrate what the Regulator's expectations are for operational systems and controls for other pension schemes.

2.7 COMPANY ACCOUNTS

Reporting of DC pension arrangements in a company's accounts is relatively straightforward. The amount of company contributions will be shown, and the only potential liability will be to the extent that there are any contributions due but not paid at the year end.

For DB schemes the position is more complex, since the scheme's assets and liabilities are unlikely to be in balance. Where the assets are less than the liabilities, the shortfall (or deficit) must be shown in the company's balance sheet as a creditor. Where the assets exceed the liabilities, the surplus can only be shown in the company's balance sheet to the extent that the company can be expected to obtain financial benefit for it.

When valuing the liabilities, there are rules prescribed to the various accounting standards, such as IAS19 (the International standard) or FRS102 (the UK standard). The calculated liabilities will normally differ from those reported by the Scheme Actuary for the purposes of the actuarial valuation, even if calculated as at the same date, because they use different actuarial assumptions.

Over the years the disclosure requirements for DB schemes have grown considerably, and it is now necessary to show a considerable amount of information about the assets and the liabilities. The objective is to provide sufficient information to enable an investment analyst to form a view of the impact of the pension scheme on the company's overall financial position.

Summary

This chapter has covered the financial administration of occupational schemes, including the trustees' duty to produce an annual report and accounts and for those accounts to be audited. The annual report must contain a report by the trustees, statements by the actuary and the auditor and the scheme accounts.

The scheme accounts should be based on fundamental accounting concepts and should be produced in line with the current Statement of Recommended Practice (SORP). Pension schemes may hold a range of assets and there are specific considerations that apply when determining the value of each type of asset for inclusion in the accounts.

Schemes must submit a quarterly Accounting for Tax return to HMRC if they have made any taxable authorised payments that are not taxed under PAYE. Schemes must also submit an annual event report to HMRC if any reportable events, including any unauthorised payments, have occurred during the tax year. Schemes also need to report to HMRC any transfers to qualifying recognised overseas pension schemes (QROPS) within 60 days of payment.

In relation to contract-based workplace pension schemes, in the absence of any trustee to monitor the scheme, since April 2015 there is a requirement for providers to operate Independent Governance Committees (IGCs).

Master trust DC schemes must operate from 2019 within the authorisation and supervisory regime established by legislation.

Pensions must be reported in company accounts in accordance with the relevant accounting standard, such as IAS19 or FRS102.

Self-Test Questions

- What documents must be included in the trustees' annual report and accounts?
- Distinguish between the purpose of the auditor's statement and the actuary's statement in a scheme's annual report and accounts
- What are the authorisation criteria for master trusts?

CHAPTER 3

Investment Governance

INTRODUCTION

Once the investment strategy has been selected, trust-based DB and DC schemes are required to document the strategy in the Statement of Investment Principles (SIP).

The SIP will also explain how the trustees have chosen to implement the strategy, although this is sometimes split out into a separate Investment Policy Implementation Document (IPID).

Investment governance principles for both DB and DC schemes are set out by the Pensions Regulator and have developed from the original Myners Principles that were published in 2002 into far more prescribed requirements such as the Pensions Regulator's guide to:
- DC Investment governance issued June 2019 and updated on website July 2019 **https://www.thepensionsregulator.gov.uk/en/trustees/managing-dc-benefits/investment-guide-for-dc-pension-schemes-.**
- DB Investment guidance issued September 2019 **https://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/db-investment-guidance.ashx**

Guidance is issued by the Regulator through its web pages 21st Century Trusteeship 'Governance, roles and strategy' found on https://www.thepensionsregulator.gov.uk/en/trustees/21st-century-trusteeship

3.1 STATEMENT OF INVESTMENT PRINCIPLES

In accordance with the Pensions Act 1995, a Statement of Investment Principles (SIP) is required for most DB and DC schemes. Exceptions are schemes with less than 100 members and some public sector schemes, while fully insured schemes are subject to different requirements.

The SIP must include the trustees' policy in the following respects:

Investment objectives: How investment are chosen, having regard for their diversification and suitability, and attitude for risk

Risk management: the way in which risks are measured and managed

Investment strategy: The types of investments and the balance between different types of investments, the expected return on the scheme's investments, and how the strategy is implemented including the policy on realisation of investments

Socially responsible investment: The extent, if any, to which social, environmental or ethical considerations are taken into account in the selection, retention and realisation of investments

Corporate governance: the exercise of the rights (including voting rights) attaching to the scheme's investments.

The last two items are now incorporated into what is called Environmental, Social and Governance (ESG), which is discussed in Chapter 3.3.

Partly due to the growing importance of ESG, Regulations issued in 2018 and 2019 have introduced further requirements relating to the SIP for both DB and DC schemes:
1. Details of how financially material considerations (including ESG) are taken into account in investment decision making
2. Details of the extent, if any, that non-financial matters (views of members and beneficiaries including ethical views) are taken into account in investment decision making
3. Trustees' stewardship policy, including on voting rights and monitoring and engagement with 'relevant persons' about 'relevant matters' in respect of scheme investments
4. Stewardship policy to include cover how trustees monitor and engage with other stakeholders (extending the definition of 'relevant persons') and how they monitor capital structure and conflicts of interest
5. Trustees' policy in relation to arrangement with their asset manager, including in relation to incentivisation, remuneration, performance evaluation, portfolio turnover and duration of agreement

Requirements 1. to 3. came into effect on 1 October 2019, and 4. and 5. on 1 October 2020.

Further new SIP requirements apply from 1 October 2019 for DC schemes in relation to default arrangement, to set out policies on financially material considerations and non-financial matters and, for schemes with 100 members or more, to include trustees' policy on stewardship (and from 1 October 2020 arrangements with the asset manager).

The new regulations also introduced additional disclosure requirements:
- SIP to be made publicly available free of charge on a website from 1 October 2019 (DC schemes) and 2020 (DB schemes)
- An **Implementation Statement** to be included in the scheme's annual report on how and the extent to which the SIP has been followed in the scheme year, from 1 October 2020 (DC schemes) and 2021 (DB schemes), from 1 October 2021 to include statement on the voting behaviour of trustees during the year

Before the SIP is drawn up or revised, the trustees must:
- Obtain and consider the written advice of a person who they reasonably believe to have the appropriate knowledge and experience of financial matters and investment management
- Consult with the employer. This means considering the employer's views carefully, but does not require the employer's explicit agreement.

The detail of how the investment strategy is implemented is sometimes set out in the Appendix to the SIP, or in a separate Investment Policy Implementation Document (IPID) The purpose of this IPID is to provide details of the specific investments in place alongside other information relevant to the management of the investments. It could include day-to-day management of the assets, the investment structure asset % held and investment managers used in return seeking assets (equities), or cashflow matching assets (property and corporate bonds), or liability matching

The IPID covers the day-to-day management of the investments. In particular it will specify which managers have been appointed, their mandates and their fees. Now that there is a regulatory requirement for an Implementation Statement to accompany a scheme SIP and be published, the usefulness of the IPID as another document to explain scheme investments strategy and practice remains to be seen, although they have different purposes with the Implementation Statement being more a summary overview and the IPID containing more detailed investment information.

3.2 INVESTMENT GOVERNANCE PRINCIPLES

In 2008 the Investment Governance Group (IGG) published investment governance principles. While these are not mandatory, trustees are expected to have given them due consideration and, to the extent they may have departed from them, to be able to justify the rationale.

The current principles, still often referred to as the updated Myners Principles, are as follows:

Effective decision-making – trustees should ensure that decisions are taken by persons or organisations with the skills, knowledge, advice and resources necessary to take them effectively and monitor their implementation. Trustees should have sufficient expertise to be able to evaluate and challenge the advice they receive, and manage conflicts of interest.

Clear objectives - Trustees should set out an overall investment objective(s) for the fund that takes account of the scheme's liabilities, the strength of the sponsor covenant as well as the attitude to risk of both the trustees and the scheme sponsor, and clearly communicate these to advisers and investment managers.

Risk and liabilities - In setting and reviewing their investment strategy, trustees should take account of the form and structure of the liabilities. These include the strength of the sponsor covenant, the risk of sponsor default and longevity risk.

Performance assessment - Trustees should arrange for the formal measurement of the performance of the investments, investment managers and advisers. Trustees should also periodically make a formal policy assessment of their own effectiveness as a decision-making body and report on this to scheme members.

Responsible ownership - Trustees should adopt, or ensure that their investment managers adopt, the Institutional Shareholders' Committee Statement of Principles on the responsibilities of shareholders and agents. A statement of the scheme's policy on responsible ownership should be included in the Statement of Investment Principles. Trustees should report periodically to members on the discharge of such responsibilities.

Transparency and reporting - Trustees should act in a transparent manner, communicating with stakeholders on issues relating to their management of investment, its governance and risks, including performance against stated objectives. Trustees should provide regular communication to members in the form they consider most appropriate.

In 2010 the IGG published a modified version of the above principles specifically for DC schemes, to cover the following areas:
- Clear roles and responsibilities
- Effective decision making
- Appropriate investment options
- Appropriate default strategy
- Effective performance assessment
- Clear and relevant communication.

3.3 ENVIRONLMENTAL, SOCIAL AND GOVERNANCE (ESG)

Chapter 3.1 mentioned that the SIP must specify the trustees' policy with regard to ESG, which stands for 'Environmental, Social and Governance':

- Environmental – what is being done to manage human activities that affect the world's climate
- Social – how organisations treat their staff, and for instance, manage greater diversity, inclusion and wealth-sharing in the areas that they can influence. This can also include demonstrating that the organisation is operating for a greater purpose in society
- Governance – how the organisation is controlled, managed and what it decides are key areas to 'get right'

At a 'street level' a company may join up with communities such as 'Business For Good' (B1G1) **www.b1g1.com** which integrate everyday work with customers with making donations to one or more of the 17 Sustainable Development Goals (SDGs) adopted by world leaders in 2015 to transform the world by 2030 (**https://sdgs.un.org.goals**)

These 17 SDGs are:
GOAL 1: No Poverty,
GOAL 2: Zero Hunger,
GOAL 3: Good Health and Well-being,
GOAL 4: Quality Education,
GOAL 5: Gender Equality,
GOAL 6: Clean Water and Sanitation,
GOAL 7: Affordable and Clean Energy,
GOAL 8: Decent Work and Economic Growth,
GOAL 9: Industry, Innovation and Infrastructure,
GOAL 10: Reduced Inequality,
GOAL 11: Sustainable Cities and Communities,
GOAL 12: Responsible Consumption and Production,
GOAL 13: Climate Action,
GOAL 14: Life Below Water,
GOAL 15: Life on Land,
GOAL 16: Peace and Justice Strong Institutions,
GOAL 17: Partnerships to achieve the Goal

Society's increasing interest in ethical, social and environmental concerns is reflected in the greater consideration these factors now receive from the investment community, partly driven by regulation.

An investment is considered socially responsible because of the nature of the business the company conducts. Common themes for socially responsible investments include avoiding investment in companies that: produce or sell addictive and unhealthy substances (e.g. alcohol and tobacco), engage in activities deemed detrimental to society (e.g. armaments, gambling or pornography), or damage the environment. This is referred to as "negative screening.

Alternatively, socially responsible investing (SRI) may adopt an approach referred to as "positive screening". This approach focuses on investment in companies engaged in environmentally sustainable activities and technologies, including alternative energy or clean technology efforts.

There are significant moral, ethical, and scientific differences over what constitutes socially responsible investment, for example in the areas of medical research and energy.

Corporate governance is the nature of the relationship between all the stakeholders in a company. This includes employees, customers, government, society at large, shareholders, directors, and management of a company, as defined by the corporate charter, bylaws, formal policy and rule of law. Examples of good corporate governance practice include the presence of independent directors on a company's board of directors, the separation of the roles of chairman and chief executive and the existence of an audit committee composed of independent directors with significant financial experience.

The United Nations Principles for Responsible Investment (UNPRI), a voluntary code of practice for asset owners and asset managers launched in April 2006, has become established as the set of global best practices for responsible investment. These six Principles commit institutional investors to the following:

- to incorporate ESG (environmental, social and corporate governance) issues into investment analysis and decision-making processes
- to be active owners and incorporate ESG issues into ownership policies and practices
- to seek appropriate disclosure on ESG issues by the entities in which they invest
- to promote acceptance and implementation of the Principles within the investment industry
- to work together to enhance the effectiveness of investors in implementing the Principles
- to report on activities and progress towards implementing the Principles Advocates of responsible investment argue that companies that are well managed and profitable and that properly manage their social and environmental impacts are likely to be better investments over the long term.

The fund manager would be expected to show trustees how the asset classes being invested in could perform well against:

- environment risks arising from climate changes
- social risks from poor human rights and negligent care of workers in the industry being invested in
- governance risks addressed with a diversity of Board directors, brand resilience and accountability to stakeholders for executive compensation and other UK Corporate Code matters.

In September 2019 TPR issued 'Investment guidance for defined benefit pension schemes' that stated trustee should 'Take environmental, social and governance (ESG) factors into account if you believe they're financially significant.'

DC funds and master trusts also have a requirement to offer funds that meet the needs of their membership. This includes ESG funds and Shariah-compliant funds which are governed by the requirements of Muslim Shariah law and principles for socially responsible investing.

Summary

Trustees of most DB and DC schemes are required to establish and maintain a Statement of Investment Principles, setting out the trustees' policy on investments. The detailed investment arrangements are sometimes included as a separate Investment Policy Implementation Document. The Investment Governance Group has published investment governance principles which trustees are expected to follow.

Self-Test Questions

- What must be included in the Statement of Investment Principles?
- What is the purpose of an Investment Policy Implementation Document?
- What are the IGG's investment governance principles for DC schemes?
- What are the six Principles of the United Nations Principles for Responsible Investment (UNPRI)?

PART 6

INVESTMENT MANAGEMENT

OVERVIEW

The main role of an investment manager is to invest the assets in accordance with the mandate agreed with the trustees. There are various possible approaches and the trustees will need to decide on which type they want, or more likely a combination. The main approaches are active and passive management.

There is a choice as to whether the investment manager retains the scheme's assets on a segregated basis or combines them with assets from other schemes on a 'pooled fund' basis.

Trustees may have a single investment manager (i.e. using a pooled fund); or use different managers who specialise in different asset classes or markets. While some managers will be employed directly by the trustees, others may be employed indirectly via one of the managers with a direct relationship ('manager of managers' or 'fund of funds').

The investment manager needs to fulfil various administrative functions agreed with the trustees to ensure the overall smooth running of the scheme (such as investing and disinvesting and rebalancing). Where there are multiple investment managers, the administrative arrangements need to be co-ordinated and responsibility for this must be determined.

Trustees need to consider carefully how to organise the investment management and this is the subject of Chapter 1.

In Chapter 2 we discuss how trustees should implement the agreed investment. This involves selecting the investment managers. Once in place, the investment arrangements should be regularly monitored, and if necessary amendments need to be made.

Finally, Chapter 3 considers the monitoring of an investment manager and the types of information required from them to assist the trustees in their governance functions.

CHAPTER 1

Approaches to Investment Management

INTRODUCTION

Trustees have a number of decisions to make regarding the investment management arrangements. Do they want the manager to be index-trackers or try to outperform the index? Do they want the manager to pool their assets with other schemes or manage them separately? Do they want a single manager or multiple managers who specialise in different types of investment? Finally, to what extent do they wish to delegate the investment decision making process?

1.1 ACTIVE AND PASSIVE MANAGEMENT

Management strategies can be split into two main approaches:

- **Active management**: aims to outperform a particular market index or benchmark through manager skill
- **Passive management**: aims to match the returns of a particular market index or benchmark (also called index-tracking or indexing).

Active management stems from the belief that markets are not entirely efficient. Fund managers seek to exploit certain market irregularities or inefficiencies to achieve potentially higher returns. This is closely related to the investment term ‘generating alpha’. Alpha is the additional return generated by manager skill as opposed to general market movements.

Passive management stems from the belief that markets are efficient or that it is difficult to beat the market. It may also be a preferred management strategy for those unwilling to take on the risks of active management.

Within the active approach, fund managers take an active role by deciding on which assets to buy and sell. They will take into account various factors affecting financial markets, such as economic and political issues, market and sector trends and company-specific features. Fund managers use various strategies in order to generate excess returns.

- **Stock selection**: Fund managers select certain stocks in a particular market or sector, based on technical or fundamental analysis. The former analysis refers to past asset price patterns, while the latter looks at the asset’s value in the context of underlying factors, such as the economy and company earnings potential.
- **Market timing**: Also called tactical asset allocation. Fund managers take advantage of short-term shifts in the market.

The passive approach means that fund managers try to mirror a particular market index or benchmark. This can be achieved in a number of ways.

- **Full index replication**: Fund managers buy the exact proportion of every constituent of the index. This means that the basic costs are substantial because many holdings must be maintained for an index such as the FTSE All-Share Index. On the other hand, after allowing for dealing and administration costs, the performance should mirror that of the index almost exactly.
- **Optimisation**: Computer simulations are used to construct a portfolio with a limited number of shares chosen to reflect the characteristics of the index. Such simulations rely on historic share data, particularly share price correlations and volatilities, holding true in the future. Costs are lower than

for full replication but performance will not coincide as precisely with that of the index. The expected variation above or below the index's performance is called the tracking error.
- **Stratified sampling**: A random selection of stocks from within each market sector of the chosen index. The selection is made such that the sample has the same characteristics, such as yield and market weight per sector, as the chosen index. The number of stocks is lower than for full replication and hence costs are lower. Again, performance will not coincide with the index and the expected variation is referred to as the tracking error.
- **Synthetic index replication**: Fund managers can use derivatives (which derive their value from the underlying index) to replicate an index, for example by combining a cash holding with a holding of futures in the particular index.

A comparison of the two approaches is summarised below.

	Active approach	Passive approach
Costs	Higher implementation and ongoing costs (expected to be more than offset by higher returns but not guaranteed)	Lower cost
Investment return objective	Aims to outperform a chosen index (but not guaranteed)	Aims to closely track a chosen index before deduction of fees
Ease of Implementation and oversight	More difficult to select managers and monitor performance. Underperforming managers more likely, followed by changes	Relatively easy to select and monitor. Low risk of underperforming manager
Manager expertise	Takes advantage of expert/ market knowledge of fund managers. E.g. selecting good performing stocks or markets, or taking defensive measures if market is expected to weaken	Performance not reliant on the investment skills of the fund manager

Two terms in common usage for judging an active manager's performance (as well as that of individual investments) are Alpha and Beta:
- **Alpha**: A measure of investment performance compared to a benchmark. An active manager will be seeking to provide alpha through good stock selection in order to outperform the passive manager
- **Beta**: A measure of volatility compared with the market. A manager who operates a portfolio with a low Beta would be expected to experience less asset volatility than one having a high Beta.

Typically, trustees will prefer an active manager to have high alpha and low beta.

A relatively recent trend is a move to what is known as smart beta. It is a form of passive management in that the investment is based on a set of rules. However, whereas passive management involves holding stocks weighted by market capitalisation (as represented by the index to be tracked), smart beta uses other criteria that aim to take advantage of perceived systematic biases or inefficiencies in the market. Smart beta is more expensive than passive but cheaper than active management.

1.2 SEGREGATED AND POOLED APPROACHES

A segregated approach involves the construction of a portfolio that is managed according to the client's specific requirements and needs, investing directly in various assets such as equities and bonds.

A pooled approach involves managing assets of a number of clients collectively according to the investment manager's stated philosophy.

In practice, a combination of segregated and pooled approaches is common.

One of the most important differences between the two approaches is the fee structure. The pooled fund is charged a flat fee for each individual underlying fund in which it invests, e.g. an annual fee of 0.4% of the total money invested for an equity fund and 0.15% for a bond fund. These fees are automatically subtracted from their funds.

Meanwhile, the management fees for a segregated fund can vary according to the size of the fund. There is likely to be a sliding scale of fees, e.g. a 0.3% annual fee for the first £30 million, 0.2% for the next £40 million, etc.

The investor in the segregated fund receives an invoice detailing what fees should be paid and there is an administrative cost for the service. Therefore, smaller schemes tend to benefit from the pooled approach, while the segregated approach is likely to be more advantageous for large pension schemes. In practice, for large schemes investing in a series of pooled funds, the fees may look identical to a segregated approach.

For pooled funds, investors automatically receive any income distributed from any of their holdings at the fixed dates (quarterly or annually). Depending on the class of shares that the investor holds, income can also be reinvested automatically as it arises (accumulation funds).

With segregated funds, investors can specify how their funds should be managed, usually by identifying thebenchmark and target asset allocation/returns. Some investors set restrictions such as not to invest in their own shares.

Types of Pooled Funds
Collective investment schemes (CIS) pool the resources of a number of investors and invest these in a specified type or range of assets. These schemes can have varying investment objectives, such as income generation or capital growth.

There are various types of investment vehicles:
- **Unit trusts**: A unit trust is a trust set up as a pooled fund usually under the supervision of the Financial Conduct Authority (FCA). Its portfolio of investments is divided into units to enable investors to buy into the trust or to sell an earlier investment. Unit trusts are "open ended" funds, which mean that the fund expands as more people invest and contracts as people remove their money.

- The price of a unit depends on the net asset value of the underlying assets. An increase in the value of the underlying assets leads to a rise in the price of a unit. Prices can be quoted one- way (the same price to buy or sell units) or two-way (a higher price to buy, or "the offer price" than to sell "the bid price"). The difference between the two is the "bid-offer spread". For one-way priced funds, charges are set out separately. For two-way priced funds, the charge is incorporated in the difference between the purchase price and the net asset value.

- **Investment companies with variable capital (ICVC):** An investment company with variable capital (ICVC, formerly called an Open Ended Investment Company - OEIC) is a pooled fund that works in a similar way to a unit trust except it is structured as a limited company (plc) in which investors can buy and sell shares on an ongoing basis. An ICVC can be an 'umbrella' structure holding sub funds with different investment objectives. Every sub fund can offer different share classes with different fees structures for different types of client. ICVCs are open ended funds, which mean that the sub funds expand as more people invest and contracts as people remove their money.

The price of a share depends on the value of the underlying assets. An increase in the value of the underlying assets leads to a rise in the price of a share.

More recently unit trusts and ICVCs have increasingly moved towards a "single swinging price" structure, where there is no explicit bid-offer spread as set out above, but the price swings between bid and offer bases depending on flows in and out of the fund at the time of dealing.

- **Investment trusts**: An investment trust is a pooled fund that is structured as a company and issues shares. These shares can be bought and sold on the London Stock Exchange. Unlike unit trusts and ICVCs, an investment trusts is a "closed ended" fund, which issues a fixed number of shares. The size of the fund does not expand or contract. In a closed end fund, the price of a share also depends on the value of the underlying assets. However, as only a limited number of shares are issued, the price of a share also depends on the demand for the fund's shares. This means the price of a share can move independently of the value of the underlying assets.

  In contrast to unit trusts and ICVCs, investment trusts can borrow money to invest. This is called 'gearing'. Investment trusts don't fall under FSA restrictions on collective investment schemes. They are governed by the Companies Act and stock exchange listing requirements.

- **Managed funds**: A managed fund is an investment contract by means of which an insurance company offers participation in one or more pooled funds. Increasingly, insurance companies are setting up their investment services as separately identified asset management companies. Some also offer external fund links to investment funds run by other managers.

  Technically, a managed fund is an insurance policy run by a life company. It enjoys similar tax privileges to any other long-term pensions account within the life company. In practice, a managed fund is tax exempt and only pension schemes that are themselves exempt from capital gains tax may participate.

1.3 MANAGER STRUCTURES

Under a balanced management structure, one or more investment managers are allocated a proportion of a pension fund's assets to invest across a range of asset classes, as equities, bonds, property and cash. Tactical asset allocation decisions are delegated to the investment managers. These types of arrangement are now rare, for reasons explained below.

Under a specialist management structure, investment managers are delegated specific areas of responsibility. Trustees can, for instance, employ separate investment managers for UK equity, global equity, fixed income, property, private equity etc. This allows the trustees to make the strategic decision on how much of their pension scheme assets must be invested in each asset class. The move to using different mangers for different portions of an overall scheme also reflects the reality that a single fund management company is unlikely to have market leading capabilities in all asset classes.

However, increasing the number of specialist managers generally results in higher investment management costs overall, and significant increases in complexity, accountability and governance requirements.

The move towards specialist management structures has led to the appointment of multiple managers by pension schemes to obtain the skills of the 'best' specialist managers. Separate active mandates for specific asset classes may be coupled with a core passive manager. The single manager appointment (other than for small schemes) is now rare.

Multi Manager Funds
Trustees' responsibility for diversification and to act in the best interests of beneficiaries implies that trustees should use the 'best of class' managers in each area and mix them appropriately to increase outperformance opportunities. This has led to the increased use of multi manager funds.

There are two distinct approaches to multi manager funds.

- **Manager of managers (MoM)**: Refers to the appointment of a few select managers, who are then given specific mandates to manage the investment in a single fund. The role of the MoM is to select the specialist managers, monitor their performance and to alter the composition of the management team to adapt to market conditions or fund performance.
- **Fund of funds (FoF)**: Describes the process whereby a manager builds up a portfolio that invests in funds that are run by a number of other managers. The fund of funds itself is generally structured as an ICVC or as an investment trust.

Multi manager funds have a number of attractions:

- **Fund or manager selection expertise**: The key attraction of multi manager funds is the expertise that they bring to manager selection. For a fund of funds, the multi manager selection process uses a number of analytical tools to narrow down the fund universe to a more manageable level. The multi manager is likely to conduct a rigorous interview process with each of the fund managers that fit the investment criteria and these meetings will often reveal a good deal more than quantitative analysis.

  Importantly, this is also an ongoing process, as many factors can change in the management of a mutual fund, of which a direct investor may not be aware. Meanwhile, some fund managers perform well in certain investment backdrops but not others leading to periods of underperformance. The fund of funds manager can position himself for changing market dynamics by altering his portfolio accordingly.

- **Diversification**: Investors in a multi manager fund also benefit from increased diversification. Traditional unit trusts provide an extra layer of diversification compared to investing directly in a few individual stocks. Multi manager takes this process a step further by creating blends of best of breed fund managers. A selection of managers with different investment approaches can reduce the risk in a portfolio without eroding the alpha they provide. Alpha is the standard measure of a fund manager's ability to add value.

  The diversification aspect of a multi manager strategy and the manager's ability to tilt the fund toward certain investment styles is of even greater importance in multi region and/or multi asset class portfolios. Here the manager can reduce exposure to assets classes or regions of the world that have poor prospects; and skew the fund towards areas with better fundamentals.

- **Access**: Another attraction of the multi manager approach is that it allows even small pension schemes access to certain funds and investment expertise that would not normally be available. This is due to the minimum amounts of investment required by some investment vehicles or simply because they are not widely known in the wider market.

The main criticism levelled at multi manager funds is that they have higher charges. Single manager mutual funds charge fees to investors and so do multi managers' funds. Therefore, it would follow that investing in a multi manager fund results in two layers of charges. This is largely true but, given that one of the benefits of investing in a multi manager fund is economies of scale, such funds are able to negotiate very attractive rates, leading some to have TERs (total expense ratios) similar to standard pooled funds.

In House Management
Accurate and timely information is essential for successful fund management. The necessary financial data can be purchased from any number of market related sources, but adequate IT and financial systems are required to access it. The costs of these systems and services are significant but manageable.

The opportunity to gain professional views on time sensitive issues from those closest to the activity in the markets often depends on the buying power of the organisation. The greater the volume of assets under management, the greater the buying power and the better the terms likely to be obtained when agreeing a deal. Consequently, there are serious disadvantages for organisations managing small amounts of money, in the form of low priority of response from market participants and less attractive price quotations.

Bearing in mind the concentration of power in the hands of a few large institutions, it is difficult to justify the management of pension scheme assets in house unless they exceed £500 million. There is no practical reason stopping schemes with assets smaller than this from being managed in-house but the financial arguments are stacked against them. It is not surprising, therefore, to see that only a small number of the largest schemes manage their assets themselves.

Employers or trustees who have decided to manage their pension assets 'in house' face the same issues as an investment organisation offering investment management services, except that they are involved with only one (tied) client.

Delegation and Fiduciary Management
Some pension schemes (especially small to medium sized schemes) have struggled to respond quickly to changes in investment markets. Delegated management allows trustees to outsource some parts of the investment decision-making process. The responsibility for setting the risk/return budget will always be retained by the trustees but beyond that most investment duties can be delegated.

Many of the traditional benefit consultancies now offer delegated management, also referred to as implemented consulting. In adopting a delegated management model, the investment consultant will provide clearer, real- time investment recommendations to the trustees than under the traditional model. The responsibility for the decision-making remains with the trustees. The presentation of advice from the investment consultant and the use of an effective decision-making process by the trustees should mean that the scheme's assets are managed in a more dynamic, efficient and appropriate manner.

Fiduciary management is an extended version of delegated management. It involves the appointment of a fiduciary manager who becomes accountable for implementation of the overall investment strategy adopted by the trustees. All of the day-to-day investment decision-making is delegated within pre-agreed guidelines. This allows the trustees to focus on other areas as well as ensuring that investment decisions are extremely dynamic.

Summary

A pooled investment approach involves investing in existing funds managed by an investment management firm, usually combining several funds for diversification purposes.

A segregated investment approach involves constructing a portfolio that is managed according to the client's specific requirements and needs, investing directly in various assets such as equities and bonds, although it may also invest in existing funds in order to achieve greater diversification.

An active management strategy aims to outperform a particular market index or benchmark through manager skill.

A passive management strategy aims to match the returns of a particular market index or benchmark (also called index tracking or indexing).

Under a balanced management structure, one or more investment managers are allocated (a proportion of) a pension fund's assets to invest across a range of asset classes, such as equities, bonds, property and cash.

Under a specialist management structure, investment managers are delegated specific areas of responsibility. The move towards specialist management structures has led to the appointment of multiple managers by pension schemes to obtain the skills of the 'best' specialist managers.

Trustees' responsibility for diversification and to act in the best interests of beneficiaries implies that trustees should use the 'best in class' managers in each area and mix them appropriately to increase out performance opportunities.

This has led to the increased use of multi manager funds.

In a manager of managers (MoM) fund, the MoM appoints a few select managers, who are then given specific mandates to manage the investment in a single fund. In a fund of funds (FoF), a manager builds up a portfolio that invests in funds that are run by other managers.

Delegated management allows trustees to outsource some parts of the investment decision- making process. Assets are managed in a much more dynamic fashion as the investment consultant takes a more directive role. Full delegation, where the outsourcing of all day-to-day investment decisions to a specialist fiduciary manager, is also gaining popularity.

Self Test Questions

- What are the key differences between unit trusts and investment companies with variable capital?
- Describe the four types of passive investment strategies.
- What are the main advantages of using an active investment strategy?
- What are the benefits of multi manager funds?
- Describe delegated management and fiduciary management

CHAPTER 2

Selecting, Monitoring and Changing Investment Managers

INTRODUCTION

Once trustees have decided upon an investment strategy, they should select an investment manager or managers to invest the funds on their behalf. As you have read in other parts of this manual, The Pensions Act 2004 requires trustees to take professional advice on the selection of investment managers. In addition, the Myners Review proposed that trustees should be prepared to pay sufficient fees for investment advice to attract a broad range of potential investment managers. Trustees normally employ an adviser who is able to research suitable investment managers. The adviser will usually provide a ‘long list’ and then provide reasons for reducing it to a ‘short list’, from which the trustees may select two or three managers to interview. At these interviews, trustees will meet representatives from the investment manager.

In the following Chapter, we look at the responsibilities of pension scheme trustees during the manager selection process. In addition to choosing the manager, trustees are responsible for negotiating fee structures, setting performance targets and ensuring that a scheme’s assets are held securely (custody of assets).These details will be laid out in a contract between the trustees and the asset manager, called the Investment Management Agreement (IMA).

We also consider the issues involved when trustees decide to move the management of a portfolio to a different manager, known as ‘transition management’. Finally, in the last subsection we look at the role of investment banks in the investment management process.

2.1 MANAGER SELECTION PROCESS

The factors that trustees need to consider when selecting a manager will be largely shaped by the strategy they have chosen. Nonetheless, there are a number of general factors that can be taken into account.

The Business
The trustees will want to ensure that the investment manager’s business is strong and will remain so for the foreseeable future. Pension investment is for the long term and frequent changes in investment manager can be expensive in terms of fees and transition costs. For example, is the investment manager part of a larger organisation? This could be an advantage as the larger parent can provide financial and other support but could also be a disadvantage if the investment management business is not core to the parent; it may make a strategic decision to sell it or fail to support it sufficiently. Growth or loss of clients is also a significant indicator, but again trustees should be wary of a manager who appears to be taking on substantial new business and question whether the investment process is scalable and whether the manager has the business and investment infrastructure to cope.

Investment Team and Structure
Are the people of good quality and experienced in the relevant area of investment? How stable is the team? The manager could be asked for staff turnover data, for example. How is the team rewarded for performance? What incentive plans are in place and do they motivate appropriately and act as a retention tool?

Investment Philosophy and Process
Most trustees will look to their advisers for guidance on this area. It is important to establish what drives the manager's process, for example, whether it is based on an individual manager's stock selection ideas or whether it is driven by a house theme, such as growth or value stocks. Trustees should consider the extent to which decisions are driven by a team or by individuals. Perhaps more importantly the trustees should check whether the style they seek is appropriate for the manager.

Management
Any active investment manager must take risks. Risk is usually measured as the risk the manager takes relative to the benchmark (e.g. the FTSE All Share index) set. Risk can take many forms, from specific matters affecting one stock (stock specific risk), to the risk that the overall portfolio might be exposed to a particular factor, e.g. the investments are vulnerable to rises in interest rate rises or oil price rises (factor risk). The trustees will therefore want to satisfy themselves that the manager has developed risk controls, both through systems that calculate risk but also management structures that ensure accountability of individual managers and oversight of portfolio construction.

Systems
Quality and regularly updated systems are increasingly important, in order to effectively produce and analyse investment data. Trustees should be aware of the manager's commitment to this area.

Performance
Most trustees know that past performance is not a guide to future performance. This is true but the reasons for past performance might be helpful in analysing how a fund manager might perform in the future. For example, if a manager had good performance in the previous three years the reasons for this can be analysed, e.g. was it because of one individual who was very good at picking individual stocks or was it because of a systematic approach that has been particularly successful in identifying good and bad sectors? More importantly, are the people and the process in place today likely to be able to sustain or improve on that performance?

Client Service
Trustees and their investment advisers should receive reports and other information from the fund managers in an accurate and timely manner. Trustees should be able to expect open, transparent, comprehensible and timely communication from their investment managers, together with attendance at trustee meetings when required.

Fees
Other than perhaps the area of passive management, the relative fees of managers should not drive the trustees' selection of a manager. The prospects of relative performance, as well as client servicing considerations, should always override considerations on fees.

As a general rule, the level of any fee will be driven by:
- The level of fees typical for that product in the market - peer group pricing
- The type of management style – passive is cheaper than active
- The size of fund - larger investments will get a lower percentage fee overall
- Whether the manager is looking to 'buy' businesses.
- Fees may also be linked to performance. For example, having been set a performance target, a manager may charge an additional fee for any performance in excess of this target. Such performance related fees should be designed to encourage and reward outperformance but should not be so tempting as to encourage risky investment to meet the outperformance targets.

2.2 IMPLEMENTING A CHANGE IN MANAGERS

Once a manager has been chosen, the trustees will need to establish an Investment Management Agreement (IMA); agree the manager's performance targets; and possibly establish socially responsible criteria (the International Organisation of Pension Supervisors (IOPS) has published supervisory non-binding guidelines (October 2019) on the integration, where proportionate, of Environmental, Social and Governance factors (ESG) into the investment and risk management of pension funds).

Trustees will also need to select a custodian that is secure and appropriate to the size and number of transactions likely to occur.

Investment Management Agreement
The IMA is the contract between the trustees and the investment manager. In drawing up an IMA, trustees will usually consult their investment advisers and, if required, legal advisers.

The IMA will set out specific investment guidelines agreed upon by the investment manager and trustees. The trustees may also wish to clarify the details of their statement of investment principles with the fund manager, so these principles can be accommodated in the exercise of the investment power.

A typical IMA will normally include the following sections:
- **Investment management**: This section will normally include details of the authorisation procedures of the client and any restrictions or limitations that trustees wish to impose on the management of the fund. For example, trustees may limit the investment in any one stock to say 5% of the overall fund value; or prohibit the investment in certain types of asset.
- **Securities lending, borrowing and overdrafts**: This section will normally state whether stock lending is permitted and if so, any restrictions on the terms, size of deals etc. Stock lending involves lending shares for a short period of time to a third party, for a fee, so they can complete a deal in the same shares.
- **Delegation and use of agents**: The IMA will usually permit the fund manager to delegate or appoint sub agents but the fund manager should remain liable to the trustees for their acts or defaults.
- **Material interests**: This section will address any potential conflicts of interest.
- Dealing and Derivatives
- Voting and Corporate Actions
- Fees and Expenses
- Confidentiality and Data Protection
- Risk Management

The IMA should also cover custody and title of assets, although in certain circumstances, custody of assets may be subject to a separate agreement if the trustees choose to use a third party for such services. Where trustees appoint a global custodian to hold all its assets, they will draw up a separate global custody agreement.

Performance targets
- **Relative return performance targets**: Traditionally, investment mandates targeted outperformance of a relevant peer group. However, increasingly, the performance of other pension schemes or investment managers is not a meaningful or relevant benchmark as schemes and investment approaches have become less homogeneous and comparable. The Myners Review (see Part 5 Chapter 3.2) recommended that trustees move away from peer group benchmarks to ones that are specifically tailored for their own fund. Targets are, therefore, more commonly expressed as a percentage above a specific market index benchmark or a scheme specific composite target benchmark. For example, a UK equity fund may be set a target to outperform the FTSE All-Share index by 1% over rolling three-year periods. This relative return approach means investors may experience either positive or negative returns, depending on the direction of the markets.

- **Absolute return performance targets**: Absolute return benchmarks, meanwhile, set a positive return target to be achieved in all market conditions. The target is usually to outperform the cash rate by, say,2-4% p.a. for growth- oriented assets. The cash benchmark in this case is usually measured by LIBID, the wholesale deposit rate.
- **Performance targets linked to liabilities**: Given the increased focus on pension liabilities, performance targets can also be set against a scheme's liabilities, as is done under liability driven investment (see Part 3 for more detail). In a fully matched strategy, the target is set in line with the scheme's liabilities. In a strategy containing a core matched portfolio and a return-seeking component, the target can be set to exceed the liability benchmark by a certain percentage.

Custody of Assets
Trustees are required to ensure that a scheme's assets are held securely. Assets may be held in the name of the trustees directly or, as is more commonly the case, in the name of a nominee company but specifically designated to the trustees. The latter is preferable since it makes administration far simpler, with the nominee company retaining share certificates and receiving dividends, which would otherwise need to be dealt with by the trustees. It also reduces the amount of paperwork required by the trustees who otherwise would have to complete stock transfer forms and return share certificates for each sale or partial sale of shares. The trustees should ensure that the nominee company is capable of dealing with assets in this way and is suitable for the size and number of transactions likely to occur.

The role of the custodian
A custodian holds investments securely on behalf of the pension scheme and is able to account independently for any financial transactions. Custodians often offer a range of other services such as:
- Income collection – collecting dividends and coupons payments due on stocks and shares
- Tax recovery – recovery of withholding tax which can be reclaimed
- Cash management – management of the cash account
- Settlement of securities – administration of the actual exchange of cash for securities when a security is traded
- Foreign exchange – settling foreign exchange deals
- Stock lending – arranging for stock lending deals
- Voting rights – exercise voting rights on behalf of the manager or trustees.When appointing a custodian, trustees should consider the following issues:
- The custodian's insurance arrangements
- The custodian's arrangements with the fund manager
- The custodian's arrangements with sub-custodians, where relevant.

Larger schemes may appoint a global custodian, such as a bank, to hold all their assets regardless of which investment manager manages them.

The use of pooled funds eliminates the need for a separate custodianship arrangement.

Details of custody and title of assets are normally set out in a custody agreement. However, in the case of pooled funds, there will be a fund prospectus setting out the terms of the fund, or a policy document in the case of a pooled pension fund contract.

Trustee Authorities and Cash Flow Control
The trustees, when appointing an investment manager, usually give full authority to the investment manager to make whatever investments the manager deems appropriate, within the terms and conditions of the IMA. This reduces the need for the trustee to give their authority for each investment to be made. However, the trustees need to document carefully who is entitled to give authority to the managers and to ensure that such authority complies with the requirements of the Trust Deed.

Investment managers usually hold cash, from time to time, to ensure that they can make investments at the most appropriate time and you would not normally expect them to have to seek approval from the trustees in these circumstances. New money in the form of contributions would need to be passed to the investment managers, which they would then hold in their client cash account until such time as appropriate investments become available. The managers would also hold dividend income and proceeds from sales in a similar manner. The operation of such bank accounts will be detailed in the IMA.

Administration
For the investment manager, administration of a pension scheme portfolio involves:
- Investment record keeping
- Informing the trustees or nominee company of investment transactions through the sending of a trade advice, trade notification or contract note
- Daily stock reconciliation of records of a portfolio's holdings with those held by the custodian
- Reporting, valuation statements and performance analysis

Transition Management
Transition management refers to the management of the transfer of a pension scheme's portfolio to a new investment manager. This will require the negotiation of an IMA with the new manager, including details on investment restrictions and guidelines, reporting requirements, the fee structure etc. The trustees may also choose to change the custodian in a transition to a new manager, requiring new custody accounts to be set up.

Depending on the type of portfolio the pension scheme holds (pooled or segregated) and the investment strategy to be adopted by the new manager, the transfer may require the sale of all or some of the portfolio's assets. The new investment manager should aim to effect the transition at the lowest possible cost to the pension scheme. The following costs may be taken into account:
- Stamp duties
- Commissions: good market relationships and program trading can reduce this cost
- Broker's bid and ask spread: the market impact and timing of executing trades

The trustees' investment consultant would typically advise on and manage asset transitions, although this may be delegated to a specialist transition manager.

Use of Investment Banks
So far, we have mainly looked at the relationship between pension scheme trustees and investment managers. During the implementation and design of a scheme's investment strategy, investment managers will often make use of investment banks, particularly as a counterparty for swap trades. Swaps are widely used in asset/liability matching strategies and can often be very significant in size. Strong counterparty relationships between an investment manager and the investment banks with which it transacts can help ensure that a pension fund achieves the most favourable trade execution terms available. Investment managers that have access to a wide range of counterparties may be able to access better terms than those who are tied to just one investment bank.

In addition to this counterparty relationship between a pension scheme and an investment bank, the sponsoring company of a pension scheme will often have separate relationships with investment banks through its treasury department. Investment banks will advise the sponsoring company on issues regarding its corporate assets.

Summary

Factors that trustees should consider when selecting an investment manager include:

- The strength of the manager's business
- Its investment team and structure
- The strength of the manager's investment process and risk controls
- Performance track record
- Client service and administration
- Fees – fees charged by investment managers are driven by factors including the type of management style and the size of the scheme. Fees may also be linked to performance
- Where managers plan to make use of derivatives, such as swaps, trustees should consider their relationship to the investment bank(s) with which it transacts
- Transition management process – transferring a scheme's assets to a new investment manager requires effective transition management to minimise costs

Self Test Questions

- List the main factors that should be taken into account when selecting an investment manager.
- What should an Investment Management Agreement cover?
- Outline some of the ways in which performance targets may be set.

CHAPTER 3
Monitoring Manager Performance

INTRODUCTION

In this Chapter we consider the monitoring of an investment manager and the types of information required from them to assist the trustees in their governance functions. Investment managers will provide trustees (or investment committees) with regular (usually quarterly) reports, containing information on the portfolio's valuation, activity (acquisitions and disposals) and performance. Investment managers will also be expected to provide information to the scheme's custodian. The trustees might also ask the fund manager to provide the investment report section of the trustees' annual report. In addition to regular reports, trustees hold regular meetings with investment managers where these issues are discussed.

3.1 PORTFOLIO VALUATIONS

Investment managers will provide trustees, or their investment committee, with a monthly or quarterly portfolio valuation. This will include the following:

- A summary portfolio valuation, confirming the book value and market value of the total portfolio held and its main constituents, and a detailed portfolio valuation containing every individual security. The valuation gives an overview of the portfolio at the end of the period under review.
- Details on investment activity over the period, with a summary and details on acquisitions and disposals of securities.
- As the securities held in the portfolio may have generated coupon payments or dividends over the period, the report will also include a section on income receipts.

3.2 PERFORMANCE REPORTING

Investment performance measurement is often the main area of monitoring. The nature of the mandate given to an investment manager will determine the way and degree to which they are assessed. A passive manager is employed to track an index while an active manager is usually employed to beat an index.

The purpose of performance measurement is to establish, as accurately as possible, the rate of return earned on the assets of the portfolio. This is the absolute return and can be given net or gross of the manager's fees. This will then be compared to the benchmark set by the trustees for the investment manager, for example, the return of the FTSE All-Share index for UK equities or the FTSE British Government All Stocks index for UK gilts. Investment managers provide trustees or their administrators with a monthly or quarterly performance report.

The calculated rate of return can be divided into its constituent parts in several different ways to help understand how the manager achieved it. This is called performance attribution. For example, an examination of the impact of 'asset allocation' will show the impact of losses or gains stemming from being overweight or underweight in a certain asset class, sector or region within an asset class. It is usual to combine this with an examination of the impact of 'stock selection'. Stock selection establishes the extent to which a manager chose shares within an asset class, sector or region that performed better or worse than an index typical of that market.

In a bond portfolio, performance attribution can examine the impact of a manager's decision to hold overweight or underweight exposure to gilts compared to corporate bonds or to hold an increased or decreased exposure to the riskier or less risky segments of the corporate bond market. For commercial property, the impact of the balance between the three principal sectors of offices, shops and industrials can be considered. The managers appointed should provide trustees with regular investment reports, including:

- Quarterly and annual performance reports
- Records of the specific investments, including quantity held, both historic and current values, plus information for performance evaluation
- Commitments entered into for the future
- Record of income received from different sources, i.e. dividends, interest, bonuses etc.
- Record of historical outgoings
- Record of 'capital' events, e.g. rights, calls, mergers, stock splits, etc.
- Continuing forecast of income/outgo, i.e. cash flow projections
- Record of expenses and transaction costs incurred
- Record of corporate governance and voting activity.

Trustees may also use reports from an investment performance monitoring service.

3.3 PEER GROUP COMPARISONS

Performance details can be obtained for the 'universe' of all eligible pension schemes, both overall and broken down by asset category. This allows each pension scheme to see how it has performed compared to other schemes. Two numbers are normally considered: percentile ranking, and the difference between fund performance and median performance. For instance, a UK equity manager might have beaten the median manager by 3.2% in a particular quarter (+6.2% vs +3.0%), and been ranked in the 20th percentile, i.e. she beat 80% of the other UK equity managers in that particular universe. Similar figures are provided for each asset class, and for the fund overall.

However, some performance comparisons can be misleading. Schemes of different maturity should have different investment policies, and it makes no sense to compare the results of a fund with high equity content to that of a fund with a significant element of gilts.

Within a single asset class, such as European equities, peer group comparisons can be valid. However, it is not always clear that managers are pursuing the same goals in a particular region. For example, some managers regard Australia as a 'developed' market which has little in common with the tiger economies of some countries in Asia, and so either exclude it from their Pacific Rim portfolios or give it only a minimal weighting. Others point out that by market capitalisation it is by far the largest market in the region outside Japan and construct their portfolios accordingly.

3.4 COMPARISON AGAINST A MARKET INDEX

Performance of a pension fund can also be measured against a relevant market index. Indices have the advantage of being available on a timely basis, their construction is transparent and their performance is unambiguous. Nevertheless, care has to be taken when selecting an index as benchmark for a manager.

Firstly, the benchmark must be appropriate. Should a UK pension fund invest only in the top 100 companies, which is what would be implied by a FTSE 100 benchmark or should it also look at mid and small-cap companies and choose the FTSE All-Share index?

Secondly, the benchmark represents a neutral position for the manager. However, an index may be dominated by one particular market, sector or company and pension fund trustees need to make sure that this is acceptable. Thirdly, the index must be practical; some Asian indices include stocks which overseas investors are not allowed to buy.

If a pension fund is allocated to a balanced manager, the benchmark will be the aggregate of its constituents, for instance:

Asset Class	Benchmark %	Index	
UK Equities	35	FTSE All-Share	
Overseas Equities	25	FTSE All-World (ex-UK)	
Corporate Bonds	10	Sterling Non-Gilts	
UK Gilts	28	FTSE British Government	> 15 years
Cash	2	LIBID 7 day	

The overall fund benchmark return will be made up of the relative percentage of each of the above.

Summary
Trustees are required to monitor an appointed investment manager against their original selection criteria and performance objectives on an ongoing basis. The trustees should consider the manager in light of any changes they make to their investment strategy to ensure they continue to meet the trustees' objectives.

To assist in this process, investment managers are required to provide trustees with regular investment reports containing information on the portfolio's valuation, activity and performance. Performance should be measured and assessed in relation to the targets originally set by the trustees.

Self Test Questions
- List the key points that an investment manager's report should cover.
- Outline the ways in which a manager's performance can be measured.