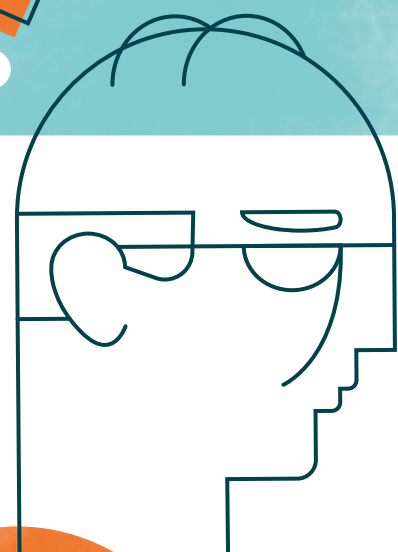
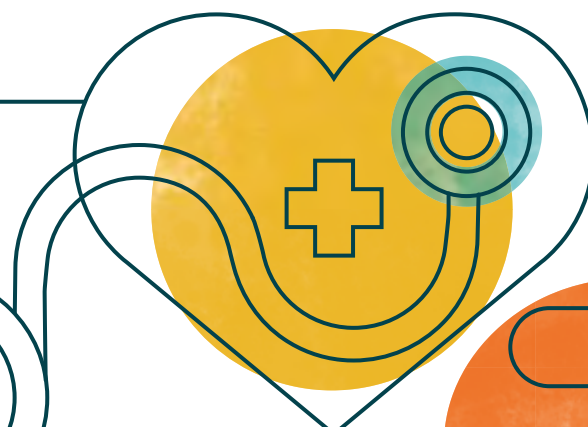
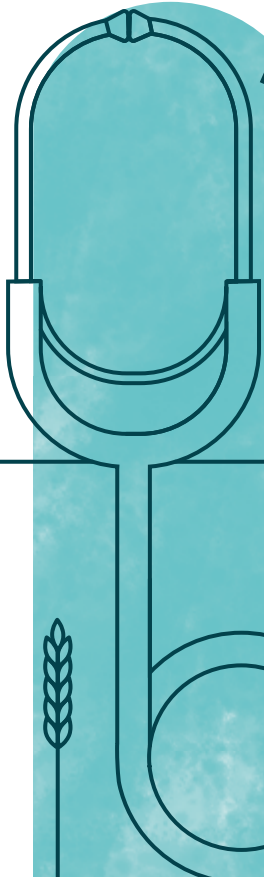
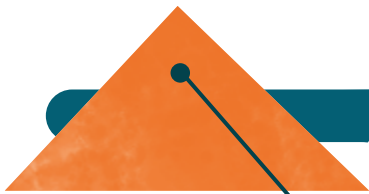


A BUFDG Guide to

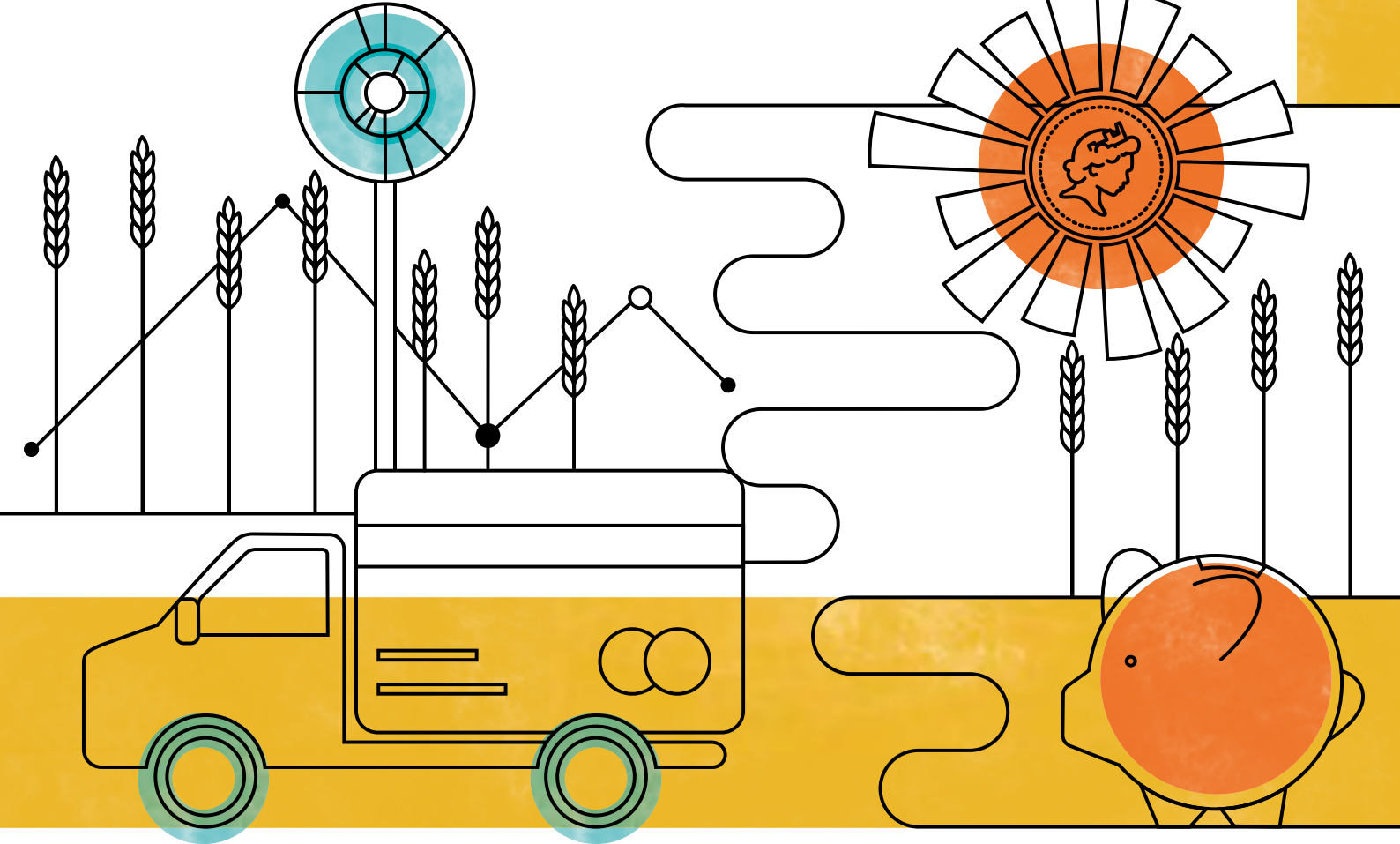
Accounting for Pensions in Higher Education



Contents

Introduction	4
What's in this guide?	4
Who is it for?.....	5
About The Author	6
01 Pensions and Pension Schemes	8
1.1 Sources of Pensions	8
1.2 Public Pensions	8
1.3 Private Pensions	9
1.4 Funded Defined Benefit Schemes	10
1.5 Valuing the Assets and Liabilities of Funded Defined Benefit Schemes	11
1.6 How Much Pension?	14
1.7 How Much Will It Cost?	14
1.8 Which Type of Scheme is Best?	16
02 Pension Schemes in the Higher Education Sector	18
2.1 Public Pension Schemes in the HE Sector	19
2.2 Private Pension Schemes in the HE Sector	19
03 Business and Reporting Cycles	22
3.1 The Rhythm of a Business.....	22
3.2 Reporting Financial Performance	23
3.3 Preparing Financial Reports.....	23
3.4 Pension Cycles.....	24
04 Financial Reporting in General	26
4.1 Introduction.....	26
4.2 Financial Reporting in Higher Education Institutions.....	27
4.3 Scope of FRS102.....	27
4.4 Objectives of Financial Statements	27
4.5 Qualitative Characteristics of Information in Financial Statements.....	28
4.6 Financial Position.....	29
4.7 Performance.....	30
4.8 Recognition of Assets, Liabilities, Income and Expenses	32
4.9 Measurement of Assets, Liabilities, Income and Expenses.....	32
05 An Overview of Accounting for Pensions	36
5.1 General Recognition Principle for All Employee Benefits	37
5.2 Distinction Between Defined Contribution Plans & Defined Benefit Plans	38
5.3 Multi-employer Plans and State Plans	40
5.4 Summary of Accounting Implications	43
5.5 Defined Contribution Plans – Recognition and Measurement	43
5.6 Defined Benefit Plans – Recognition and Measurement	44
5.7 Accounting for Public Pension Schemes in the HE Sector	46
5.8 Private Pension Schemes in the HE Sector.....	47

06 Issues for Financial Reporting and Management.....	50
6.1 Introduction.....	50
6.2 What Gets Measured Where.....	52
6.3 Concentrating on What can be Measured.....	53
6.4 Managing the Long-Term Assets and Liabilities.....	58
6.5 A Brief Note About Comparability.....	61
07 A More Detailed Analysis of Accounting for Pensions.....	64
A Defined Contribution Schemes.....	64
7A.1 Basic Accounting Requirements.....	64
7A.2 Accounting Policies.....	65
7A.3 Statement of Comprehensive Income (SOCi).....	65
7A.4 Statement of Financial Position (SFP).....	65
7A.5 Notes to the Accounts – Staff Costs.....	65
7A.6 Notes to the Accounts – Pension Schemes.....	66
B Defined Benefit Schemes with no Segregation of Assets and Liabilities.....	67
Bi Teachers’ Pension Scheme (TPS).....	67
7Bi.1 Basic Accounting Requirements.....	67
7Bi.2 Accounting Policies.....	67
7Bi.3 Statement of Comprehensive Income (SOCi).....	68
7Bi.4 Statement of Financial Position (SFP).....	68
7Bi.5 Notes to the Accounts – Staff Costs.....	68
7Bi.6 Notes to the Accounts – Pension Schemes.....	69
BiI Universities Superannuation Scheme (USS).....	71
7BiI.1 Basic Accounting Requirements.....	71
7BiI.2 Accounting Policies.....	72
7BiI.3 Statement of Comprehensive Income (SOCi).....	72
7BiI.4 Statement of Financial Position (SFP).....	73
7BiI.5 Notes to the Accounts – Staff Costs.....	73
7BiI.6 Notes to the Accounts – Provisions for Liabilities.....	73
7BiI.7 Notes to the Accounts – Pension Schemes.....	76
C Defined Benefit Schemes with Segregation of Assets and Liabilities.....	81
7C.1 Basic Accounting Requirements.....	81
7C.2 Accounting Policies.....	82
7C.3 Statement of Comprehensive Income (SOCi).....	83
7C.4 Statement of Financial Position (SFP).....	84
7C.5 Notes to the Accounts – Staff Costs.....	85
7C.6 Notes to the Accounts – Interest and Other Financing Costs.....	85
7C.7 Notes to the Accounts – Pension Schemes.....	86
Annex A: Glossary of terms.....	98
Further Reading.....	109



Introduction

This guide explains how pensions affect the financial reporting of universities, so that the reader can better understand the operational performance of universities.

What's in this guide?

Section 1 (page 8)

A simple explanation of what pensions are, why they exist, and how pension schemes are run, funded, and regulated.

Section 2 (page 18)

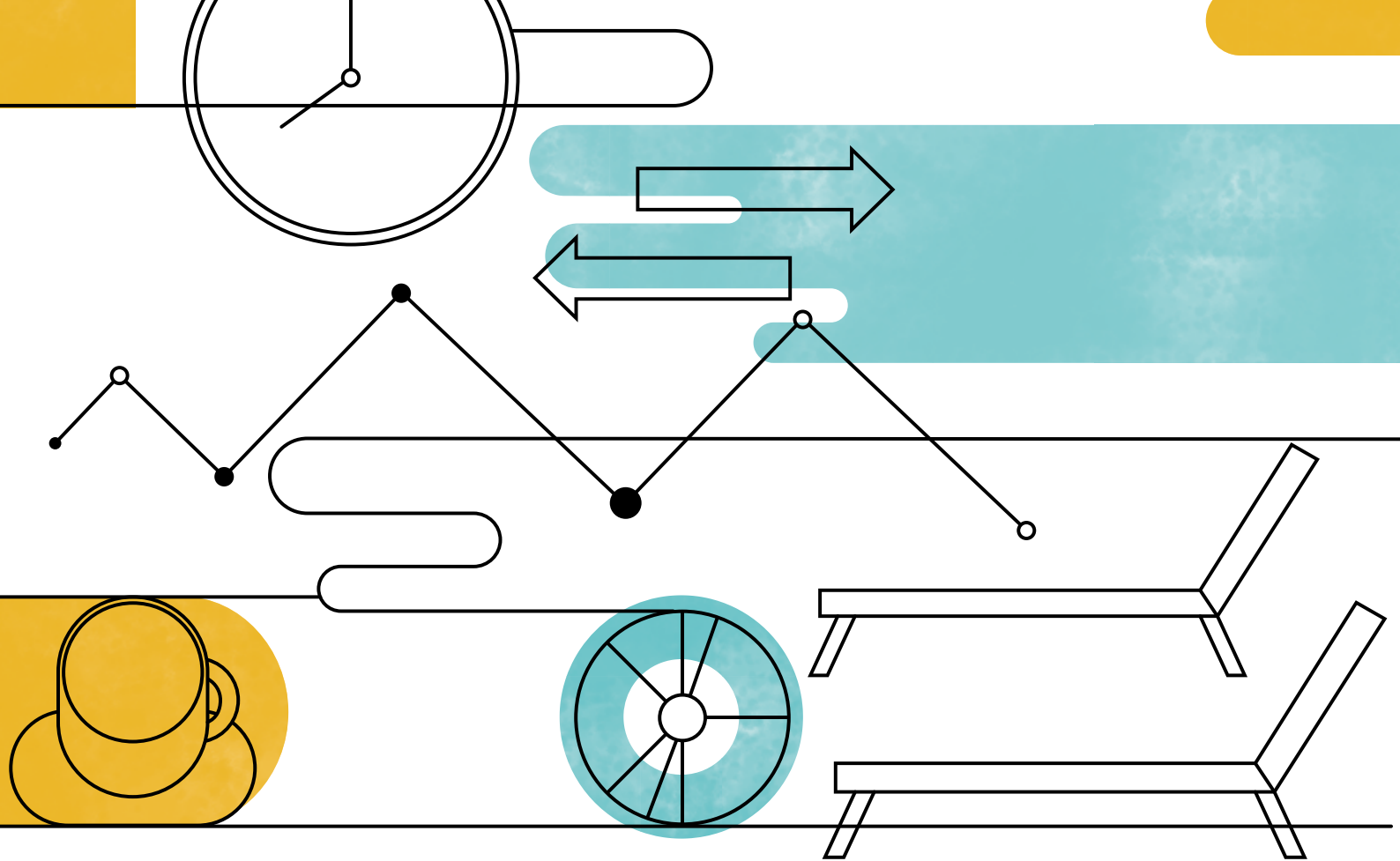
A summary of the different pension schemes in use in universities.

Section 3 and 4 (pages 22 and 26)

An overview of financial topics such as business cycles and financial reporting, and why these are crucial to understanding the pensions picture.

Section 5 (page 36)

An explanation of how the different schemes are accounted for.



Section 6 (page 50)

The resultant issues for financial reporting and financial management in the sector.

Section 7 (page 64)

A more detailed explanation of the accounting requirements of different types of pension schemes and their impact on financial reporting.

Glossary (page 98)

Further Reading (page 109)

Who is it for?

This guide is for: governors; senior staff who may be tasked with understanding financial information and making decisions based on their understanding; staff who are required to understand and explain financial information to others; staff who are interested in their employer's financial performance, including trade unions and other staff representatives; and, last but by no means least, students and their representatives who are interested in financial information about their university.



About The Author

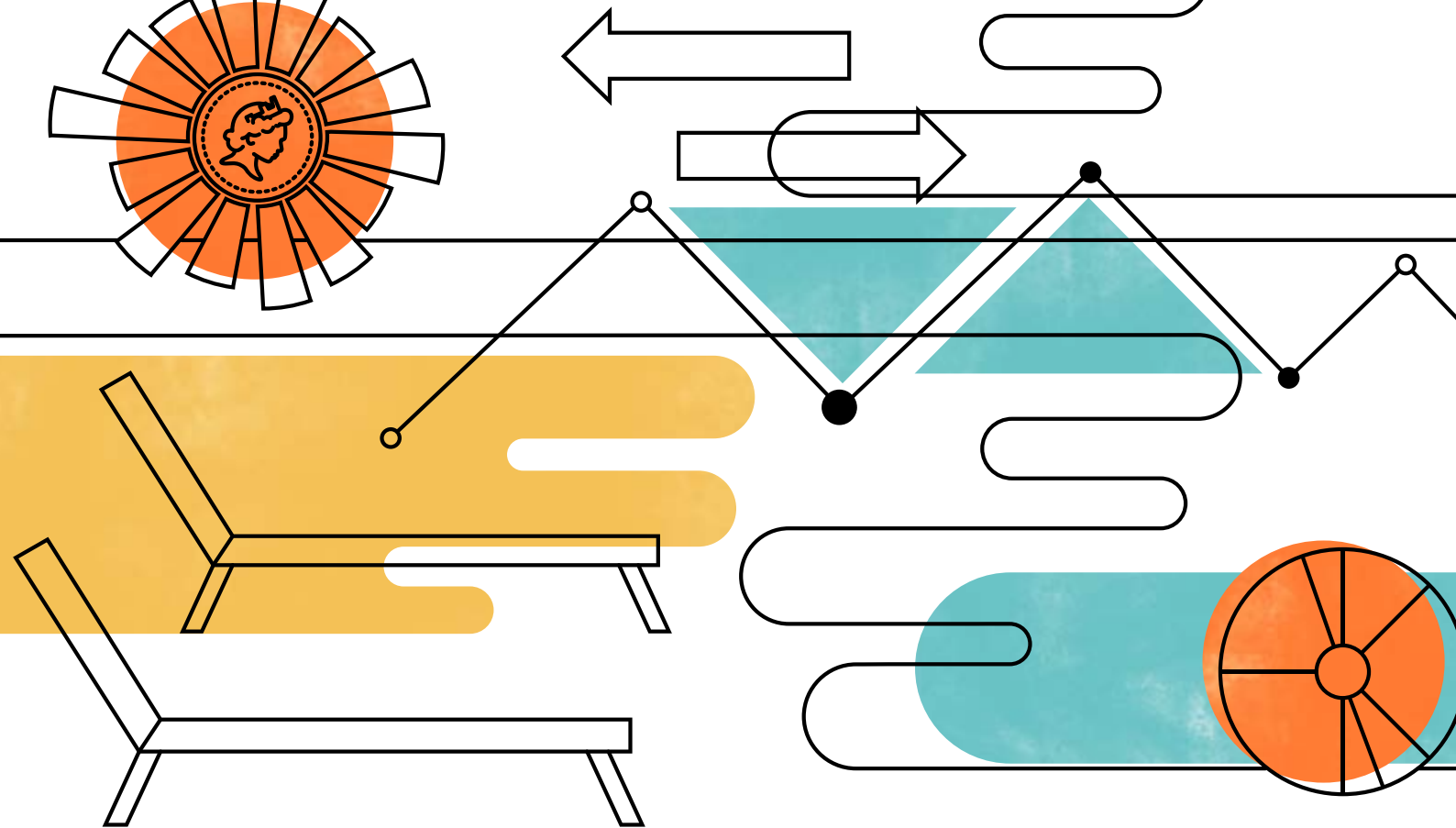
Miles Hedges was educated at Bloxham School and St John's College, Oxford. He is a Fellow of the Institute of Chartered Accountants in England and Wales and is a Court Assistant of the Chartered Accountants' Livery Company and a trustee of the Chartered Accountants' Livery Charity.

Miles initially spent 11 years as an auditor, which included significant experience of auditing universities and pension schemes. For two years he was Financial Adviser to the Universities Funding Council, sometime funder and regulator of universities across the UK. He has been finance director/ chief financial officer of three universities: the University of Nottingham, The Open University and the University of Derby. He has been a trustee of two self-administered trusts providing pension benefits for two of these universities.



Miles is a past Chairman of BUFDG and was a member, and sometime chair, of the BUFDG Financial Reporting Group from its inception in 1990 until his retirement from full-time work in 2016. He is currently a member of the Financial Reporting Council's UK GAAP Technical Advisory Group.

Miles appreciates the support he has received from BUFDG, as well as those who read and commented on early drafts of this document. Any errors and omissions are those of Miles alone.



01 Pensions and Pension Schemes

The purpose of pensions is to provide individuals with an income in retirement. Pensions are encouraged as a matter of public policy so that individuals are less reliant on the State for support when they are no longer able to earn an income.

1.1 Sources of Pensions

Pensions are paid from one of two sources: public and private.

1.2 Public Pensions

The best known, and universal, public pension is the State Pension. This is known as a **Defined Benefit pension scheme**, where the benefit (pension paid throughout retirement) is determined by a formula. In the State Pension, the formula is based on the number of years of National Insurance Contributions (NICs), and is paid automatically to the individual once they reach the State Pension age.

Despite the link to National Insurance Contributions, there is no fund set aside to pay for the State Pension - it is paid out of general taxation. Accordingly, this type of pension arrangement is referred to as an **Unfunded Defined Benefit** scheme.

The other public pensions are those for employees of organisations supplying services provided wholly or largely by the State, for example in teaching and healthcare. These are **Defined Benefit** schemes where the benefit (the pension) is determined by a formula based on the number of years in which contributions have been made. It is paid automatically to the individual once they reach the normal retirement age specified by the scheme, which may or may not equate to the State Pension Age (but is generally becoming increasingly aligned to the State Pension Age). The amount by which the pension increases annually is determined by Government policy. The rate of increase is generally linked to the Government's preferred measure of inflation, currently the Consumer Prices Index, and applied in September of each year.

Once again, even though both employees and employers pay contributions related to the salary of the employees, there are no funds set aside to pay these pensions and they, too, are paid out of general taxation. So, these pension arrangements are also **Unfunded Defined Benefit**.

There are arrangements whereby some, or all, of the benefits of these schemes can be taken before the schemes' normal retirement age. In these instances, the scheme is compensated for the additional cost of paying the pension for a longer period either by paying a reduced pension or by requiring additional contributions from the employee and/or employer.

1.3 Private Pensions

Private pensions come into two categories: those that provide specific benefits based on years of service and earnings (**Defined Benefit**); and, those that accumulate contributions, invest the contributions and provide the resulting sum on retirement (**Defined Contribution**), with the member able to choose how the benefits are taken.

A common factor of private pensions is that a fund is created, into which employer and employee contributions are paid, and out of which the benefits are paid. So, all these schemes are known as **Funded**.

The key consideration for the members of these private schemes, and hence for the *Pensions Regulator*, is that the amount of pension promised is available to the members when they claim their benefits. This is easier to ensure for Defined Contribution schemes, as the promise is to hand over the fund accumulated at the date of retirement. It is more challenging for *Funded Defined Benefit* schemes, due to the challenge of predicting the size of the fund required to meet the promised benefits as they are due. This is explained in more detail in the next section.

The organisation of private pensions can be varied. Some are sector-wide schemes that provide benefits to employees of several employers, known as *Multi-Employer* schemes, whilst some are specific to employees of individual employers, known as *Self-Administered Trusts* (or SATs).

There are arrangements whereby some, or all, of the benefits of these schemes can be taken before the schemes' normal retirement age. In these instances, the scheme is compensated for the additional cost of paying the pension for a longer period either by paying a reduced pension, or by requiring additional contributions from the employee and/or employer.

Finally, there are also work-based pension schemes, based on Government standards, that can be used by any employer. An example is the National Employment Savings Trust (NEST). These schemes accumulate contributions, invest them, and provide a sum on retirement (and are another form of *Defined Contribution* scheme).

1.4 Funded Defined Benefit Schemes

Funded Defined Benefit schemes provide pension and other benefits not just for members but also for the dependents of those members, for example spouses (for life) and children (whilst dependent). The other benefits are death in service lump sums, generally a multiple of the deceased member's salary, and ill-health benefits.

Funded Defined Benefit schemes take members' and employers' contributions over the period of the members' employment and invest them until the members retire at the normal retirement date specified by the scheme.

It follows that the relationship between an individual member and the pension scheme may be very long: possibly from the start of a career in their early twenties to the death of a surviving dependent, which, depending on the age difference between a member and their spouse, could reach a century or more.

Funded Defined Benefit schemes are governed by trustees (or, if the trustee is a company, the directors of the trust company), with responsibility for the management of the scheme generally outsourced to professional firms that specialise in the relevant aspects of pension fund management. Only for the very largest pension schemes is it cost effective to in-source management functions.

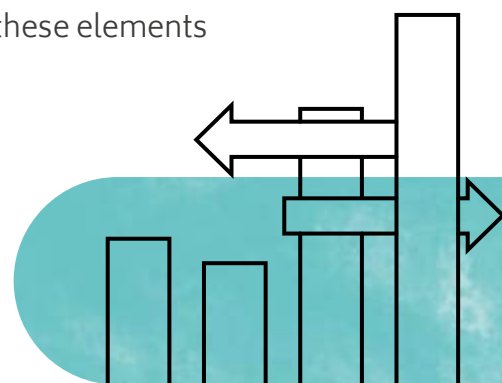
The trustees of **Funded Defined Benefit** schemes have many responsibilities but the key one is to ensure that there are sufficient funds to make good the benefit promises made by the scheme. The question they must ask continually is:

Is the total value of the existing assets, the future returns from those assets, and the future contributions from members and their employers at least equal to the value of all the benefits that will be paid out until the last member dies?

In a perfect world, the ultimate objective of the trustees is for the last pound in the fund to be paid out in the last pension payment to the last pensioner in the month in which they die. This is somewhat of a challenge when they may be dealing with cash inflows and outflows up to a century away!

1.5 Valuing the Assets and Liabilities of Funded Defined Benefit Schemes

The box above outlines the elements that must be known or estimated in order to determine the value of a scheme's fund. Some of these elements are easier to determine than others.



The existing assets of a pension at any given date will generally be relatively easy to value, particularly cash balances, bonds quoted on stock markets and equities quoted on stock markets, although their value fluctuates over time. Larger schemes may have direct investments in property and private equity (sometimes known as "alternative" investments), which need specialist valuers and, whilst there will be greater uncertainty over their value at a given time, there should be sufficient certainty for the trustees' purposes.

Now for the more complex valuations.

The trustees have to take into account the expected future contributions payable by the scheme members and their employers (unless the scheme has been 'closed' to new members or contributions), as well as investment returns. Investment returns are subject to changes in worldwide economic conditions and in market sentiment and so are inherently difficult to estimate. This is an issue that has existed for all time and is borne out by some eminent economists:

"The only function of economic forecasting is to make astrology look respectable."

-John Kenneth Galbraith

"The herd instinct among forecasters makes sheep look like independent thinkers."

- Edgar R. Fiedler in *The Three Rs of Economic Forecasting-Irrational, Irrelevant and Irreverent*, June 1977

"The ignorance of even the best-informed investor about the more remote future is much greater than his knowledge, and he cannot but be influenced to a degree which would seem wildly disproportionate to anyone who really knew the future, and be forced to seek a clue mainly here to trends further ahead. But if this is true of the best-informed, the vast majority of those who are concerned with the buying and selling of securities know almost nothing whatever about what they are doing. They do not possess even the rudiments of what is required for a valid judgement, and are the prey of hopes and fears easily aroused by transient events and as easily dispelled."

- John Maynard Keynes *A Treatise on Money, Volume II* (1930), pp. 360–61

The problem about estimates is that they can be challenged by everyone, but their accuracy can only be determined in the future. So, the trustees, having taken appropriate advice from their actuaries and other advisers, must make a judgement.

If valuing future contributions and investment returns is challenging, then valuing liabilities (the obligation to pay out pensions to members) is doubly so. These are some of the questions trustees must ask:

How long will the member live?

Will they die before or after retirement?

Will the member have dependents – and, if so, how many and how long will they live?

Will the member leave the scheme before normal retirement age? Will current trends in longevity continue into the future?

Actuaries have access to huge amounts of data and so can make estimates for all these questions and more, but the inherent problem of estimates remains.

Is this inherent lack of accuracy significant? Yes, it can be, as indicated by the following (fictional) example:

Suppose the estimated life expectancy for every member in retirement is 20 years. However, the actuaries now estimate that members will live for one year longer. What is the impact on the liabilities? They increase by $1/20$ or 5%. If these liabilities were valued at £40m then the increase in liabilities is £2m.

This inherent lack of certainty is a problem for valuing the assets and liabilities of **funded defined benefit** schemes. However, these issues apply equally to members of **defined contribution** schemes: they do not know what economic returns will apply over the rest of their lifetime – and they do not know when that life will end. In a perfect world, the ultimate objective of the individual member is for the last pound in the fund to be paid out in the month in which they die – essentially the same perfect result desired by trustees of **funded defined benefit schemes**.

1.6 How Much Pension?

The question of how much pension a member desires and how much they can afford to save are linked: saving more and/or earlier generates a larger pension fund; saving less and/or later generates a smaller pension fund. It is not just that less is saved, but also that the effect of compound interest (i.e. interest on interest) applies over the period the pension contributions are made. This is exemplified in the following quotation:

"Compound interest is the eighth wonder of the world. He who understands it earns it... he who doesn't... pays it."

-**Albert Einstein**

For the individual member, choosing how much to save in a pension is always a trade-off between a higher standard of living now, or in retirement.

The minimum contribution a member can make is either the statutory minimum pension contribution, or the scheme specific contribution, depending on which is higher. The maximum limit on pension contributions is influenced by the tax relief, or its withdrawal, on pension contributions. As this affects only the highest earners, and can change as a result of government policy, it is not discussed further here.

The total amount of pension received by an individual member will be the sum of the State Pension and their workplace pension (unless they have opted out of membership). It follows that the State Pension will be a more significant part of an individual's retirement income the lower paid they were and the lower their pension contributions were.

1.7 How Much Will It Cost?

So, what might be a reasonable target for an income in retirement and how much might it cost?

In the past many Defined Benefit schemes provided a pension of 1/80 of salary for each year of service plus a lump sum of three times the initial pension. The following is an extremely simplified example to give an idea of the cost of a pension:

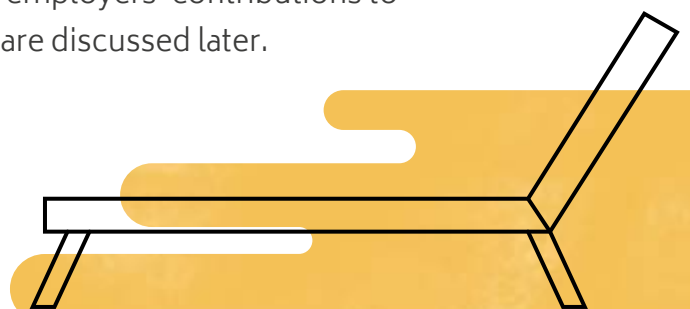
For a 40-year career (say, from the age 25 to 65), there would have been an expectation of a pension of $40/80$, or half, of the final salary with a lump sum of $3 \times 40/80$, or one and a half times final salary. On the basis of the (very large!) assumption that the return on investment will cover the impact of salary growth and inflation as well as the costs of running the scheme, if the member were to live for 20 years in retirement, the total cost to the scheme of providing the pension and the lump sum payment would be $23/80$ times final salary.

This implies that the scheme would have to have collected an aggregate (employee's plus employer's) contribution equivalent to 28.75% of the employee's salary for every one of the 40 years of their employment. A retirement period of 30 years would have an equivalent total cost of $33/80$ times final salary, which implies an aggregate contribution equivalent to 41.25% of the employee's salary.

There is presently more variation in how defined benefits are calculated, both in terms of the denominator used (the '80' in the above example) and the salary used. Some schemes have moved from using a final salary to calculating benefits based on a career average salary, or on one that is defined for each year of service, which increases by a given index (often the Consumer Prices Index) until the date of retirement.

Employers and pension scheme trustees have for many years assumed that investment returns will exceed the cost of salary growth and inflation and therefore set contributions rates lower than implied by the simplistic example above. However, investment returns are not expected to be at the same level over the next few decades as they have been over the last two decades.

High pensions are expensive! High pensions should therefore be valued very highly by those who benefit. The very simple example above demonstrates why unexpected increases in longevity are very costly to the scheme and why there has been such pressure on defined benefit to increase the aggregate of members' and employers' contributions to address this issue, as well as others, which are discussed later.



Theoretically, there should be no difference between the financial benefits of a defined contribution scheme and a funded defined benefit scheme for a given life expectancy and a given investment strategy over the same time period. It just requires the same, rather high, contribution rate saved over the entire career of the employee.

Not joining a pension scheme means that the employee will have to rely on the State Pension for an income when they retire; this may not provide them with a very high standard of living. Also, not joining a pension scheme is to throw away 'free money' in the form of the employer's pension contributions. In addition, the Government currently provides tax relief on pension contributions – more free money. Who would want to throw away free money? Membership of an employer pension scheme provides the discipline of saving into the scheme – and the Government's auto-enrolment legislation is designed to make it easy to sign up. However, some individuals may find it difficult to afford both pension contributions at the level required by their employer's pension scheme and the various necessities of life and so face a difficult trade-off between living for the present and saving for the future.

1.8 Which Type of Scheme is Best?

We have already noted that equivalent contributions invested over the same period in equivalent assets classes should provide essentially the same benefits. So, what are the relative advantages and disadvantages of *defined benefit* and *defined contribution* schemes?

Some advantages of *defined benefit* schemes are as follows:

They are guaranteed – being underwritten by the employer (and in the case of multi-employer schemes by all participating employers) and, in the event of the employer (or sector) being unable to support the scheme, the Pension Protection Fund (with the exception of Local Government Pension Schemes, which are discussed further later).

The benefits are generally inflation linked, perhaps up to a cap.

The member does not have to worry about investment and longevity risk.

The member does not have to worry about choosing and managing their investments.

Some advantages of **defined contribution** schemes are as follows:

They offer flexible retirement dates.

There is more choice over contribution rates by employees.

There is more flexibility about how the money is taken, i.e. the split between lump sum and regular payments.

They offer the ability to continue working whilst drawing pension benefits.

On the death of the member, any sum not used to buy an annuity or otherwise drawn down from the fund can be passed to the member's heirs, subject to tax, or to charity (whereas defined benefits, subject to guaranteed minimum pensions and dependents' pensions, die with the member and so can offer poor value for those who die very shortly after retirement).

Members can often vary their contributions over the working lifetimes (but beware the effect of compound interest and potential loss of employer contributions).

Some members may value security more than flexibility and others vice versa, although employees have to accept the pension arrangements offered by their employers should they choose to enrol. A general problem with many **defined contribution schemes** is that both employee and employer contributions are lower than those for **defined benefit schemes**, as a result of steps taken to make annual contributions more affordable (for both employers and employees). However, the basic rule is that the lower the contributions the lower the pension.

When defined benefit schemes were first proposed, and life expectancies were shorter, they looked viable, with quite reasonable contribution rates, and during the 1980s and 1990s there was even a time when these schemes looked overfunded and the employers could take a pension contribution 'holiday'. However, changes in longevity, market returns and interest rates over time have pushed up the cost of these schemes and hence contribution rates for both employers and their employees.

So, having discussed pensions in general, the next section describes the main pension schemes in the higher education sector.



02 Pension Schemes in the Higher Education Sector

Following the categorisation in the previous section, this section starts with the public pension schemes applicable to the higher education sector before moving onto the private schemes.

All the **public** schemes are **multi-employer** schemes; however, only some of the **private** schemes are **multi-employer** schemes.

All the **public** schemes are **unfunded defined benefit** schemes, with the exception of the National Employment Savings Trust (NEST). All the **private** schemes are **funded** schemes; some are **defined benefit** schemes, but others are **defined contribution** schemes.

2.1 Public Pension Schemes in the HE Sector

The main public pension schemes to which some parts of the sector may contribute, and the staff groups that are members, are set out in the following table.

Scheme	University Members and Staff Groups
Teachers' Pension Scheme (TPS)	Former polytechnics and colleges in England and Wales that became universities in or after 1992 ("new" universities) – in respect of teaching and research staff
Scottish Teachers' Superannuation Scheme (STSS)	Former colleges in Scotland that became universities in or after 1992 ("new" universities) – in respect of teaching and research staff
National Health Service Pension Scheme (NHSPS)	Universities throughout the UK – only in respect of staff teaching and researching in medicine and related subjects
National Employment Savings Trust (NEST)	A small number of UK universities – generally in respect of support staff (non-teaching and non-research)

The NEST is included in this analysis because, although the assets held by this pension scheme are not part of the public sector and the liabilities are not underwritten by the Government, it is organised by, and administered on behalf of, the Government.

It is possible that, through mergers within the sector, members of a particular pension scheme may retain membership of that pension scheme after a merger with another higher education institution (HEI) that would normally offer membership of another scheme in the sector. It follows that some HEIs may end up having staff that are members of both **public** and **private** pension schemes.

2.2 Private Pension Schemes in the HE Sector

The main private pension schemes to which some parts of the sector may contribute, and the staff groups that are members are set out in the following table

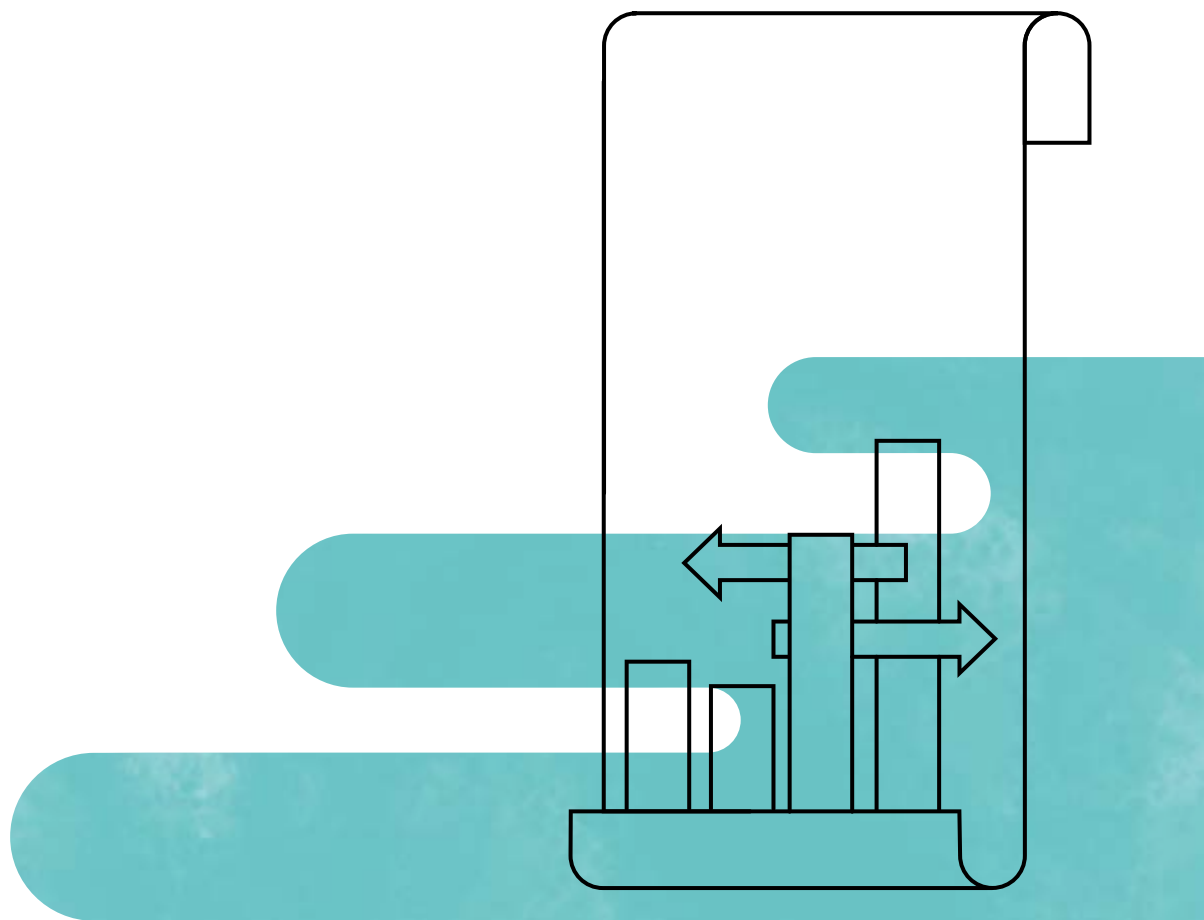
Scheme	University Members and Staff Groups
Multi-employer schemes	
Universities Superannuation Scheme (USS)	All UK universities other than former polytechnics and colleges that became universities in or after 1992 (“old” universities) – in respect of teaching and research staff and senior support staff (and, in the case of The Open University, all staff)
University of Oxford Staff Pension Scheme (OSPS)	The University of Oxford and the independent Colleges of the University – in respect of more junior support staff
Superannuation Arrangements for the University of London (SAUL)	The University of London and its constituent colleges, together with a few other employers – in respect of more junior support staff
Local Government Pension Scheme (LGPS)	Some UK universities – in respect all support staff in post 1992 universities and more junior support staff in “old” universities
Other Schemes	
Self-administered pension schemes, often called self-administered trusts (SATs), providing defined benefits	Some individual UK “old” universities – in respect of more junior support staff employed by that University and, in some cases, subsidiaries of that University
Money purchase schemes, i.e. defined contribution schemes	Some individual UK “old” universities – in respect of more junior support staff

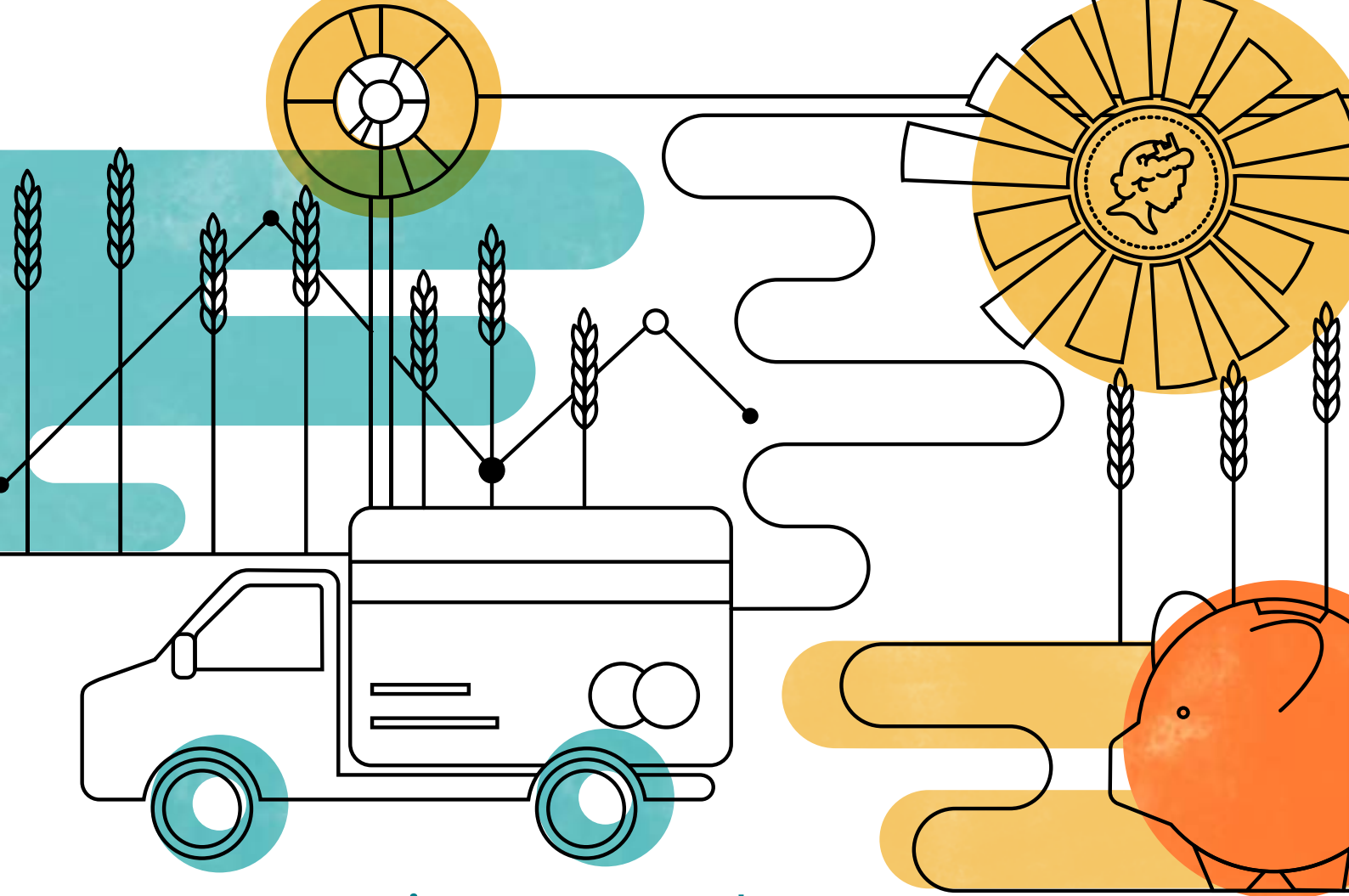
The LGPS is included in this analysis because, although local government is clearly part of the public sector, the pension schemes are not part of the public sector and include employers, such as universities, that are not formally part of the public sector. The LGPS schemes tend to be organised on a regional basis.

The **multi-employer** schemes in the above table are USS, OSPS, SAUL and LGPS. Of these, only LGPS can attribute the assets and liabilities of the scheme to individual employers – this feature has an important impact on the accounting for these schemes, as will be covered in Section 5.

Private pension schemes are totally separate legal entities from their sponsoring employers, with their own trustees and independent governance arrangements. The trustees manage the pension fund in the interests of the members, not the employer. There is therefore an expectation that trustees of private defined benefit schemes will periodically look at the underlying financial health of the sponsoring employer organisations (known as 'testing the strength of the covenant') - as it is important that employer organisation will continue to be able to make contributions at the required level, especially if the scheme is in deficit.

In addition to the pension schemes that provide retirement benefits to university employees there are also pension arrangements for the staff of student unions. Like pension schemes, student unions are totally separate legal entities, with their own governance arrangements. However, due to the close links (including funding arrangements) between student unions and the universities whose students they represent, there can be an indirect impact on the university arising from the pension arrangement adopted by its related student union.





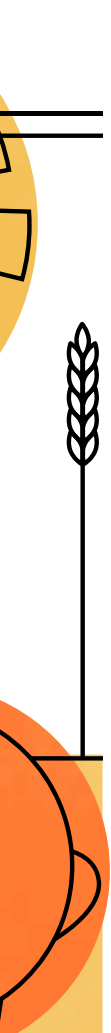
03 Business and Reporting Cycles

A discussion of business and reporting cycles, albeit brief, may seem a digression but please read on, as this topic has a significant impact on the accounting for pension costs in HEIs.

3.1 The Rhythm of a Business

Every business has its own rhythm. For example, in agriculture the four seasons of the year determine when an annual product is set growing and when it is sold. For many consumer-facing businesses, it is linked to the shopping habits of the population such as the 'weekly shop', evening hospitality, or weekend leisure activities. At the other end of the spectrum is the construction sector, where projects can last years or even decades.

In the HE sector, the rhythm could be said to be three years, which is currently the normal period of an undergraduate degree, some postgraduate degrees, and the length of many externally funded research projects. Alternatively, it could be said to be one year, as many students



have annual examinations that must be passed in order to progress to the next stage. In addition, the Student Loans Company makes payments to universities in respect of academic years (subject to 'termly' census confirmations).

3.2 Reporting Financial Performance

The reporting of the financial performance of a business is generally on an annual basis, being deemed a reasonable period for the directors to be accountable to the shareholders. Annual reporting also links neatly to many of the timescales for reporting to taxation and other regulatory authorities.

It is logical for the financial reporting cycle to be linked to the business cycle. This is why many agricultural businesses have a financial year ending in March (roughly the end of the sowing season in the Northern Hemisphere) or September (roughly the end of the harvest season). Most other businesses do not link reporting to a particular month but it should be noted that many consumer-facing businesses report for a given number of weeks (say four years of 52 weeks followed by one of 53 weeks) so that their financial reporting remains linked to the rhythm of the business.

Education, and particularly higher education, is a long-standing business and so, like agriculture, the financial reporting cycle (August to July) is linked roughly to the academic year (now typically late September to June for undergraduates).

3.3 Preparing Financial Reports

Financial reports are easier to prepare the more they result from just the aggregation of transactions. In simple terms, a retail business that buys stock and sells it within a year or even a month or week has a short period between expenditure and income, and at any point will have a reasonably clear idea of its performance as a result. Businesses with very long business cycles (e.g. building an aircraft carrier), will have to make judgements as to when money might be spent, revenue earned, and profits realised, and is buffeted by economic and political changes in the interim. Judgements are inherently inaccurate and have resulted in some major 'accounting scandals' when educated guesses made in one period are not subsequently realised (but see the quote from JK Galbraith in Section 3).

3.4 Pension Cycles

So, what is the business cycle for an individual's pension? Theoretically, it is from the day that individual joins a pension scheme to the day their last dependent dies – a period that could cover the best part of a century or more.

Why does this matter? It matters because the judgements discussed in Section 1 affect a long period and the inherent inaccuracies that surround those judgements can end up being compounded over many years. This means that the impact of small decisions, assumptions and judgements are magnified by the passage of time.

How can a pension scheme minimise the magnifying impact of inherent error on successive annual reports? This would be easier if the assumptions remained constant; however, economic conditions change on a daily basis and other factors, such as longevity, are revised frequently. It is the effect of these changes, compounded over such a long period, that results in large changes in pension scheme valuations from one year to the next, and reflected in employers' financial statements.

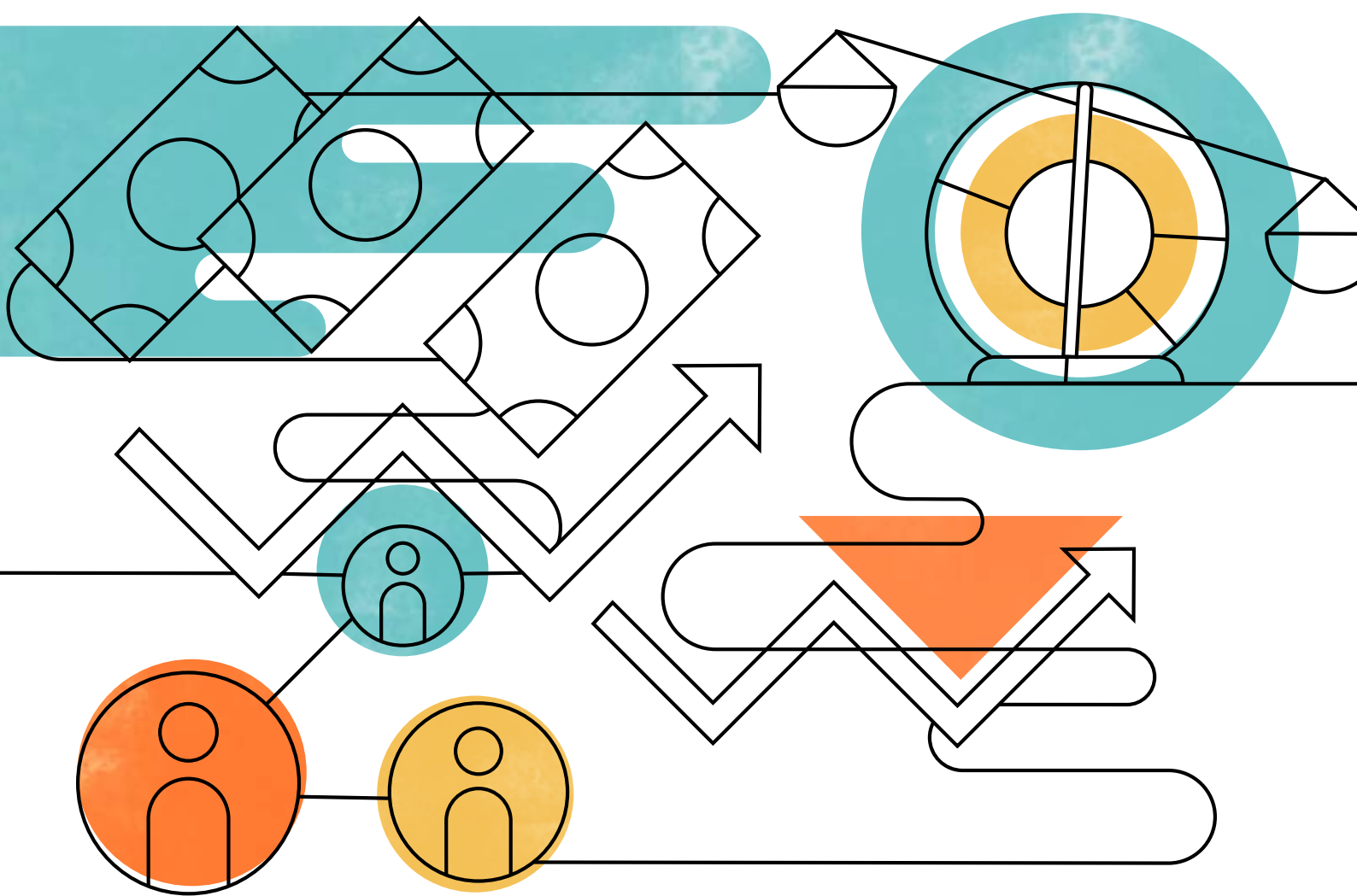
Furthermore, the assets and liabilities of a pension scheme that has been in place for a long time may end up being as large, or larger, than the assets of the sponsoring employer. It was once said that British Airways was "a large pension scheme with a small airline attached!" This sector example from the Financial Statements 2018/19 of the University of Oxford illustrates this point:

Scheme	Oxford University Press £m	Oxford University Press Group Pension Scheme £m	Ratio of Pension Scheme to Sponsor
Assets	830.5	702.7	0.85
Liabilities	415.6	842.8	2.03
Net Assets	414.9	(140.1)	(1.34)

So, the Oxford University Press (OUP) pension scheme's assets are almost as big as those of the OUP itself, whilst its liabilities are slightly higher than OUP's assets. The net deficit is around a quarter of OUP's net assets. The liabilities represent the pension promises to employees accumulated over many years; however, they will be discharged over many years in the future as members live through retirement. This allows OUP, like all employers with pension scheme deficits, to manage the impact of the deficit over several years.

This example has been chosen because of the one-to-one relationship of a single business to a single pension scheme. For virtually all universities the mix of *public* and *private, funded* and *unfunded*, and *defined benefit* and *defined contribution* schemes make such a comparison impossible. Despite this, the impacts of the various schemes on the sponsoring employers are still very significant.





04 Financial Reporting in General

4.1 Introduction

The Financial Reporting Council (FRC) governs financial reporting for all but the tiniest of UK corporate entities: it covers those operating for commercial purposes and those operating for public benefit purposes. It publishes financial reporting standards that all such entities are required to follow. The standard relevant to higher education institutions is Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" (shortened to FRS102).

In addition, some specialist industries and sectors that comply with FRS102 are also required to comply with Statements of Recommended Practice (SORPs). These are sector-driven recommendations on financial reporting, auditing practices and actuarial practices for specialised industries, sectors or areas of work. These supplement FRC standards and other legal and regulatory requirements in the light of special factors

prevailing or transactions undertaken in that particular industry, sector or area of work that are not addressed in FRC standards. SORPs also address matters that are addressed in FRC standards, but about which additional guidance is considered necessary. One of the most well-known SORPs is the Charity SORP, that applies to most, but not all, UK charities.

4.2 Financial Reporting in Higher Education Institutions

Universities are included in the corporate entities that are required to comply with FRS102 (unless they have chosen to apply full International Financial Reporting Standards). In addition, although the vast majority of universities are charities, they are not required to comply with the Charities SORP but rather they choose to apply SORP "Accounting for Further and Higher Education" (called the FHE SORP), which provides guidance on issues peculiar to further and higher education.

In passing, it should be mentioned that the colleges of the universities of Oxford and Cambridge, although they undertake teaching and research activities in conjunction with those universities, are not higher education institutions for the purposes of financial reporting and are required to comply with the Charities SORP rather than the FHE SORP.

In the UK there is a growing number of for-profit HEIs that do not have charitable status, and comply only with standard corporate financial reporting requirements.

4.3 Scope of FRS102

FRS102 applies to *financial statements* that are intended to give a true and fair view of a reporting entity's *financial position* and *profit or loss* (or *income and expenditure*) for a period. [FRS102 paragraph 1.1].

4.4 Objectives of Financial Statements

Although this chapter may seem abstract on first reading, it explains concepts and financial accounting requirements in order to then explain accounting for pensions in the next chapter. The reader's efforts to grasp these concepts will be rewarded by a fuller understanding of the principles and practice of accounting for pensions. The wording uses quotes from

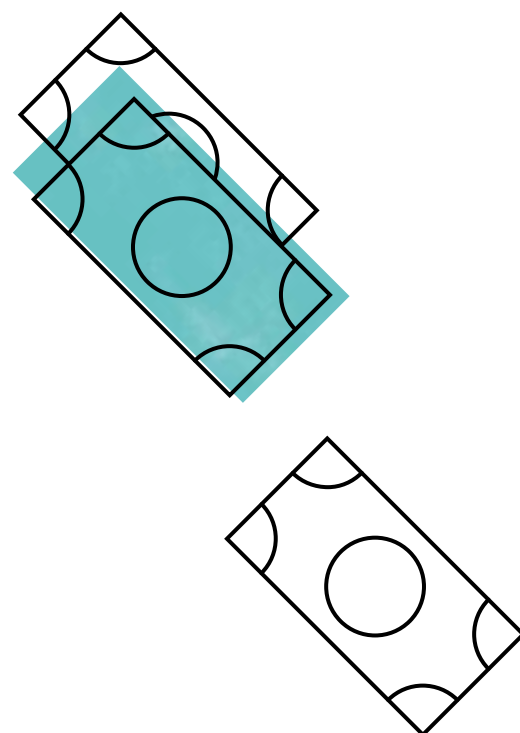
FRS102 [with references provided in square brackets], which applies to all entities reporting financial performance and not just higher education institutions – and so the language is generic. Additional explanations have been provided where necessary to link the generic requirements to those applying in higher education institutions.

The objective of **financial statements** is to provide information about the **financial position, performance** and **cash flows** of an entity that is useful for economic decision-making by a broad range of users who are not in a position to demand reports tailored to meet their particular information needs. **Financial statements** also show the result of the stewardship of management – the accountability of management for the resources entrusted to it. [FRS102 paragraphs 2.2 and 2.3]

4.5 Qualitative Characteristics of Information in Financial Statements

Section 2 of FRS102, 'Concepts and Pervasive Principles', sets out the qualities that make the information in **financial statements** of the entities within the scope of this FRS useful. These qualitative characteristics, which are defined in FRS102, are:

- Understandability
- Relevance
- Materiality
- Reliability
- Substance over form
- Prudence
- Completeness
- Comparability
- Timeliness
- Balance between benefit and cost



4.6 Financial Position

The financial position of an entity is the relationship of its *assets*, *liabilities* and *equity* as of a specific date as presented in the *statement of financial position*. These are defined as follows:

- a. An *asset* is a resource controlled by the entity as a result of past event and from which future economic benefits are expected to flow to the entity.
- b. A *liability* is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefit.
- c. *Equity* is the residual interest in the assets of the entity after deducting all its liabilities. [FRS102 paragraph 2.15]

“*Equity*” is not a term in general use in higher education. For universities, the term effectively covers the net worth of the university – the value of all the assets less all the liabilities. This can be illustrated by the following, personal, example:

An individual lives in a property worth £250,000. The mortgage on their house is currently £100,000. It therefore follows that the equity in their property is £150,000, being the difference between the value of the property and the value of the mortgage.

Another way of thinking about the *equity* of a university is to think of the value of its reserves.

The future economic benefit of an *asset* is its potential to contribute, directly or indirectly, to the flow of *cash* and *cash equivalents* to the entity. Those *cash flows* may come from using the asset or disposing of it. Many *assets*, for example property, plant and equipment, may have a physical form; however, physical form is not essential to the existence of an asset – some assets are intangible. In determining the existence of asset, the right of ownership is not essential; thus, for example, property held on a lease is an *asset* if the entity controls the benefits that are expected to flow from the property. [FRS102 paragraphs 2.17 to 2.19]

An essential characteristic of a **liability** is that the entity has a present obligation to act or perform in a certain way. The obligation may either be a legal obligation or a constructive obligation. A legal obligation is legally enforceable as a consequence of a binding contract or statutory requirement; a constructive obligation is an obligation that derives from an entity's action when:

- a. By an established pattern of past practice, published policies or a sufficiently specific current statements, the entity has indicated to other parties that it will accept certain responsibilities; and,
- b. As a result, the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities. [FRS102 paragraph 2.20]

4.7 Performance

Performance is the relationship of the income and expenses of an entity during a reporting period [for universities the year ending 31 July]. [In the higher education sector,] it is presented in a single **statement of comprehensive income**. Income and expenses are defined as follows:

- a. Income is increases in economic benefits during the reporting period in the form of inflows or enhancements of **assets** or decreases of liabilities that result in increases in **equity**, other than those relating to contributions from equity investors.
- b. Expenses are decreases in economic benefits during the reporting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other those than relating to distributions to equity investors. [FRS102 paragraph 2.23]

The concept of equity investors is not relevant to not-for-profit universities: distributions to equity investors are often called dividends and represents an investment return to the investors and not a cost of running the business.

The recognition of income and expenses results directly from the recognition and measurement of **assets** and **liabilities**. [FRS102 paragraph 2.24]

The definition of income encompasses both revenue and gains:

- a. Revenue is income that arises in the course of the ordinary activities of an entity and is referred to by a variety of names, including sales, fees, interest, dividends, royalties, rent and, in the higher education sector, grants.
- b. Gains are other items that meet the definition of income but are not revenue. When gains are recognised in the **statement of comprehensive income**, they are usually displayed separately because knowledge of them is useful for making economic decisions. [FRS102 paragraph 2.25]

The separate disclosure of gains that meet the accounting definition of income but are not revenue is important in understanding the accounting for pensions, particularly as some of the gains (or losses) can be very significant – as will be seen in Section 6 below.

The definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity:

- a. Expenses that arise in the course of the ordinary activities of the entity include, for example, cost of sales, wages (including associated costs of national insurance and pensions) and depreciation (the measure of consumption of fixed assets over their useful lives). They usually take the form of an outflow or depletion of assets such as cash and cash equivalents, inventory, or property, plant and equipment.
- b. Losses are other items that meet the definition of expenses and may arise in the course of the ordinary activities of the entity. When losses are recognised in the statement of comprehensive income, they are usually presented separately because knowledge of them is useful for making economic decisions. [FRS102 paragraph 2.26]

4.8 Recognition of Assets, Liabilities, Income and Expenses

Recognition is the process of incorporating in the *statement of financial position* or *statement of comprehensive income* an item that meets the definition of an asset, liability, income or expense and satisfies the following criteria:

- a. It is probable that any future economic benefit associated with the item will flow to or from the entity; and,
- b. The item has a cost or value that can be measured reliably. [FRS102 paragraph 2.27]

In the context of accounting for pensions, the requirements for measuring **liabilities** are key.

An entity shall recognise a *liability* in the *statement of financial position* when:

- a. The entity has an obligation at the end of the reporting period as a result of a past event;
- b. It is probable that the entity will be required to transfer resources embodying economic benefits in settlement; and
- c. The settlement [of the liability] can be measured reliably. [FRS102 paragraph 2.39]

4.9 Measurement of Assets, Liabilities, Income and Expenses

Measurement is the process of determining the monetary amounts at which an entity measures its *assets, liabilities, income* and *expenses* in its *financial statements* and involves the selection of a basis of measurement. Two common measurement bases are historical cost and fair value:

- a. For **assets**, historical cost is the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire **the asset** at the time of its acquisition. For **liabilities**, historical cost is the amounts of proceeds of cash or cash equivalents received or the fair value of non-cash assets received in exchange for the obligation at the time the obligation is incurred, or in some circumstances (for example, income tax) the amounts of cash or cash equivalents expected to be paid to settle the **liability** in the normal course of business. Amortised historical cost is the historical cost of an **asset** or **liability** plus or minus that portion of its historical cost previously recognised as an **expense** or **income** for example, the depreciation of a building to recognise its consumption over its expected useful life).
- b. Fair value is the amount for which an **asset** could be exchanged, a **liability** settled, or an **equity** instrument grant could be exchanged, between knowledgeable willing parties in an arm's length transaction. [FRS102 paragraphs 2.33 and 2.34]

It may be helpful to illustrate these concepts by a simple example:

Entity A buys goods priced at £100 for immediate settlement, i.e. payment in full (or settlement within 30 days). The historical cost of these goods is £100.

Entity B buys the same goods and agrees to pay £105 in a year's time. Current interest rates are at 5%, so it follows that Entity B can earn interest by settling its liability after a year, rather than immediately. Therefore, the fair value of the goods is £105/1.05 or £100. Entity B is in exactly the same position as Entity A: it has earned £5 in interest and paid out £105, leaving it with a net cost of £100.

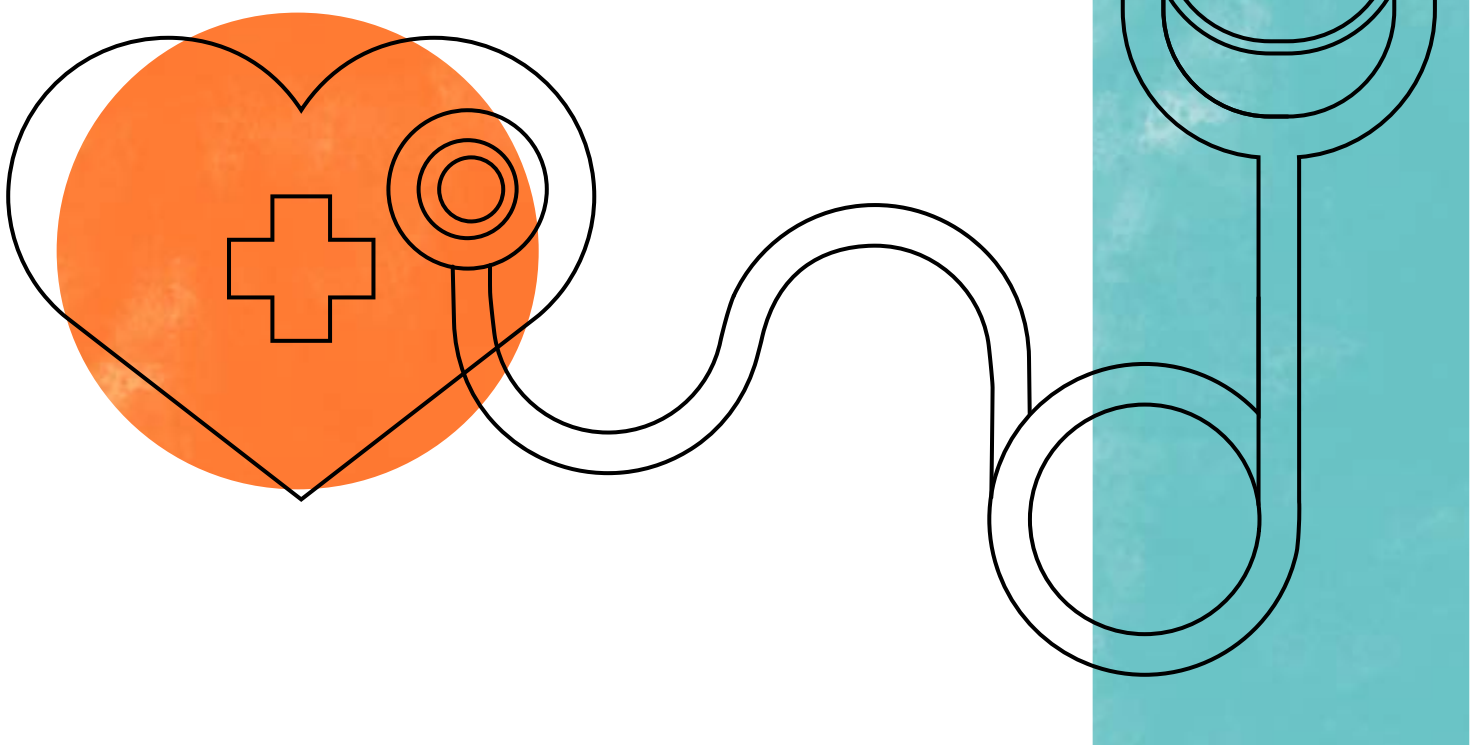
It can be seen from this very simple example that the application of historical cost and fair value is designed to value assets on a comparable basis.

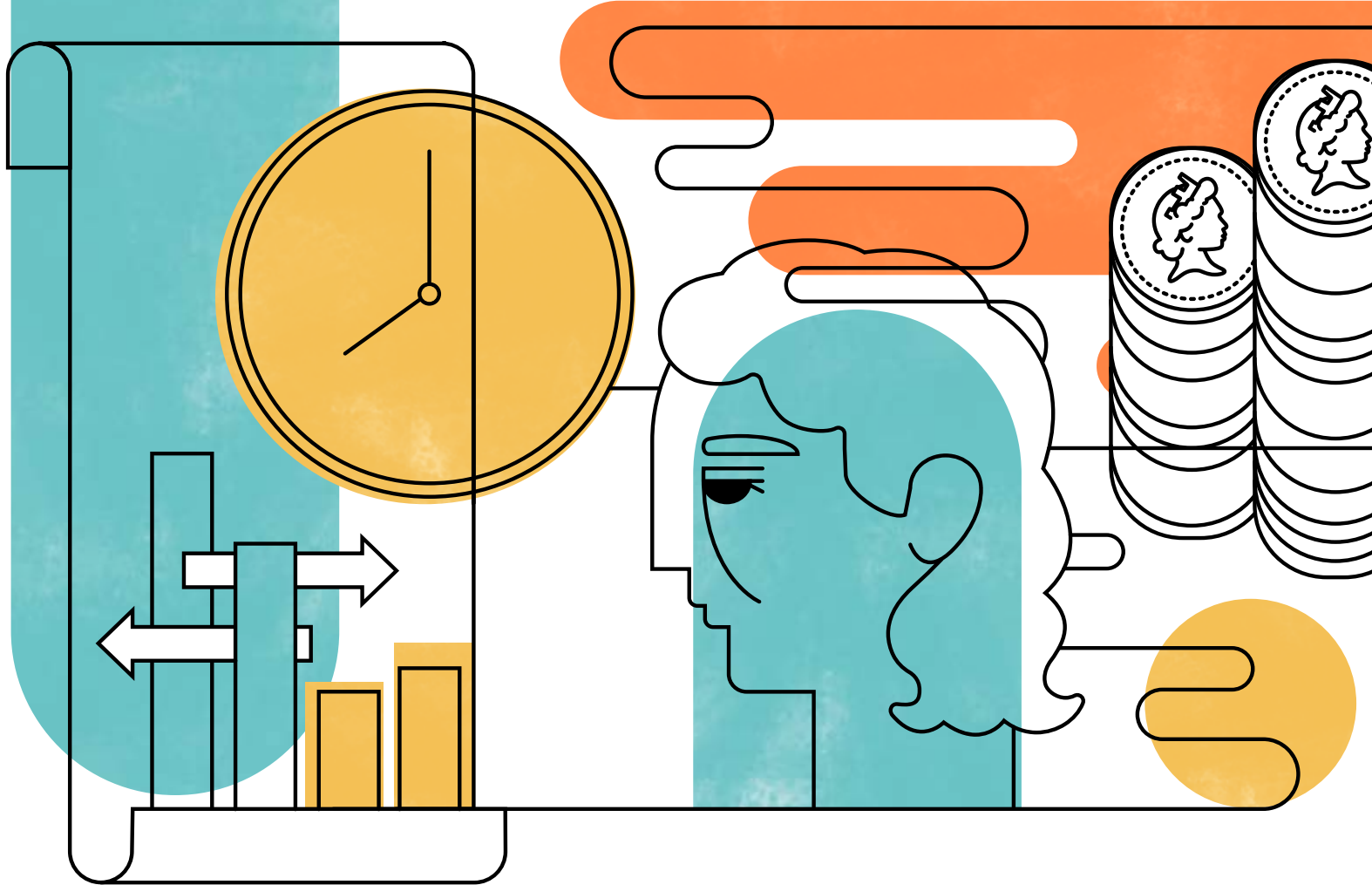
The problem for accountants comes when dealing with many transactions that may be settled over many different periods; for example, when an insurance company sells an **annuity** to an individual. The insurance company receives a single lump sum and promises to pay a set sum (set either in money terms, i.e. a set number of pounds each month, or in real

terms, i.e. a set number of pounds each month increasing each year by inflation) for the life of the individual. When setting the lump sum, the insurance company has to consider how long the individual will live, what rates of inflation will apply over that period, what rate of return it will earn on the lump sum (less annuity payments over time) and what amount of profit it can earn.

That these complexities can be successfully dealt with can be judged by the level of profits earned by insurance companies.

These are exactly the issues that pension scheme trustees have to deal with when managing *defined benefit* schemes and that individuals have to deal with when considering their own *defined contribution* plans.





05 An Overview of Accounting for Pensions

This section sets out the basic principles for accounting which have to be followed by all types of entity and identifies areas of particular relevance for universities.

FRS102 approaches accounting for pensions from the wider perspective of all employee benefits. This is perfectly understandable when it is remembered that pensions represent deferred pay for working for an employer and are determined and underpinned by the promises made by the employer during the employees' period of employment.

5.1 General Recognition Principle for All Employee Benefits

An entity shall recognise the cost of all employee benefits to which its employees have become entitled as a result of service rendered to the entity during the reporting period:

- a. As a liability, after deducting amounts that have been paid either directly to the employees or as a contribution to an employee benefit fund. If the amount paid exceeds the obligation arising from service before the reporting date, an entity shall recognise that excess as an asset to the extent that the prepayment will lead to a reduction in future payments or a cash refund.
- b. As an expense, unless another section of FRS102 requires the cost to be recognised as part of the cost of an asset such as inventories or property, plant and equipment. [FRS102 paragraph 28.3]

Clause (a) above essentially means that all amounts due to employees are the liability of the employer until they have been paid either to the employee or, in the case of pension contributions, to the pension plan. Generally, the only liability that will be unpaid at the end of a financial year will be the final month's contributions (these are often due in the first few days of the following calendar month), as pension plans impose a strict timetable for the payment of contributions.

For most universities, the application of clause (b) above will mean that all employees' pay, and the associated employer's pension contributions, will be classified as an expense (disclosed as part of "staff costs").

However, there may be instances where employees are working on the construction of capital projects that may have a useful life of several years (these can include physical assets, e.g. buildings or parts of buildings or equipment, or, less often, non-physical assets such as some long-life computer software programs) in which case the costs relating to the work of these employees will be included in the costs of the assets.

Employee benefits include:

- a. Short-term benefits, which are employee benefits (other than termination benefits) that are expected to be settled wholly before twelve months after the end of the reporting period in which the employees render the related service;
- b. Post-employment benefits, which are employee benefits (other than termination benefits and short-term employee benefits) that are payable after the completion of employment; or
- c. Termination benefits, which are employment benefits provided in exchange for the termination of employee's employment as a result of either an entity's decision to terminate an employee's employment before the normal retirement date or an employee's decision to accept voluntary redundancy in exchange for those benefits. [FRS102 paragraph 28.1 – part thereof]

For a university, this means that it must recognise all salary payments and employer pension contributions for existing staff as well as payments that have been made to former employees who leave the service of the university. It also means that if an employee's employment ends on the last day of the university's financial year (normally 31 July) but payments are due after that date they must be recognised in that year's financial statements.

5.2 Distinction Between Defined Contribution Plans & Defined Benefit Plans

Accounting for pensions is driven by the recognition of liabilities summarised in the Section 4 and the general recognition principle above.

Essentially, this means that accounting for pensions comes from the answer to this question:

'What promises have been made to employees as a result of their employment in the period up to the end of the financial reporting period?'

There are only two possible answers to this question, which are set out in FRS102 paragraph 28.10 and are paraphrased here:

- a. The employer has promised to make fixed contributions into a separate entity (a fund) held on behalf of the employee. The contributions can be fixed by way of monetary amount, or, more usually, by way of a set percentage of the employee's salary; the government currently has in place legislation requiring minimum payments into pension schemes by both employees and employers (unless the employee chooses to opt out). The employer has no legal or constructive obligation to pay any further contributions or to make direct payments to employees once they have left their employment even if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods that the employee expected to be available to him or her. These schemes are known as **defined contribution** schemes.
- b. The employer has promised to provide agreed benefits to current and former employees. That promise endures even after an employee has left the employment of the employer. The employer bears an actuarial risk (a risk calculated using "actuarial assumptions") that benefits will cost more or less than expected and investment risk (that returns on assets set aside to fund the benefits will differ from expectations). These schemes are known as **defined benefit** schemes.

There are some **defined contribution** schemes in universities, usually established by new employers or existing employers to replace **defined benefit** schemes that are no longer open to new employees or for future service by existing employees.

There are many **defined benefit** schemes in universities, of varying types – as discussed in Section 2.

A more recent development has been the development of the 'hybrid' scheme that provides different defined benefits to the same employees – part **defined benefit** and part **defined contribution**. The most significant example of this is the Universities Superannuation Scheme (USS), which, for service from April 2016, provides **defined benefit** pensions up to a specified salary cap (revalued each year in line with inflation) and **defined contribution** benefits above that cap.

5.3 Multi-employer Plans and State Plans

Multi-employer plans and *state plans* are classified as *defined contribution plans* or *defined benefit plans* on the basis of the terms of the plan, including any constructive obligation that goes beyond the formal terms. However, if sufficient information is not available to use defined benefit accounting for a *multi-employer plan* that is a defined benefit plan, the entity shall account for the plan as if it was a *defined contribution* plan and make the disclosures required below. An entity shall account for a *state plan* in the same way as for a *multi-employer plan*. [FRS102 paragraph 28.11]

The different accounting requirements for *defined benefit* and *defined contribution* plans are discussed below. The *defined benefit* accounting requirements reflect the nature of the promise made by the employer: to provide the benefits, normally determined by length of service and salary, for the life of the employee (and, where relevant, their dependents). Equally, the *defined contribution* accounting requirements reflect the nature of the promise made by the employer: to provide cash into a pension plan that the employee can choose to draw down later.

The exception to this principle is where there is a *defined benefit* plan that cannot identify the assets and liabilities by individual member and/or employer. This situation occurs in *state plans* and *multi-employer plans* that relate to particular sectors (teachers and National Health Service staff being two of the largest) and generally provide the same benefits for the same contribution rates across all employers in that sector. As such, there was never a need to keep separate records by employer until the accounting requirement developed to reflect the nature of the promise made by the employer.

A further problem with defining the liability by employer within *multi-employer* plans is the fact that individuals could move between different employers within their sector and retain their existing pensionable service within the scheme, thus mixing the pension liabilities. When the *defined benefit* is related to final salary this caused real difficulties, as indicated by this simple example, which ignores annual salary increases and inflation:

Example: Hilary is a member of a multi-employer pension plan that provides a final salary benefit calculated as one-eightieth of final salary for every year of service. Hilary worked for Employer A for 20 years at a salary of £20,000; Hilary then worked for Employer B for 20 years at a salary of £30,000. Both employers are members of the same multi-employer scheme and Hilary has been eligible to be a member of the scheme in both cases. At retirement Hilary's pension was therefore $£30,000 \times 40/80$ or £15,000.

However, if Hilary had been treated as leaving the sector at the end of working for Employer A, the deferred pension at that time would have been $£20,000 \times 20/80$, or £5,000; the actual pension from service with Employer B would have been $£30,000 \times 20/80$ or £7,500. This would have been a total of £12,500 and not the £15,000 actually paid.

So, whose is the liability for the additional £2,500 of pension: Employer A or Employer B?

As a **multi-employer** scheme, it is obviously both: actuaries determine a scheme-wide contribution rate that covers the higher liability.

This example just illustrates the scale of the problem – particularly in a sector like higher education that encourages movement between individual employers for the purposes of career development and bringing new ideas to employers. This is why the only reasonable thing is to treat such **defined benefit** plans as though they were **defined contribution** plans despite this being 'technically' incorrect.

Where an entity participates in a **multi-employer plan** that, in accordance with the previous paragraph [in FRS102], is accounted for as if the plan were a **defined contribution plan**, and the entity has entered into an agreement with the **multi-employer plan** that determines how the entity will fund a deficit, the entity shall recognise a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and the resulting expense. [FRS102 paragraph 28.11A]

This requirement of FRS102 reflects the nature of the promise made by the employer: a deficit means that the employer has contributed less than the liabilities it has incurred and therefore is liable for that deficit. Thus, an agreement to pay contributions in the future for an existing liability must be recognised by the employer. The largest example of this in the university sector relates to USS.

Where universities are funding a deficit by means of annual fixed sums the measurement of the liability is relatively easy: it is the sum of each annual sum discounted for the time value for the period from the reporting date to the date the contribution is due. This just applies the principles discussed in Section 4.9 above.

In some cases, the deficits are funded by additional percentage contributions calculated on the pensionable pay of the employees for a set number of years. The same principles apply, it is just that the calculations are considerably more complex: they have to take into account salary growth over the set period and expected changes to employee numbers of that period. In the case of USS, an annual modeller is published by BUFDG to facilitate these complex calculations.



5.4 Summary of Accounting Implications

It follows that, although there are only two kinds of pension scheme (*defined contribution* and *defined benefit*), there are three types of accounting:

Scheme Features	Accounting Requirements
Defined Contribution	<p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid.</i></p>
Defined Benefit – if multi-employer scheme assets and liabilities can be segregated by employer	<p>Statement of financial position: <i>recognise a liability for the entity's total obligations under the plan net of the assets of that plan.</i></p> <p>Statement of comprehensive income: <i>recognise changes in that liability as the cost for the year.</i></p>
Defined Benefit – if multi-employer schemes assets and liabilities cannot be segregated by employer	<p>Statement of comprehensive income: <i>recognise contributions when they are due plus the change in the liability for funding future contributions to a scheme's deficit (if it has one) – generally known as "deficit contributions"</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid plus the value of future contributions that the entity has agreed to make to fund any deficit in the scheme.</i></p>

The precise accounting requirements for each of these are summarised below and explained in further detail in Section 7.

5.5 Defined Contribution Plans – Recognition and Measurement

An entity shall recognise the contribution payable for a period:

- a. As a liability, after deducting any amount already paid. If contribution payments exceed the contribution due for service before the reporting date, an entity shall recognise an asset to the extent that the prepayment will lead to a reduction in future payments or a cash refund.
- b. As an expense (unless another section of FRS102 requires the cost to be recognised as part of the cost of an asset such as inventories or property, plant and equipment). [FRS102 paragraph 28.13]

As indicated above, the liability appears in the Statement of Financial Position and the expense in the Statement of Comprehensive Income. Given the requirements of the schemes in the university sector, the only liability that is generally evident is for the contributions due in respect of salaries paid at the end of the previous month.

Payments in excess of the liability are extremely rare.

5.6 Defined Benefit Plans – Recognition and Measurement

In applying the general recognition principle set out in [Section 5.1] above to **defined benefit plans**, an entity shall recognise:

- a. A liability for its obligations under **defined benefit plans** net of the assets held by the trustees of that plan (or insurance company if the assets are held in the form of insurance policies) – its **net defined benefit liability**; and,
- b. The net change in that liability during the period as the cost of its **defined benefit plans** during the period. [FRS102 paragraph 28.14]

This is the same principle as in the previous section (and disclosed in the Statements of Financial Position and Comprehensive Income). The major difference is that the accounting requirements relate to the whole of the employer's promises to its staff, which reflects the economic reality of that promise.

Much of the remainder of this section provides the definitions in FRS102: they should be read in the context of the extent of the employer's promise to its staff and the discussion of financial reporting issues in general in Section 4.

An entity shall measure the net defined benefit liability for its obligations under **defined benefit plans** as the net total of the following amounts:

- a. The present value of its obligations under **defined benefit plans** at the reporting date; minus,
- b. The **fair value** at the reporting date of plan assets (if any) out of which the obligations are to be settled. [FRS102 paragraph 28.15]

Where an entity has measured its **defined benefit** obligation using the projected unit method (including the use of appropriate actuarial assumptions), it shall not recognise any additional liabilities to reflect differences between these assumptions and those used for the most recent actuarial valuation of the plan for funding purposes. For the avoidance of doubt, no additional liabilities shall be recognised in respect of any agreement with the **defined benefit plan** to fund a deficit (such as a schedule of contributions). [FRS102 paragraph 28.15A]

To do so would double count the obligation, i.e. it would include both the net scheme deficit and the provision for future deficit contributions.

An entity shall measure its **defined benefit** obligation on a discounted present value basis. The entity shall determine the rate used to discount the future payments by reference to market yields at the reporting date on high quality corporate bonds. [FRS102 paragraph 28.17]

If the present value of a **defined benefit** obligation at the reporting date is less than the fair value of the plan assets at that date, the plan has a surplus. An entity shall recognise a plan surplus as a **defined benefit plan** asset only to the extent that it is able to recover the surplus either through reduced contributions in the future or through refunds from the plan. [FRS102 paragraph 28.22]

An entity shall recognise the cost of a **defined benefit plan**, except to the extent that FRS102 requires part or all of the cost to be recognised as part of the cost of an asset, as follows:

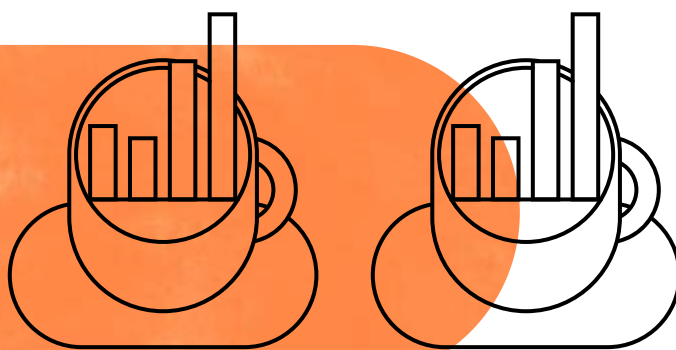
- a. The change in the net **defined benefit** liability arising from employee service rendered during the reporting period in profit or loss [in the University sector, in expenditure];
- b. Net interest on the net **defined benefit** liability during the reporting period in profit or loss [in the University sector in expenditure];
- c. The cost of plan introductions, benefit changes, curtailments and settlements in profit or loss (in the University sector in expenditure); and,
- d. Remeasurement of the net **defined benefit** liability in **other comprehensive income**.

Some **defined benefit** plans require employees (all in the University sector) or third parties to contribute to the cost of the plan. Contributions by employees reduce the cost of the benefits to the entity. [FRS102 paragraph 28.23]

Requirements (a) and (b) of FRS102 paragraph 28.23 reflect the economic substance of the pension promise of the employer: the employer is responsible for those promises and so the effect of providing the promised pension for another year of service and the interest for the cost of not settling that liability in the reporting period is part of the effective cost of employment. Requirement (c) may include remeasurement of liabilities incurred in previous reporting periods and so are not included in the measurement of the reporting period's normal expenditure.

5.7 Accounting for Public Pension Schemes in the HE Sector

The main public pension schemes to which some parts of the sector may contribute, and the staff groups that are members, were set out in Section 2. The following table summarises how the accounting principles above define the accounting treatment adopted by the universities whose employees are members of those schemes.



Scheme	Accounting Treatment
Teachers' Pension Scheme (TPS)	<p>Defined Contribution</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of <i>financial position</i>: <i>include as liabilities any contributions due but not yet paid.</i></p>
Scottish Teachers' Superannuation Scheme (STSS)	<p>Defined Contribution</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of <i>financial position</i>: <i>include as liabilities any contributions due but not yet paid.</i></p>
National Health Service Pension Scheme (NHSPS)	<p>Defined Contribution</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of <i>financial position</i>: <i>include as liabilities any contributions due but not yet paid.</i></p>
National Employment Savings Trust (NEST)	<p>Defined Contribution</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of <i>financial position</i>: <i>include as liabilities any contributions due but not yet paid.</i></p>

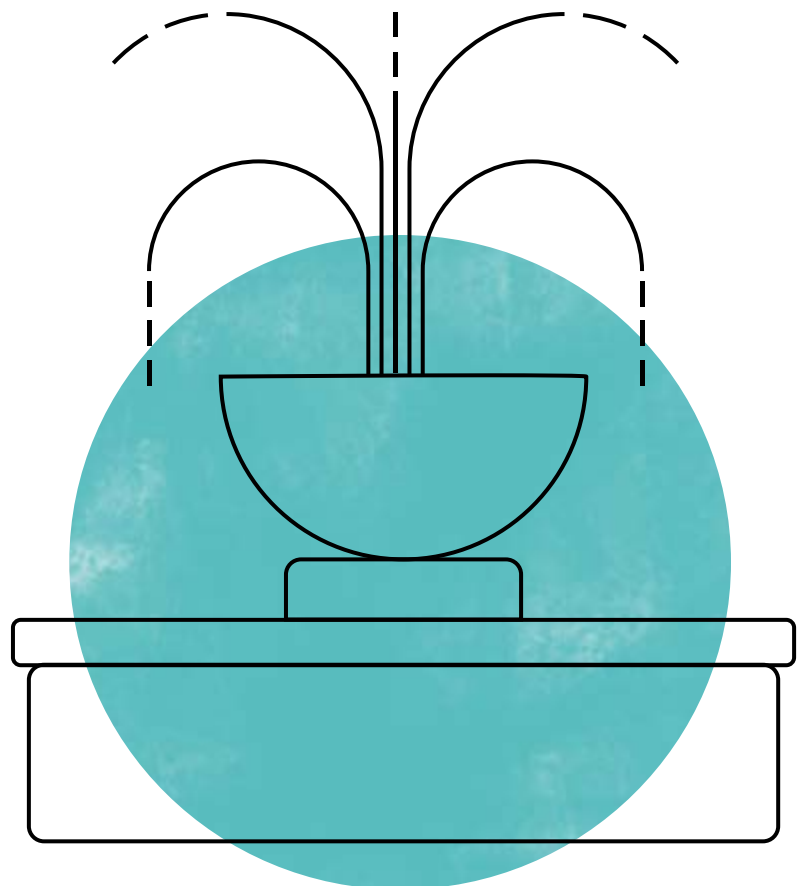
All the **public** schemes are **unfunded defined benefit** schemes, with the exception of NEST (see Section 2). It follows that the assets and liabilities cannot be segregated by employer; furthermore, the only mechanism for the Government to reduce any theoretical fund deficit is by changing employee and/or employer contributions (and by changing future benefits). Thus, the accounting for these schemes is simple.

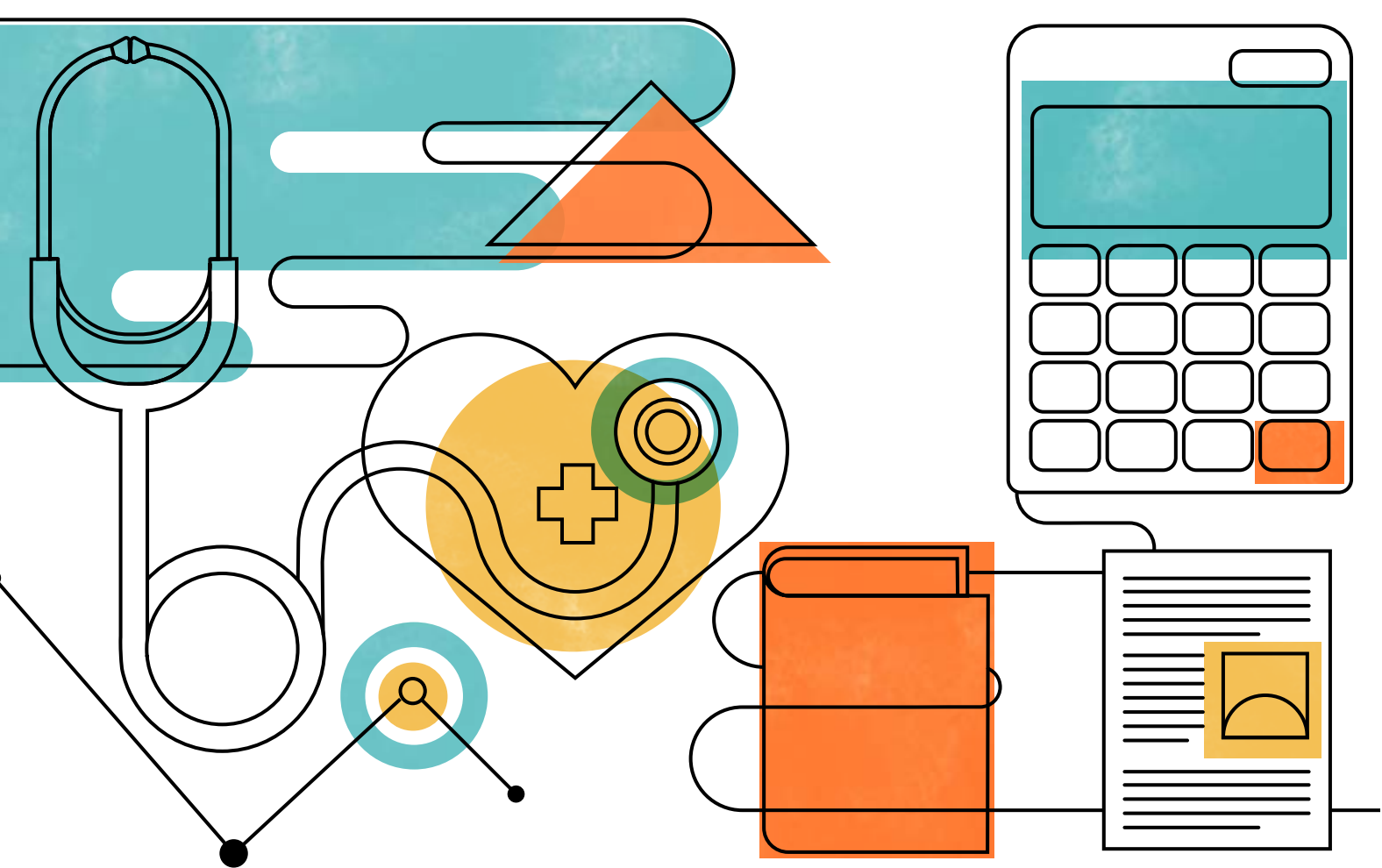
5.8 Private Pension Schemes in the HE Sector

The main private pension schemes to which some parts of the sector may contribute, and the staff groups that are members were set out in Section 2. The following table (overleaf) summarises how the accounting principles above define the accounting treatment adopted by the universities whose employees are members of those schemes.

LGPS schemes can generally segregate assets and liabilities by employer because historically they were often set up with separate sub-funds for workers in different sectors, e.g. schools and council offices. In these cases, there was generally less movement of workers between the different sectors than within those sectors.

Scheme	Accounting Treatment
Multi-employer Schemes	
Universities Superannuation Scheme (USS)	<p>Defined Benefit – where multi-employer schemes assets and liabilities cannot be segregated by employer</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due. plus the change in the liability for future deficit contributions.</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid plus the value of future contributions that the entity has agreed to make to fund any deficit in the scheme.</i></p>
University of Oxford Staff Pension Scheme (OSPS)	<p>Defined Benefit – where multi-employer schemes assets and liabilities cannot be segregated by employer</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due. plus the change in the liability for future deficit contributions.</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid plus the value of future contributions that the entity has agreed to make to fund any deficit in the scheme.</i></p>
Superannuation Arrangements for the University of London (SAUL)	<p>Defined Benefit – where multi-employer schemes assets and liabilities cannot be segregated by employer</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due. plus the change in the liability for future deficit contributions.</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid plus the value of future contributions that the entity has agreed to make to fund any deficit in the scheme.</i></p>
Local Government Pension Scheme (LGPS)	<p>Defined Benefit – where multi-employer schemes assets and liabilities can usually be segregated by employer</p> <p>Statement of financial position: <i>recognise a liability for the entity's total obligations under the plan net of the assets of that plan.</i></p> <p>Statement of comprehensive income: <i>recognise changes in that liability as the cost for the year.</i></p>
Other Schemes	
Self-administered pension schemes, often called self-administered trusts (SATs)	<p>Defined Benefit – where multi-employer schemes assets and liabilities can always (by definition) be segregated by employer</p> <p>Statement of financial position: <i>recognise a liability for the entity's total obligations under the plan net of the assets of that plan.</i></p> <p>Statement of comprehensive income: <i>recognise changes in that liability as the cost for the year.</i></p>
Money purchase schemes	<p>Defined Benefit</p> <p>Statement of comprehensive income: <i>recognise contributions when they are due.</i></p> <p>Statement of financial position: <i>include as liabilities any contributions due but not yet paid.</i></p>





06 Issues for Financial Reporting and Management

6.1 Introduction

There are two key issues for reporting and management of financial performance resulting from the accounting requirements relating to pensions.

- a. The extent to which results can vary from reporting period to reporting period.
- b. The extent to which the financial results reported in published financial statements vary from the financial targets set in the budgets prepared by management and approved by governors.

The extent to which different types of pension scheme contribute to these issues derives from the valuation of assets and liabilities of funded defined benefit schemes (discussed in Section 1 above) and the way in which liabilities are measured (discussed in Section 5 above). They are summarised in the following table:

Defined Contribution

There are no particular financial reporting and management issues arising from participation in a defined contribution pension plan.

Defined Benefit – if multi-employer scheme assets and liabilities **can** be segregated by employer

Changes in valuation of scheme assets.

Changes in liability assumptions – *longevity, salary increases whilst in work, pension increases whilst retired.*

Changes in discount rates applied to liabilities.

Defined Benefit – if multi-employer schemes assets and liabilities **cannot** be segregated by employer

Changes in deficit funding agreements between the employer and the scheme trustees (which reflect the factors set out in the previous segment of this table).

Changes in discount rates applied to liabilities.

For self-administered trusts, multi-employer **defined benefit schemes** where assets and liabilities can be segregated by employer, and **defined benefit schemes** where assets and liabilities cannot be segregated by employer and which are in deficit, the most significant changes are likely after the (usually) triennial actuarial valuations.

It is because of the scale of the liabilities and assets, which may have been accumulated over many decades and which we have seen may dwarf the assets and liabilities of the employer (Section 3.4 above), that relatively small changes in asset values and assumptions may result in very material impacts on the financial performance of the employer universities, as shown in their **statements of comprehensive income**.

Apart from employee and employer contributions to pension schemes, none of the other accounting requirements can be measured until after the end of the financial reporting period, when asset values, liabilities and discount rates will be known or can be derived. This makes budgeting for these items impossible.

The combination of materiality of impact and inability to budget has significant implications for managing and reporting financial performance, both externally, to regulators and other stakeholders, and internally to managers and governors.

The only way to deal with these issues is to concentrate and what can be measured and budgeted and to explain all significant changes.

6.2 What Gets Measured Where

Before considering what can be measured, it is important to understand the construction of the performance statement for universities, known as the *statement of comprehensive income*. Its content and format are prescribed by the FHE SORP described in Section 4.2; this is to aid comparability of financial reporting between different universities. It is set out in the following table:

Income	
Tuition fees and education contracts	XX
Funding body grants	XX
Research grants and contracts	XX
Other income	XX
Investment income	XX
Donations and endowments	XX
Total Income	XX
Expenditure	
Staff costs	XX
Fundamental restructuring costs	XX
Other operating expenses	XX
Depreciation	XX
Interest and other finance costs	XX
Total Expenditure	XX
Surplus/(deficit) before other gains/(losses)	
Gain/(loss) on disposal of fixed assets	XX
Gain/(loss) on investments	XX
Share of operating surplus/(loss) in joint venture	XX
Share of operating surplus/(loss) in associate	XX
Surplus/(deficit) before tax	XX
Taxation	XX
Surplus/(deficit) for the year	XX
Other Comprehensive Income	
Unrealised surplus on revaluation of land and buildings	XX
Actuarial gain/(loss) in respect of pension schemes	XX
Change in fair value of hedging financial instruments	XX
Total Comprehensive Income For the Year	XX

When discussing the financial performance of an entity, it does not matter whether the focus is on the surplus/(deficit) for the year or on total comprehensive income for the year; however, the focus should be consistent year on year. The discussion should cover all factors that have a material impact on the financial performance, and which are important to gain an understanding of the performance and the factors influencing that performance.

6.3 Concentrating on What can be Measured

Many businesses and universities will calculate a measure of the performance of their day to day activities and show how that is derived from the **surplus/(deficit)** for the year or the **total comprehensive income** for the year.

This can be illustrated by examples from two different universities relating to the financial year ended 31 July 2019. The first example commences with the **surplus/(deficit)** for the year and the second example starts with the **total comprehensive income** for the year.

Example 1 - The Open University Consolidated Financial Statements

	Year ended 31 July 2019 £ million	Year ended 31 July 2018 £ million
Deficit for the year	(112.1)	(17.9)
Restructuring and strategic change	14.3	27.7
USS deficit provision adjustments	111.1	(2.1)
Other operating and asset adjustments	(11.1)	(12.9)
Adjusted surplus/(deficit) from operating activities	2.2	(5.2)

Example 1 demonstrates the extent to which pension adjustments can fluctuate from year to year (£111.1m in 2018 compared to (£2.1m) in 2019) and can dwarf the underlying surplus/(deficit).

The basis for determining the USS deficit provision adjustments are set out in Section 5.3 above. They reflect the additional pension contributions required to eliminate the deficit in the scheme, in this case set as percentages of employees' salaries, discounted to account for the fact they are paid over several years. The contributions will reflect the assumptions made by the University for future salary growth and changes in employee numbers over the period for which the deficit contributions are payable.

The Open University's financial performance for the year is discussed in sections of the Strategic Report entitled "the Financial Review", "Pensions" and "Going Concern and Long-Term Sustainability". Excerpts from these sections are quoted below.

Financial Highlights and Results (Excerpt)

Like all Higher Educational Institutions that are members of the Universities Superannuation Scheme (USS), the 2018/19 financial results reflect the accounting impact of the latest applicable complete actuarial valuation of the USS, as at 31 March 2017. The 2017 revaluation identified an overall scheme deficit of £7.5 billion. The University is required to use a prescribed model to calculate its share of the accounting provision for the cost of the deficit recovery plan. A new actuarial valuation as at 31 March 2018 has been agreed after the balance sheet date and the resulting adjustment reducing this provision will be reflected in the University's Financial Statements for the year ended 31 July 2020.

Pensions (Excerpt)

2017 Actuarial Valuation

The disclosures in Note 25 in respect of USS refer to the latest completed full actuarial valuation, as at 31 March 2017. The funding level under the scheme-specific funding regime introduced by the Pensions Act was 89%. The scheme deficit was £7.5 billion, an increase of £2.2 billion since the last full valuation in 2014, although the funding level of 89% remained unchanged.

Following completion of the 2017 valuation, a revised deficit recovery plan was implemented with the aim of eliminating the deficit by 2034. The

plan increased member contributions to 8.8% and employer contributions to 19.5% from April 2019. Further increases were planned to be phased in during 2019/20, although the outcomes of the 2018 scheme valuation impact these changes (see below).

The changes to the deficit recovery plan have resulted in a significant increase in the liability recognised by the Group in respect of its commitment to the USS deficit recovery plan. At 31 July 2019 the liability is £167.8 million (31 July 2018, £56.7 million), shown in Note 20. The plan, along with the changes to scheme benefits, is expected to eliminate the deficit by 2034.

2018 Actuarial Valuation

The actuarial valuation as at 31 March 2018 was completed on 16 September 2019 - after the financial year end but before these financial statements were completed.

This valuation has resulted in amendment to the deficit recovery plan which will take effect during 2019/20 along with the appropriate accounting adjustments. The provision to fund the deficit is expected to reduce from £167.8 million at 31 July 2019 to approximately £99.0 million at 31 July 2020, although this will be subject to changes resulting from other factors such as discount rates and pensionable staff costs.

Member and employer contribution rates will change as a result of the amended plan as follows: from 1 October 2019 to 30 September 2021: 9.6% and 21.1% respectively, and from 1 October 2021 onwards: 11% and 23.7% respectively.

These disclosures demonstrate the materiality of the changes in the provision for pension deficit recovery contributions: (£2.1m) in 2017/18; £111.1m in 2018/19 and, potentially, some (£69m) in 2019/20.

The Open University is unique amongst UK higher education institutions in having all its staff in a single pension scheme, the Universities Superannuation Scheme.

Given the materiality of the pension provisions and annual movements in them, consideration should be given to their impact on the entity's long-term sustainability. Here is The Open University's discussion on the potential impact.

Going Concern and Long-Term Sustainability (Excerpt)

Cost of Pension Provision

The impact and timing of decisions relating to the 2017 and 2018 valuations of the Universities Superannuation Scheme are discussed on page 17. The increase in the scheme deficit provision as a result of the 2017 valuation has a significant adverse accounting effect on the statement of comprehensive income. Whilst it is anticipated that there will be a reduction in the scheme deficit on finalisation of the 2018 valuation, the University has resources available to mitigate wholly against the 2017 valuation, addressing any going concern issues. However, any significant increase of employer contributions over those anticipated within the 2018 valuation would pose future operational cost challenges.

Discussion of issues concerning the affordability of the future scheme in terms of cost to members and employers, and of the types of benefit available to members, is likely to continue for some time.

Example 2 - University of Oxford Consolidated Financial Statements

	Year ended 31 July 2019 £ million	Year ended 31 July 2018 £ million
Total Comprehensive Income	96.4	389.9
Pension provision movements	269.2	(47.8)
Gain on investments	(237.1)	(308.3)
Capital grants	(55.0)	(59.6)
Depreciation	145.2	145.5
Loan repayments	(2.7)	(2.5)
New endowments and donated heritage assets	(66.0)	(55.5)
Building sale and donation received	(19.0)	-
Restructuring cost	1.9	-
Tinbergen provision movements	(3.1)	1.5
Other income, eliminations and adjustments	(2.5)	69.6
Adjusted surplus for management accounting	127.3	132.8

Example 2 also demonstrates the materiality of the pension provision movements, which in this case reflects a number of different pension schemes for which different accounting requirements apply, and the extent to which pension adjustments can fluctuate from year to year. In this case these are related to **total comprehensive income** along with similarly significant adjustments pertinent to this University's operations.

The University of Oxford has more complex pension arrangements than The Open University. These are summarised in the 2019 Statement of Accounting Policies for Post-Employment Benefits (Pensions).

The three principal pension schemes for the University's staff are the Universities Superannuation Scheme (USS), the OUP Group Pension Scheme (OUP Group) and the University of Oxford Staff Pension Scheme (OSPS). The University also contributes on behalf of its employees to a number of other pension schemes including: Superannuation Arrangement of the University of London (SAUL), Medical Research Council Pension Scheme (MRCPS), overseas schemes and NHS Pension Scheme.

Looking at the underlying results discussed by both these universities, it is interesting to note these are similar in scale in the two financial years in question, as indicated below:

	Year ended 31 July 2019 £ million	Year ended 31 July 2018 £ million
The Open University		
Adjusted surplus/(deficit) from operating activities	2.2	(5.2)
University of Oxford		
Adjusted surplus for management accounting	127.3	132.8

This outcome ought not to be surprising as the economic and funding regime for these two years was relatively stable. The fluctuation of reported results is down to the materiality of the adjustments for pensions (for both universities) and other items (for the University of Oxford). As previously stated, the value of relatively small changes in liabilities built up over many decades and the assumptions necessary to convert those liabilities into a single figure can be material and significantly affect the results reported by an entity from one year to the next.

In order to be able to plan and manage its finances effectively, each university should budget and monitor performance at the “adjusted surplus” level. It should then explain the impact of the factors that determine the *surplus/(deficit)* for the year or the *total comprehensive income* for the year.

The challenge for universities’ finance functions is then to clearly explain the difference between the results and how the longer-term issues can be managed.

6.4 Managing the Long-Term Assets and Liabilities

In considering the management of pension schemes’ long-term assets and liabilities – and the resultant surpluses or deficits – it is important to be aware of the different, and often opposing, interests of the various parties:

- a. Pensioner members, the Pension Protection Fund (PPF) and the Pensions Regulator will all have a desire for scheme deficits to be eliminated as quickly as possible to reduce the chances of pensioners falling into the PPF.
- b. Employers, particularly those in the HE sector, where fees for UK and EU students (or teaching grants for students in Scotland) are often held level in cash terms for long periods (i.e. no real-terms increases to reflect inflation over those periods), will have a desire to minimise increases in their contributions to pension schemes in order to protect resources used for their business.
- c. Employees, and those representing them, will (or should) have a more nuanced position. They will want to protect the benefits for former employees who have retired and for those still working, maintain employee pension contributions at existing (or lower) levels, and retain other employee benefits and take-home pay. At the same time, they will recognise that employers need to balance budgets and consider the implications for job security and opportunity.
- d. The Government will have a desire to minimise assets held in tax sheltered pension scheme that are in surplus in order to protect the tax base – this was one of the reasons for the Government to remove, from 1997, the ability of tax payers to claim refunds of Advance Corporation Tax (ACT) paid on dividends.

This makes for complex negotiations between employers and employees (and their representatives) when pension schemes are in deficit.

When pension schemes have been in surplus there has been pressure to improve benefits, which happened regularly in the 1990s, or to tax surpluses (as in the removal of ACT refunds for pension schemes in 1997). The problem for pension scheme trustees and for employers is that, once granted, pension scheme benefits cannot be withdrawn from pensioners or from current employees in respect of past service: the decisions of the 1990s have therefore exacerbated the issues faced in the 2010s and 2020s.

For employers there is essentially the same trade-off as for individual members described in Section 1.6 above: having a desire to reduce the long-term pension liability versus being able to protect current expenditure (and services).

The excellent investment returns of the 1990s and early 2000s, and again in the 2010s, may encourage a "wait and see" attitude amongst some employers, something that concerns the Pensions Regulator.

Since the financial crisis of 2008, the return on government bonds, and by extension corporate bonds, has increased considerably the net present value of long-term liabilities. This is illustrated by the following, quite simple, example from Section 4.9 above:

A person owes £100 that will be paid in one year's time.

If current interest rates are 5% the present value of that liability is $£100/1.05$ or £95.23. If current interest rates fall to 2%, the present value of that liability is $£100/1.02$ or £98.04.

The example above gives a relatively small difference – although a small difference on liabilities of, say, £100 million is a significant sum. However, the impact is magnified for liabilities that reflect payments over many years, e.g. pension payments that could commence in several decades' time and then last for several decades. This is because of the effect of compound interest.

There are those who argue that these markets conditions are an aberration and that markets (both equity and debt) will move closer to historic norms; however, beware one of the famous quotations of the eminent economist (and sometime bursar of King's College, Cambridge) John Maynard Keynes: "The market can stay irrational longer than you can stay solvent".

The key to managing the long-term liabilities is to pay contributions, shared between employers and employees in accordance with the rules of the scheme, that meet the underlying annual cost of the pension promise plus additional contributions to meet the changes in the financial value of the liabilities. The sums and the period over which they are paid are a matter of negotiation between the trustees of the pension scheme and the employer or, in the case of *multi-employer schemes*, the employers' representatives.

The Pensions Regulator requires pension schemes in deficit to agree deficit recovery plans between the trustees of the schemes and the participating employers. The time over which these contributions can be spread depends on the underlying financial strength of the employers (otherwise known as the "covenant"): the stronger the covenant, the longer the plan can take.

Those universities that are members of funded schemes can take solace from the fact that universities are some of the longest-lived corporate entities that have ever existed (some are nearly a thousand years old, compared with most commercial companies having a life of less than a century). This means that long-term deficit recovery plans are more acceptable – but even these plans generally last for barely more than a decade, for reasons that include the requirements of the Pensions Regulator.

For those universities in unfunded Government schemes, the issues are different. There are no large deficits on their balance sheets; however, the Government can change pension contributions at short notice, e.g. in 2019 for the Teachers' Pension Scheme where contributions increased by around a third – causing multi-million pound holes in the budgets of post-1992 universities. The impact of this change was felt immediately in cash terms, unlike changes in deficit recovery liabilities or actuarial deficits where the cash is paid over the lifetime of the agreed deficit recovery period or through changes to contributions rates.

In the first half of 2020 the UK was affected by the pandemic Coronavirus Covid-19. This resulted in stock market falls of up to a third and recoveries of up to a tenth, the issuance of massive amounts of Government debt, an almost complete freezing of many parts of the economy and a vastly greater morbidity for older people infected with the virus. All of these will have an impact on the economic returns from pension assets and on the level of scheme liabilities. The extent of these is unknown, for, as Nils Bohr, Nobel Laureate in Physics, said, "prediction is very difficult, especially if it's about the future".

There will many judgements that have to be taken by pension scheme trustees, regulators, employers, and employees (and their representatives) in order to deliver employers' pension promises; some, in hindsight, will prove to be correct and others wrong. Sadly, "worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally" — John Maynard Keynes again. Perhaps, we should wish for less convention!

The existence of funded pension schemes has a significant impact on the financial position and management of employing entities: this is why there has been a move from **defined benefit** pension schemes to **defined contribution** schemes. Whilst this reduces the risks faced by employers it moves the same risks onto the individual employees.

Sadly, there are no easy answers to funding a retirement income over a retirement of uncertain length.

6.5 A Brief Note About Comparability

Section 7 will illustrate the complexity of accounting for different pension arrangements and the differences between accounting for schemes with similar pension promises. This makes comparing the financial performance of different entities difficult – and reinforces the need to discuss the results both before and after taking into account the costs of different pension schemes.

But why? It is simply the fact that different types of pension scheme have different economic impacts on their sponsoring employers:

- for public **defined benefit** schemes, it is the taxpayer that stands behind the pension promise;

- for private **defined benefit** schemes, it is the sponsoring employer that stands behind the pension promise, although if the employer goes out of business it is the Pension Protection Fund, which is financed by a levy on all defined benefit pension schemes, that will take on the liability.

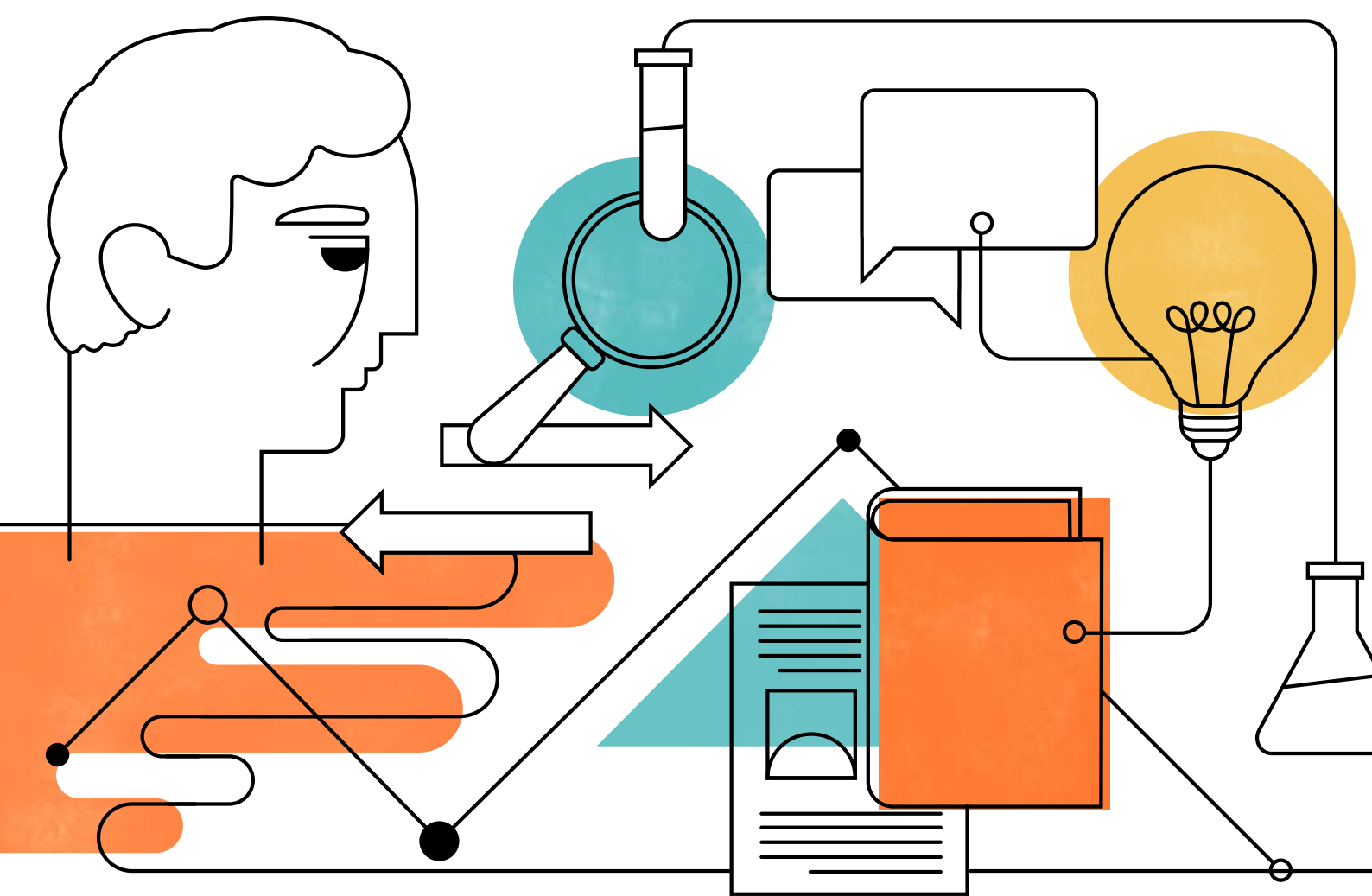
In these two instances the economic nature of the pension promise is quite different – this is reflected in the different accounting requirements.

The anomaly is the situation where a multi-employer private **defined benefit** pension scheme cannot segregate the assets of that scheme between sponsoring employers. In this case, the requirement to provide for any deficit recovery plan contributions brings the accounting treatment as near as possible to those private **defined benefit** pension schemes that can segregate assets and liabilities by sponsoring employer.

It follows that an entity, university or otherwise, that has its staff, or some of its staff, in a public **defined benefit** pension scheme will be in an inherently stronger financial position than one that has its staff, or some of its staff, in a private **defined benefit** pension scheme – particularly when the private scheme is in deficit. This is despite the fact that the pension promises to the employees may be similar in both cases.

This matter of economic substance may be taken into account by regulators and funders and so will need to be managed by the management and governors of the entities concerned.





07 A More Detailed Analysis of Accounting for Pensions

The purpose of this section is to provide an analysis and explanation of the more detailed requirements for accounting for pensions. This section is divided into three major sub-sections, dealing with the three types of accounting for pension schemes in the sector that were introduced in Section 5.4 above; they are supported by four examples from disclosures in the 2019 financial statements of several universities. The sub-sections and examples are listed in the order of increasing complexity.

A Defined Contribution Schemes

7A.1 Basic Accounting Requirements

- As set out Section 5.4, the basic accounting requirements are, in the statement of comprehensive income, to recognise contributions when they are due and, in the statement of financial position, to include as liabilities any contributions due but not yet paid.

7A.2 Accounting Policies

The description of the accounting policies relating to defined contribution schemes are illustrated by the example from the University of Birmingham's 2019 financial statements:

Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which the University pays fixed contributions into a separate entity and has no legal or constructive obligation to pay further amounts.

Obligations for contributions to defined contribution pension plans are recognised as an expense in the income statement in the year during which services are rendered by employees.

7A.3 Statement of Comprehensive Income (SOCl)

There are no specific entries in the SOCI – the pension costs are included within "staff costs" in expenditure.

7A.4 Statement of Financial Position (SFP)

There are no specific entries in the SFP – any pension contributions unpaid at the end of the financial year will be included within creditors.

7A.5 Notes to the Accounts – Staff Costs

For defined contribution schemes, the costs will appear with a line for "pension costs" within the note setting out the staff costs. Generally, there will be three categories disclosed: salaries, social security costs and other pension costs.

Where individual universities have staff in a multitude of schemes, the pension costs may cover several schemes and, depending on their materiality, some may be identified separately. This is the disclosure in the University of Birmingham's 2019 financial statements (without the relevant figures):

Salaries	xxx
Social security costs	xxx
Movement on USS pension provision	xxx
Other pension costs	xxx
Total	xxx

The issues surrounding the disclosures relating to the Universities Superannuation Scheme (USS) are dealt with in section B11.

7A.6 Notes to the Accounts – Pension Schemes

The note on pensions will start by listing the principal pension schemes and then go on to make the relevant disclosures for each one. Here is the list in the University of Birmingham's 2019 financial statements:

The four principal pension schemes for the University's staff are the Universities Superannuation Scheme (USS); the University Birmingham Pension and Assurance Scheme (BPAS); the Group Personal Pension Scheme (GPPS), and the NHS Pension Scheme (NHSPS).

The defined contribution scheme in this instance is the Group Personal Pension Scheme (GPPS). The relevant disclosure is this:

Group Personal Pension Scheme (GPPS)

The University introduced from 1 April 2008 a new 'defined contribution' pension scheme for its support staff who are not members of BPAS. The scheme will enable staff to build a fund that can be used to provide a pension on retirement in addition to the normal state pension. The University contributes 10% in addition to an agreed percentage paid by the individual. The scheme operates as a Group Personal Pension Scheme and is run on the University's behalf by Friends Life. The value of employer contributions for the year ending 31 July 2019 was £3.7m (2017/18: £3.3m).

The disclosures in respect of the defined contribution scheme are very simple: the names of the scheme; which staff are eligible for membership and from when; the employer's contribution rate; how it operates; and, the value of the employer's contributions.

B Defined Benefit Schemes with no Segregation of Assets and Liabilities

Although these schemes form a single class, there are two separate categories:

- I. those schemes, always public schemes, where the assets are notional and the liabilities cannot be segregated by employer and so cannot have a deficit; and,
- II. those schemes, always private schemes, which are funded and so have their own assets but where the assets and liabilities cannot be segregated by employer and which may have either a surplus or a deficit.

These two categories can be illustrated by the Teachers' Pension Scheme (TPS) and the Universities Superannuation Scheme (USS) respectively. The disclosures are discussed for a representative employer of each type of scheme in turn.

Bi Teachers' Pension Scheme (TPS)

7Bi.1 Basic Accounting Requirements

As set out Section 5.4, the basic accounting requirements are, in the statement of comprehensive income, to recognise contributions when they are due and, in the statement of financial position, to include as liabilities any contributions due but not yet paid. This is the same as for defined contribution schemes.

7Bi.2 Accounting Policies

The description of the accounting policies relating to the TPS are illustrated by the example from the University of Derby's 2019 financial statements:

In this instance, the reference to the "income and expenditure account" can be read as the "statement of comprehensive income": many organisations currently use the two terms interchangeably.



Retirement benefits

Retirement benefits to employees of the University are provided by the Teachers' Pension Scheme (TPS) and the Local Government Pension Scheme (LGPS).

It is not possible to separately identify the assets and liabilities of the TPS scheme which are attributable to the University due to the mutual nature of the scheme. Therefore, the University accounts for the scheme as if it were a defined contribution scheme. Contributions to the TPS scheme are charged to the income and expenditure account so as to spread the cost of pensions over employees' working lives with the University in such a way that the pension cost is a substantially level percentage of current and future pensionable payroll. The contributions are determined by qualified actuaries on the basis of quinquennial valuations using a prospective benefit method.

7Bi.3 Statement of Comprehensive Income (SOCl)

There are no specific entries relating to the TPS in the SOCl – the pension costs are included within "staff costs" in expenditure.

7Bi.4 Statement of Financial Position (SFP)

There are no specific entries relating to the TPS in the SFP – any pension contributions unpaid at the end of the financial year will be included within creditors.

7Bi.5 Notes to the Accounts – Staff Costs

For defined contribution schemes, the costs will appear with a line for "pension costs" within the note setting out the staff costs. Generally, there will be three categories disclosed: salaries, social security costs and other pension costs.

Where individual universities have a staff in a multitude of schemes, the pension costs may cover several schemes and, depending on their materiality, some may be identified separately. This is the disclosure in the University of Derby's 2019 financial statements (without the relevant figures):

Salaries	xxx
Social security costs	xxx
Other pension costs	xxx
Increase in holiday pay accrual	xxx
Subtotal	xxx
Restructuring costs including pensions	xxx
Total	xxx

Comparing this example with that of the University of Birmingham in Section 7.A5 above, demonstrates that, along with the standard headings, each individual university will provide disclosures of figures that relate to its own particular circumstances.

7Bi.6 Notes to the Accounts – Pension Schemes

The note on pensions will start by listing the principal pension schemes and then go on to make the relevant disclosures for each one. Here is the list and subsequent TPS disclosure in the University of Derby's 2019 financial statements:

Pensions and similar obligations - Consolidated and University

The University employees belong to two principal pension schemes, the Teachers' Pension Scheme and the Local Government Pension Scheme. The total pension cost for the year was 19,671,035 (2018: 18,354,618).

Teachers' Pension Scheme (TPS)

The Teachers' Pension Scheme (TPS) is a statutory, contributory, defined benefit scheme, governed by the Teachers' Pensions Regulations 2010, and, from 1 April 2014, by the Teachers' Pension Scheme Regulations 2014. These regulations apply to teachers in schools and other educational establishments, including academies, in England and Wales that are maintained by local authorities. In addition, teachers in many independent and voluntary-aided schools and teachers and lecturers in some establishments of further and higher education may be eligible for membership. Membership is automatic for full-time teachers and lecturers and, from 1 January 2007, automatic too for teachers and lecturers in

part-time employment following appointment or a change of contract. Teachers and lecturers are able to opt out of the TPS. Regulations giving effect to a reformed Teachers' Pension Scheme came into force on 1 April 2014 and the reformed scheme commenced on 1 April 2015. The pension costs paid to TPS in the year amounted to £6,012,189.

The Teachers' Pension Budgeting and Valuation Account

Although members may be employed by various bodies, their retirement and other pension benefits are set out in regulations made under the Superannuation Act 1972 and are paid by public funds provided by Parliament. The TPS is an unfunded scheme and members contribute on a 'pay as you go' basis – these contributions, along with those made by employers, are credited to the Exchequer under arrangements governed by the above Act. The Teachers' Pensions Regulations 2010 require an annual account, the Teachers' Pension Budgeting and Valuation Account, to be kept of receipts and expenditure (including the cost of pension increases). From 1 April 2001 the Account has been credited with a real rate of return, which is equivalent to assuming that the balance in the Account is invested in notional investments that produce that real rate of return.

Valuation of the Teachers' Pension Scheme

The latest actuarial review of the TPS was carried out as at 31 March 2016 and in accordance with The Public Service Pensions (Valuations and Employer Cost Cap) Directions 2014. The key results of the valuation are:

- employer contribution rates were set at 16.4% of pensionable pay, increasing to 23.6% from 1 September 2019;
- total scheme liabilities for service to the effective date of £218.1 billion, and notional assets of £196.1 billion, giving a notional past service deficit of £22.0 billion;
- an employer cost cap of 10.9% of pensionable pay.

A full copy of the valuation report and supporting documentation can be found on the Teachers' Pension Scheme website at the following location: <https://www.teacherspensions.co.uk/-/media/Documents/Member/Documents/News-items/Teachers-Pension-Scheme-Actuarial-valuation-2016.ashx>

FRS 102 section 28

Under the definitions set out in Financial Reporting Standard (FRS 102) section 28 Retirement Benefits, the TPS is a multi-employer pension scheme. The University is unable to identify its share of the underlying assets and liabilities of the scheme. Accordingly, the University has taken advantage of the exemption in FRS102 and has accounted for its contributions to the scheme as if it were a defined-contribution scheme. The University has set out above the information available on the scheme and the implications for the University in terms of the anticipated contribution rate.

The disclosures in respect of the TPS are still relatively simple but there is more detail, particularly in respect of the regular actuarial reviews of this scheme. The disclosures are therefore more akin to those provided in respect of *private schemes*, e.g. USS (as discussed in the next section).

Bii Universities Superannuation Scheme (USS)

7Bii.1 Basic Accounting Requirements

As set out Section 5.4, the basic accounting requirements are:

- in the statement of comprehensive income, to recognise contributions when they are due **plus** the changes in the liability for future deficit contributions; and,
- in the statement of financial position, to include as liabilities any contributions due but not yet paid **plus** the value of future contributions that the entity has agreed to make to fund any deficit in the scheme.

The first element of each requirement is the same as for defined contribution schemes. The second is an additional element to take into account the contributions necessary to fund a deficit in the scheme.

USS has, over the past four decades, moved from being in deficit to being in surplus and then in deficit again. These changes are due to many factors, including: changing returns on assets; increases in the longevity of members; government policy changing in respect of the tax credits on dividends held by pensions schemes; past decisions to increase benefits when the scheme was in surplus; and, the general decline in interest rates that are used to discount future liabilities.

7Bii.2 Accounting Policies

The description of the accounting policies relating to the USS are illustrated by the example from The Open University's 2019 financial statements:

Defined benefit scheme (USS)

The assets of the scheme are held in a separate trustee-administered fund. Because of the mutual nature of the scheme, the scheme's assets are not hypothecated to individual institutions and a scheme-wide contribution rate is set. The University is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities in full in USS on a consistent and reasonable basis and therefore, as required by FRS 102, the University accounts for the scheme as if it were a defined contribution scheme. The University also makes a provision for its estimated share of any deficit in the USS; changes in the provision are reflected in the income and expenditure account. As a result, the amount charged to the income and expenditure account represents the contributions payable to the scheme in respect of the accounting period along with changes in the level of the deficit provision.

The costs of the USS deficit recovery plan have been estimated based on a model devised by the USS and the British Universities Finance Directors Group (BUFDG). The model uses the additional costs included in the deficit recovery plan and discounts based on corporate bond levels having a maturity similar to the length of the recovery plan (15 years as at 31 July 2019). The scheme actuary reviews the funding of the USS every year and undertakes a formal actuarial valuation every three years, at which time the deficit recovery plan may be amended.

7Bii.3 Statement of Comprehensive Income (SOCl)

There are no specific entries relating to the USS in the SOCl – the pension costs are included within "staff costs" in expenditure.

7BII.4 Statement of Financial Position (SFP)

There are no specific entries relating to the USS in the SFP – any pension contributions unpaid at the end of the financial year will be included within creditors and the liability for future deficit contributions within provisions; it is the latter that may often be material and can change materially between financial years (see Section 7BII.6 below).

7BII.5 Notes to the Accounts – Staff Costs

For defined contribution schemes, the costs will appear with a line for “pension costs” within the note setting out the staff costs. Generally, there will be three categories disclosed: salaries, social security costs and other pension costs.

Where individual universities have a staff in a multitude of schemes, the pension costs may cover several schemes and, depending on their materiality, some may be identified separately. This is the disclosure in The Open University’s 2019 financial statements (without the relevant figures):

Salaries	xxx
Social security costs	xxx
Other pension costs	xxx
Total	xxx

Comparing this example with that of the University of Birmingham in Section 7A.5 above and the University of Derby in Section 7BI.5 above, again demonstrates that each individual university will provide disclosures of figures that relate to its own particular circumstances.

7BII.6 Notes to the Accounts – Provisions for Liabilities

As indicated above (see Section 7BII.4 above), it is the provision for the deficit recovery plan that is likely to be material and to move materially between financial years. This is the disclosure in The Open University’s 2019 financial statements in respect of the consolidated obligation to fund the USS deficit (it is part of Note 20 “Provisions for Liabilities” and the elements quoted relate only to the pension provision):

	£m
At 1 August 2018	56.7
Increase in provision	112.8
Unwind of finance charge	1.2
Utilised in year	(2.9)
At 31 July 2019	167.8

The obligation to fund the past deficit on the Universities Superannuation Scheme (USS) arises from the contractual obligation with USS to deficit payments in accordance with the deficit recovery plan. The provision has been calculated by estimating future employer pension payments and applying the deficit recovery contributions outlined in the USS deficit recovery plan published in February 2019. The weighted average discount factor that has been applied over the remainder of the deficit recovery plan is 1.58% (31 July 2018, 2.16%).

The adoption of the new deficit recovery plan following the 2017 actuarial valuation has given rise to a significant increase in the Group deficit provision which has increased from £56.7 million to £167.8 million. More details on the 2017 actuarial valuation are set out in Note 25.

Since the year end, following the completion of the 2018 actuarial valuation, a new deficit recovery plan has been agreed of which more detail is given in Note 25. As at 31 July 2019 using a discount factor of 1.38% reflecting the shorter period of the deficit recovery plan and with other assumptions used to calculate the provision unchanged, this would have resulted in a revised provision of £99.0 million, a decrease of £68.8 million from the current year end provision.

The table of data has five elements:

- the balance at the end of the previous financial year, in this case £56.7m at 1 August 2018;
- the increase in the provision for the year, in this case £112.8m – virtually double the balance at the end of the previous financial year for the reasons set out in the first two paragraphs of text following the table, which is discussed further below;

- the 'unwind' of the finance charge, in this case £1.2m, which is discussed further below;
- the amount of the provision utilised in the year, in this case (£2.9m), which is also discussed further below; and,
- the balance at the end of the current financial year, in this case £167.8m.

The very large increase in the provision for the year is down to two factors discussed in the text: the establishment of a new deficit recovery plan (in this case agreed in February 2019, half way through the University's financial year) and the change in the discount rate applied over the period of the new deficit recovery plan, 1.58% compared to 2.16% (the lower the discount rate the higher the calculated net present value of the liability for the payments due over the deficit recovery period).

The 'unwind' of the finance charge results from the fact that the liability calculated at each year end is discounted to calculate the net present value of the deficit recovery payments due: the passing of one financial year means that one year's worth of discount has been used up, with a consequent increase in the liability.

The amount of the provision utilised in the year is the element of the deficit recovery payments due at the end of the previous year that relate to the service of the employees in the current year. The decrease in this liability is matched by the cost of the employees' pension for the current financial year and which is reflected in the note on staff costs (see Section 7BII.5 above).

The text following the table explains the basis on which the provision has been calculated – in this example this is set out the first two paragraphs of the text quoted.

The third text paragraph quoted relates to conditions that arose after the end of the financial year, and which should not be taken into account when preparing this year's financial statements, but which will have a material impact on the following year's financial statements and so should, in accordance with FRS102 Section 32, be disclosed.

In this case, the third text paragraph provides advanced notification of a reversal of a significant proportion of the increase in the provision included in this year's financial statements that will feature in the following year's financial statements: a sum of £68.8 million.

The potential for significant fluctuations from one year to the next is why the discussion of the entity's financial performance in the Strategic Report is so important in obtaining a full understanding of the financial position of the university and the impact of its pension obligations to present and former staff. The movements are so large because they relate to obligations built up over many years/decades and which may not be settled for many years/decades in the future: as discussed previously, small variations in assumptions can result in large changes in the aggregate liabilities.

7Bii.7 Notes to the Accounts – Pension Schemes

The note on pensions will start by listing the principal pension schemes. Here is the list in The Open University's 2019 financial statements:

Pension Schemes

The University participates in the Universities Superannuation Scheme (USS), a defined benefit scheme which was contracted out of the State Second Pension (S2P) up to 5 April 2016. The assets of the scheme are held in a separate fund administered by the trustee, Universities Superannuation Scheme Limited. A small number of employees are members of defined contribution schemes.

The pensions notes will then go on to make the relevant disclosures for each one of the pension schemes. Here is the disclosure for USS in The Open University's 2019 financial statements:

Defined Benefit Scheme

The University participates in the Universities Superannuation Scheme (USS), a defined benefit scheme which is externally funded. The assets of the scheme are held in a separate fund administered by the trustee, Universities Superannuation Scheme Limited. The appointment of directors to the board of the trustee is determined by the Company's Articles of Association. Four of the directors are appointed by Universities UK; three are appointed by the University and College Union, of whom at least one must be a USS pensioner member; and a minimum of three and a maximum of five are independent directors appointed by the board.

Under the scheme trust deed and rules, the employer contribution rate is determined by the trustee, acting on actuarial advice.

The University is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis and therefore, as required by FRS 102, accounts for the scheme as if it were a defined contribution scheme. As a result, the amount charged to the expenditure account represents the contributions payable to the scheme in respect of the accounting period along with the adjustment for the provision for the scheme deficit as discussed below.

The trustee's role is to set risk and return parameters that reflect the strength of the sponsoring employers and the nature of the scheme's liabilities. These parameters are informed by advice from its internal investment team, its investment consultant and the scheme actuary, as well as an independent assessment of the support available from the sponsoring employers. The trustee remains confident that it can continue to take a long-term view of scheme funding, backed as it is by a robust Higher Education sector.

The fund is invested in a wide range of asset classes, both publicly traded (including equities and fixed income) and private (including private equity, infrastructure, property and timberland). A diversified portfolio helps to spread investment risk across different asset classes and boost the level of confidence in maintaining sufficient investment returns from the funds as a whole.

These disclosures for USS are still relatively simple, but there is more detail relating to the governance and investment of the scheme, along with the basis of accounting (following on from the disclosures in the accounting policies set out in Section 7BII.2 above).

The Open University's disclosures then include information akin to those provided in respect of **private schemes**, where the assets and liabilities can be assigned with reasonable accuracy to individual employers (see Section 7C on the next page):



USS triennial actuarial valuation

The latest triennial actuarial valuation that is included in the Statement of Financial Position (page 52) and in Note 20 and this Note reports on the scheme as at 31 March 2017. This is the fourth valuation for USS under the new scheme-specific funding regime introduced by the Pensions Act 2004, which requires schemes to adopt a statutory funding objective, which is to have sufficient and appropriate assets to cover their technical provisions. The value of the assets of the scheme at 31 March 2017 was £60.0 billion and the value of the scheme's technical provisions was £67.5 billion indicating a deficit of £7.5 billion and a funding level of 89%.

The level of the scheme deficit has led to changes in the deficit recovery plan, and this in turn effects the provision shown in the Financial Statements.

	2014 valuation	2017 Valuation
Entire USS Scheme		
Total Assets	£41.6 billion	£60.0 billion
Total Liabilities	£46.9 billion	£67.5 billion
Scheme Deficit	£5.3 billion	£7.5 billion
Funding Level	89%	89%
Open University Group		
Provision	£56.7 million	£167.8 million

The Open University's share of the deficit has been modelled based on additional contribution rates along with an estimate of future staff costs, and a discount factor based on high-quality corporate bonds. The discount factor used to calculate the provision at 31 July 2019 was 1.58% (31 July 2018, 2.16%), and the total provision at 31 July 2019 was £167.8 million (31 July 2018, £56.7 million). The provision for the deficit is shown in Note 20.

USS is a "last man standing" scheme so that in the event of the insolvency of any of the participating employers in USS, the amount of any pension funding shortfall (which cannot otherwise be recovered) in respect of that employer will be spread across the remaining participant employers and reflected in the next actuarial valuation of the scheme.

The 2017 triennial valuation was carried out using the projected unit method. The assumptions which have the most significant effect on the result of the valuation are ... in the next [section].

Assumptions used in the triennial valuation

Valuation rate of interest

Years 1-10: CPI – 0.53% reducing linearly to CPI – 1.32%

Years 11-20: CPI + 2.56% reducing linearly to CPI + 1.7% by year 21

Years 21 +: CPI + 1.7%

Pension increases

Term dependent rates in line with the difference between the Fixed Interest and Index Linked yield curves, less 1.3% p.a.

Life expectancy at age 65 (currently aged 65)

Male: 24.6 years Female: 26.1 years

Life expectancy at age 65 (currently aged 45)

Male: 26.6 years Female: 27.9 years

Employer and Employee contributions

As part of the 2017 valuation, the trustees determined, after consultation with the employers, a recovery plan to pay off the shortfall by 30 June 2034. Following the completion of the 2018 valuation the deficit recovery plan has been amended. The additional funding required to fund both the deficit and the ongoing future costs are collected through increased employer and employee contributions.

The contributions following the 2017 valuation are as follows:

Period	Employers	Employees
To 31 March 2019	18%	8%
1 April 2019 to 30 September 2019	19.5%	8.8%
1 October 2019 to 31 March 2020	22.5%	10.4%
1 April 2020 onwards	24.2%	11.4%

The total pension cost for the University was £145.7 million (year ended 31 July 2018, £29.6 million). This includes £3.2 million outstanding contributions as at 31 July 2019 (year ended 31 July 2018, £2.8 million). The total pension cost is after a £108.1 million debit related to adjustments to the USS deficit provision (year ended 31 July 2018, a credit of £3.2 million).

2018 Valuation (not included in the Financial Statements)

A further full valuation was completed on 16 September 2019, which reported the scheme as at 31 March 2018. This showed assets of £63.7 billion, technical provisions of £67.3 billion and a scheme deficit of £3.6 billion and a funding level of 95%. This valuation is not reflected in these financial statements as it was completed after the end of the financial year.

As at 31 July 2019, using a discount factor of 1.38%, reflecting the shorter period of the deficit recovery plan, but with other assumptions used to calculate the provision unchanged, this results in a revised provision of £99.0 million, a decrease of £68.8 million from the reported provision.

The contributions following the 2018 valuation are as follows:

Period	Employers	Employees
1 October 2019 to 30 September 2021	21.1%	9.6%
1 October 2021 onwards	23.7%	11.0%

The disclosures above provide a good summary of the key factors affecting the amount of the provision for USS deficit recovery contributions. These come from two sources:

- underlying changes in the net liability itself; and,
- changes in the way that liability is measured for accounting purposes.

The reason for the very large fluctuations in the net deficit is down to the difference between two very large numbers: the value of the assets built up over some 40 years (whose market value may sometimes change by a third over as short a time a month or two) and the value of the liabilities built up over that same period.

The provision for deficit recovery contributions is also affected by changes in the discount rate as a result of fluctuations in financial markets: the lower the discount rate, which is determined by yields on corporate bonds, the higher the net present value of the liability.

The large movements in the pension provision, and hence in the reported results because of these changes in the value of pension liabilities, is why the discussion of the entity's underlying results in the Strategic Report is so important: see the discussion of The Open University's 2019 results in Section 6.3 above.

C Defined Benefit Schemes with Segregation of Assets and Liabilities

Universities with *Defined Benefit* schemes that have assets and liabilities segregated by employer include both self-administered trusts, multi-employer trusts and Local Government Pension Schemes. In all cases the accounting requirements are the same and so a single example suffices.

The example shown below is from the University of Derby's financial statements for the year ended 31 July 2019.

7C.1 Basic Accounting Requirements

As set out in Section 5.4, the basic accounting requirements are, in the statements of financial position, to recognise a liability for the university's total obligations under the pension plan net of the assets of that plan and, in the statement of comprehensive income to recognise the changes in that liability as the cost for the year.

It is worth remembering at this point that accounting standards are based on economic substance rather than legal form. The legal form in this instance is that the assets and liabilities of the pension plan are those of the trustees of that plan and not that of the sponsoring employer. However, the economic substance is that the employer has, over time, promised the pension benefits to current and former employees and made financial contributions (along with those of the employees) towards the lifetime cost of those promises. Thus the economic substance is that the liability for the promises are those of the employer, as are the assets used to offset that liability.

7C.2 Accounting Policies

The description of the accounting policies relating to defined benefit schemes where the assets and liabilities of the scheme can be segregated by employer are illustrated here:

The University's share of assets and liabilities within the LGPS scheme can be separately identified and therefore the LGPS scheme is accounted as a defined benefit scheme, which is externally funded. The assets of the LGPS are measured using closing market values. LGPS liabilities are measured using the projected unit method and discounted at the current rate of return on a high quality corporate bond of equivalent term and currency to the liability. The increase in the present value of the liabilities of the scheme expected to arise from employee service in the period is charged to the operating surplus. The expected return on the scheme's assets and the increase during the period in the present value of the scheme's liabilities, arising from the passage of time, are included in pension finance costs. Actuarial gains and losses are recognised in the statement of total recognised gains and losses are recognised in other comprehensive income.

This disclosure has several important elements:

- confirmation that "the university's share of assets within the (in this case) LGPS can be separately identified and therefore the LGPS scheme is accounted as a defined benefit scheme" – this is the economic substance;
- confirmation that the scheme is "externally funded" – an important protection for the members of the scheme, so that the assets of the scheme are held separately from the assets of the employer;
- a statement that the "assets of the LGPS are measured using closing market values" – the normal basis for measuring financial assets;
- a statement that the "LGPS liabilities are measured using the projected unit method" – the basis required by FRS102 and which ensures that each individual liability is measured separately;

- a statement that the liabilities are “discounted at the current rate of return on a high quality corporate bond of equivalent term and currency to the liability” – again, the basis required by FRS102 and which allows many thousands of individual liabilities stretching over many different time periods to be aggregated into a single measure;
- a statement that “the increase in the present value of the liabilities of the scheme expected to arise from employee service in the period is charged to the operating surplus” – this is to reflect the underlying cost of the pension promise that has been made to employees in that year as a result of their service during the year;
- a statement that “the expected return on the scheme’s assets and the increase during the period in the present value of the scheme’s liabilities, arising from the passage of time, are included in pension finance costs” – again, this reflects the economic substance of the employer’s promise in that the return on the assets held by the scheme effectively reduce the net cost of the scheme and, were those assets to have been held by the employer, the return would have been a financial return, and, similarly, the change in the net present value of the liabilities arising from the passage of time is effectively a change in the cost of “borrowing” the liability from the pension plan; and, finally,
- a statement that “actuarial gains and losses are recognised in the statement of total recognised gains, and losses are recognised in other comprehensive income” – this, once more, is an economic substance issue as changes in longevity, for example, are not purely a cost of operating during the reporting period but rather relate to the past service of current and past employees and future service of current employees.

As we have seen in previous examples for other types of pension plan, these figures can be exceptionally large as they relate to liabilities that have built up over many years.

7C.3 Statement of Comprehensive Income (SOI)

Elements of the pension cost will be “staff costs” and “interest and other finance costs” within the “expenditure” heading and are disclosed within the Notes to the Accounts.

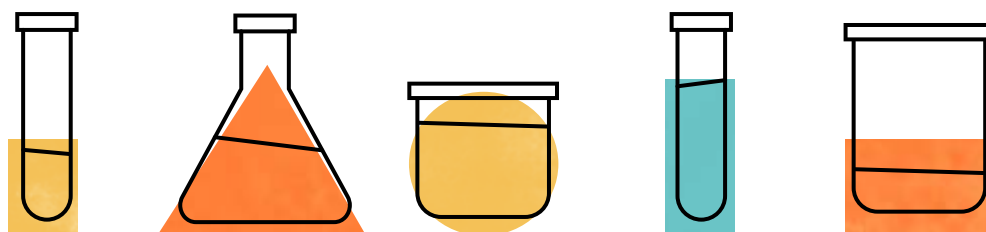
As indicated above (and illustrated in the other examples quoted), actuarial gains and losses can be material – as shown by the following edited extract from the University of Derby’s 2019 financial statements.

	Year ended 31 July 2019 £000	Year ended 31 July 2018 £000
Total income	192,453	178,344
Total expenditure	194,232	179,413
Deficit before other gains (losses)	(1,779)	(1,069)
(Loss)/gain on investments	(559)	1,096
Gain on investment properties	1,562	-
Profit on disposal of fixed assets	3,934	1,107
Surplus for the year	3,158	1,134
(Unrealised surplus)/(deficit) on revaluation of land and buildings	52,527	(10,797)
Actuarial (loss)/gain in respect of pension scheme	(37,759)	18,566
Total comprehensive income for the year	17,926	8,903

The figures appearing in the SOCI are further analysed and described in the Notes to the Accounts – and the individual components are discussed in these notes.

7C.4 Statement of Financial Position (SFP)

The only specific entry that is likely to appear in the SFP is the amount of the pension provision, if it is material. The provision may include liabilities for other pension arrangements, which will generally be discussed in the Notes to the Accounts. Again, the pension plan net liability is likely to be large and may move materially between financial years – as shown by the following edited extract from the University of Derby's 2019 financial statements.



	Year ended 31 July 2019 £000	Year ended 31 July 2018 £000
Total non-current assets	530,896	477,182
Total current assets	60,504	53,773
Less: Creditors – amounts due within one year	(40,285)	(42,751)
Net current assets	20,219	11,022
Total assets less current liabilities	551,115	488,204
Creditors – amounts due after more than one year	(89,682)	(92,607)
Provisions	(6,628)	(6,341)
Pension provision	(96,132)	(48,509)
Total net assets	358,673	340,747

The figures appearing in the SFP are further analysed and described in the Notes to the Accounts – and the individual components are discussed in these notes.

7C.5 Notes to the Accounts – Staff Costs

The disclosures for this example, the University of Derby, are set out in Section 7BI.5 above. The pension costs within this note are discussed further in the note on pensions – see Section 7C.7 below.

7C.6 Notes to the Accounts – Interest and Other Financing Costs

The amounts related to pension plan disclosures relating to interest and other financing costs is unique to those employers that have a pension plan with assets and liabilities that can be segregated by employer. This is the disclosure from the University of Derby's 2019 financial statements:

	Year ended 31 July 2019 £000	Year ended 31 July 2018 £000
Loans not wholly repayable within five years	1,992	1,587
Net charge on pension scheme	1,474	1,659
Total	3,446	3,246

The figures appearing in this note relating to the (in this case LGPS) pension plan, £1,474k and £1,659k are further analysed and described in the later note on pensions (see below). This disclosure reinforces the fact that pension schemes have a material impact on the finances of universities.

7C.7 Notes to the Accounts – Pension Schemes

The information in the note is designed to provide the reader with an understanding of the pension plan to which the employer is committed, its main features and the elements that have a significant impact on the financial performance and financial position of the employer. It is one of the most extensive notes in the financial statements of sponsoring employers, often covering several pages.

These are the disclosures from the University of Derby's 2019 financial statements, along with a commentary on each element.

Local Government Pension Scheme (LGPS)

The LGPS is a funded defined benefit scheme, with assets held in separate trustee administered funds. The total contribution for the year ended 31 July 2019 was £6,683,913 (2018: £6,338,407), of which employers' contributions totalled £4,461,968 (2018: £4,226,122) and employees' contributions totalled £2,221,945 (2018: £2,112,287). The agreed contribution rates for future years are 12.7%-25.8% for employers and 5.5%-12.5% for employees. In addition, a fixed annual employer's contribution of £740,336 is payable, representing a lump sum deficit recovery amount.

This introductory section provides:

- confirmation that the assets of the scheme are held separately from those of the employer;
- information on the totality of the contributions paid to the scheme by the employer and by employees;
- information about the contribution rates payable by employer and members – in this case, now in common with many schemes, the employer's and members' contribution rates are tiered (increasing as salaries increase); and,

- information about the amount of deficit recovery contributions payable.

In this example there are two important points to note.

First, the variable contribution rates are only a way of funding the entire liabilities of the scheme: the benefits will be those set out in the trust deed and do not necessarily bear any relation to the contributions paid; indeed, many of the liabilities will have been incurred before many of the pension schemes introduced tiered contribution rates.

Secondly, unlike with the example of USS above, the deficit contributions paid to the pension scheme do not give rise to a specific deficit contribution provision as the whole of the net pension liability is included in the employer's balance sheet, and to include an additional deficit contribution provision would be to double count the liability.

The amounts recognised in the balance sheet are as follows:

	Consolidated	
	2019 £000	2018 £000
Present value of funded liabilities	276,994	214,457
Fair value of plan assets	(181,532)	(166,618)
	95,462	47,839
Present value of unfunded obligations	670	670
Deficit and net liability	96,132	48,509

The individual components of this analysis are further analysed below.

Once again, attention is drawn to the size of the liabilities compared to the size of the assets and liabilities of the University itself in Section 7C.4 above, remembering that in this case academic staff are members of the TPS and so are not included in this analysis. As previously stated, this is a function of liabilities being incurred and assets built up over many years and liabilities stretching for many years in the future.

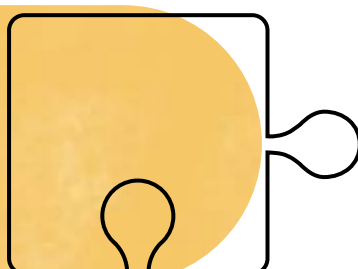
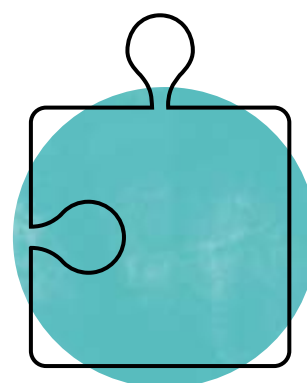
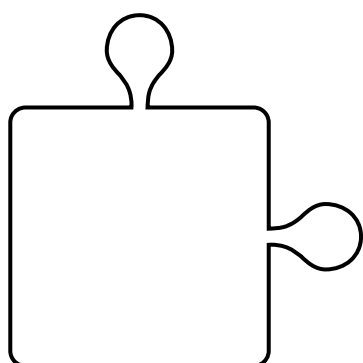
This example also reinforces the fact that the values of assets and liabilities can change considerably from one year to the next.

In this particular example, the employer has a small value of unfunded obligations due to previous employees who had retired early. The employer had elected to top up their pensions direct rather than pay a lump sum to the pension scheme to fund the early retirement. This arrangement, whilst not common, is not unusual; it reinforces the point that the pension promises are those of the employer and so the liability remains with the employer.

The amounts recognised in the statement of comprehensive income are:v

Please see the table opposite.

(The letters are for ease of reference in this guide and do not form part of the disclosures in the University of Derby's 2019 financial statements)



			Consolidated	
			2019 £000	2018 £000
Charge to payroll costs				
A	Current and past service cost	[See A below]	13,824	12,801
B	Contributions by employer	[See B below]	(5,434)	(5,066)
			8,390	7,735
Interest Payable				
C	Interest on pension liabilities	[See C below]	6,197	5,777
D	Interest income on plan assets	[See D below]	(4,723)	(4,118)
			1,474	1,659
Analysis of other comprehensive income				
E	Actuarial gain on liabilities	[See E below]	(43,544)	10,559
F	Actuarial gain on plan assets	[See F below]	5,785	7,967
			(37,759)	18,566
Cumulative actuarial loss recognised in other comprehensive income				
Opening actuarial loss on liabilities			215,127	208,373
A	Service cost	[See A above]	13,824	12,801
C	Interest cost	[See C above]	6,197	5,777
G	Member contributions	[See G below]	2,220	2,115
E	Actuarial gains	[See E above]	43,544	(10,599)
H	Net benefits paid	[See H below]	(3,248)	(3,340)
Closing actuarial loss for liabilities			277,664	215,127
Cumulative actuarial gain recognised in other comprehensive income				
Opening fair value of plan assets			166,618	150,692
D	Expected return on assets	[See D above]	4,723	4,118
F	Actuarial gain on assets	[See E above]	5,785	7,967
B	Contributions by employer	[See B above]	5,434	5,066
G	Member contributions	[See G above]	2,220	2,115
H	Benefits paid	[See H above]	(3,248)	(3,340)
Closing fair value of plan assets			181,532	166,618

This analysis is relatively complex but it is designed to enable the reader to understand from where the figures in the SOCI and SFP (also called balance sheet) are derived and how the assets and liabilities, and changes therein, of the pension plan differ from the assumptions that were made by the scheme trustees on the advice of the their actuaries when they set the contribution rates. Several of the elements are repeated in different elements of the analysis: these are identified by the references in square brackets above.

Charge to payroll costs

This part of the analysis shows the relationship of the current and past service costs, i.e. the additional liability arising from the service of employees up to the end of the reporting period (in this case 31 July 2019), and the contributions paid by the employer to the scheme.

As the contributions are set in advance, it is easy for the employer to plan and budget for these. The current and past service cost can only be determined by the pension scheme's actuary after the end of the reporting period because, although it relates to service up to the end of that period, the cost is determined not just by the additional service but by changes in actuarial assumptions, e.g. longevity.

In this example, the contributions represent only about 40% of the total service cost. This means that the liabilities are increasing at a faster rate than cash is being contributed. This could point to the need for increased contributions at a later date; however, if actuarial conditions changed significantly the gap could close. See Section 6.4 above for a discussion on the long-term implications for managing an employer's exposure to pension liabilities.

The net cost (in this case £8,390k) features in the reconciliation of pension costs featured below.

Interest payable

This analysis shows the expected cost of the liabilities and the expected return from the assets of the scheme. This shows the expected underlying economic substance of the employer owing the money to the pension plan and having the benefit of the assets held by the plan.

These elements feature in the further analyses in this section (as indicated by the cross referencing).

Analysis of other comprehensive income

This analysis deals with two elements that have the capacity for the greatest variations between reporting periods, which this example demonstrates; the reason for these items often being so large was discussed in Section 3.4 above. These items relate not to the service provided by employees in the reporting period but rather the remeasurement of the liabilities built up over many years – and in some cases several decades. It is for this reason that these items are not included in the 'charge to payroll costs' or 'interest payable' and are included in other comprehensive income in the SOCI.

These elements also feature in the further analyses in this section (as indicated by the cross referencing).

Cumulative actuarial loss recognised in other comprehensive income

This analysis provides a reconciliation of the movement in the gross liability from the start of an individual reporting period to the end of that period. It draws together part of the three elements already discussed in the section.

The components of this reconciliation are as follows:

- the actuarial loss on liabilities at the beginning of the reporting period, in this case £215,127k (being the aggregate of the funded liabilities of £214,457k and the unfunded liabilities of £670k mentioned above);
- the service cost for the year, in this case £13,824k – it was discussed in the commentary on the 'charge to payroll costs' above;
- the interest cost for the year, in this case £6,197k – it was discussed in the commentary on the 'interest payable' above;
- the member contributions for the year, in this case £2,220k – whilst it may seem strange that member contributions increase the overall liability, this component corrects for the value of these contributions now included in the scheme assets (see below), and which were effectively taken into account in calculating the service cost for the year;
- the actuarial gains for the year, in this case £43,544k – it was discussed in the commentary on 'analysis of other comprehensive income' above;

- the net benefits paid during the year, in this case (£3,248k) – whilst it may seem strange that benefits paid decrease the overall liability, this component corrects for the value of these payments that were taken from scheme assets (see below) and which were taken into account in determining both the opening balance and the service cost for the year, and so remove any element of double counting; and, finally,
- the closing actuarial loss on liabilities at the end of the financial year, in this case £277,664k (being the aggregate of the funded liabilities of £276,994k and the unfunded liabilities of £670k mentioned above).

Cumulative actuarial gain recognised in other comprehensive income

This analysis provides a reconciliation of the movement in the gross fair value of the plan assets from the start of an individual reporting period to the end of that period. It draws together the remaining part of the three elements already discussed in the section.

The components of this reconciliation are as follows:

- the opening fair value of plan assets at the beginning of the reporting period, in this case £166,618k;
- the expected return on assets for the year, in this case £4,723k – it was discussed in the commentary on the 'interest payable' above;
- the actuarial gains on assets for the year, in this case £5,785k – it was discussed in the commentary on 'analysis of other comprehensive income' above and represents the difference between the expected return on the assets held by the pension plan and the actual return achieved (this figure will be positive in good years and negative in bad ones);
- the contributions by the employer in the year, in this case £5,434k – it was discussed in the 'charge to payroll costs' above and, of course, represents an addition to the assets held by the pension plan;
- the member contributions received by the pension plan during the year, in this case £2,220k – this also represents an addition to the assets held by the scheme;
- the benefits paid during the year, in this case (£3,248k) – which represents a reduction in the assets held by the pension plan; and, finally,
- the closing fair value of plan assets at the end of the financial year, in this case £181,532k

The group expects to contribute £5,207,000 to the defined benefit pension plan during the year ended 31 July 2020.

This disclosure provides the reader with an indication of the amount of contributions payable in the ensuing year: a comparison with contributions for the reporting period shown above indicates a relatively flat level of expected contributions. This would not be the case had a significant increase in contributions been agreed with effect from the beginning of the new financial year and so this disclosure provides confirmation that this is not the case in this instance.

The University's contribution and movement on provisioning in respect of costs to the various schemes for its own staff were:

	Consolidated	
	2019 £000	2018 £000
Teachers' Pension Scheme	6,012	5,630
Local Government Pension Scheme	5,224	4,959
Other schemes	45	31
	11,281	10,620
FRS102 section 28 adjustment to pension charge for year	8,390	7,735
Pension cost for year	19,671	18,355

This analysis shows how the pension for the year is broken down between the contributions paid by the employer and the adjustment to reflect the economic substance of the pension promises made by the employer. The total appears in the Note on Staff Costs, discussed above. Once again, this analysis demonstrates the extent to which the contributions paid in any individual financial year can vary from the economic cost.

The remaining sections of this note provide information on the financial aspects of the pension plan: they provide a context for understanding better the monetary disclosures discussed above.

The major categories of plan assets, as a percentage of total plan assets are as follows:

	2019 %	2018 %
Equities	62	67
Bonds	23	19
Property	8	7
Cash	7	7

In this instance, the proportion of the plan's investments in equities has reduced whilst that in bonds has increased.

There is no right or wrong answer to the proportion of assets held in particular asset classes: bonds tend to give static returns with lower risk of volatility whilst equities tend to give returns linked to economic growth (and hence better match the growth in pay related liabilities) but at the cost of greater risk of volatility – sometimes changing in value by 50% or more over a short period. Those schemes that are relatively young and for which the contributions being received in a financial year exceed the benefits being paid by the scheme can afford to take higher investment risks than instances where the reverse is true. In this case employer contributions of £5,434k and member contributions of £2,220k compare to benefits paid of £3,248k – see analysis above.

The decisions over the investment strategy of the pension plan are the responsibility of the scheme trustees, although trustees will consult sponsoring employers over their willingness to accept volatility in investment returns. The trustees will also be influenced by the financial strength of the employer and its ability to pay higher contributions should the need arise: the stronger the financial position of the employer the greater the volatility that may be acceptable to the pension plan trustees.

The principal actuarial assumptions at the balance sheet date (expressed as weighted averages) were as follows:

	2019 %	2018 %
Discount rate at 31 July	2.1	2.8
Future salary increases	2.9	2.9
Future pension increases	2.4	2.4
Proportion of employees commuting part of pension to lump sum on retirement pre April 2008	50.0	50.0
Proportion of employees commuting part of pension to lump sum on retirement post April 2008	75.0	75.0

The mortality assumptions used in the valuation of the scheme are summarised in the table below and have been selected to reflect the characteristics and the experience of the membership of the plan. This has been done by using the PA92 tables with longevity projection based on medium cohort and the year in which the member was born.

Longevity at age 65 for current retirees:

Men	86.9	86.9
Women	89.4	89.4

Longevity at age 65 for future retirees, current age 45:

Men	88.9	88.9
Women	91.5	91.5

The assumptions used by the trustees of the pension plans are particularly important in determining the value of the liabilities accounted for by the sponsoring employers.

In this case the discount rate has changed from 2.8% last year to 2.1% this year – a decrease of 25%, which has the effect of increasing the net present value of the future liabilities. Looking back at the monetary disclosures above, the actuarial increase in pension liabilities was £43,544k compared

to an opening value at the start of the financial year of £215,127k – an increase of 20%. Thus, the bulk of the increase in the liability this year has been driven more by the change in the discount rate and less by a change in the value of the underlying liabilities.

The information on the expected longevity demonstrates the impact of improvements over the years as a result of better lifestyles and improved healthcare: an increase from 89.4 to 91.5 in respect of employees retiring at, say, 65 is 2.1 years over 24.4 years of retirement or 9%. This is why there is increasing pressure on employers and employees to increase their contributions to all defined benefit pension schemes, not just the LGPS as in this case.

Amounts for the current and previous three periods are as follows:

	2019 £000	2018 £000	2017 £000	2016 £000
Actuarial losses	(277,664)	(215,127)	(208,373)	(195,700)
Fair value of plan assets	181,532	166,618	150,692	131,040
Deficit	(96,132)	(48,509)	(57,681)	(64,660)

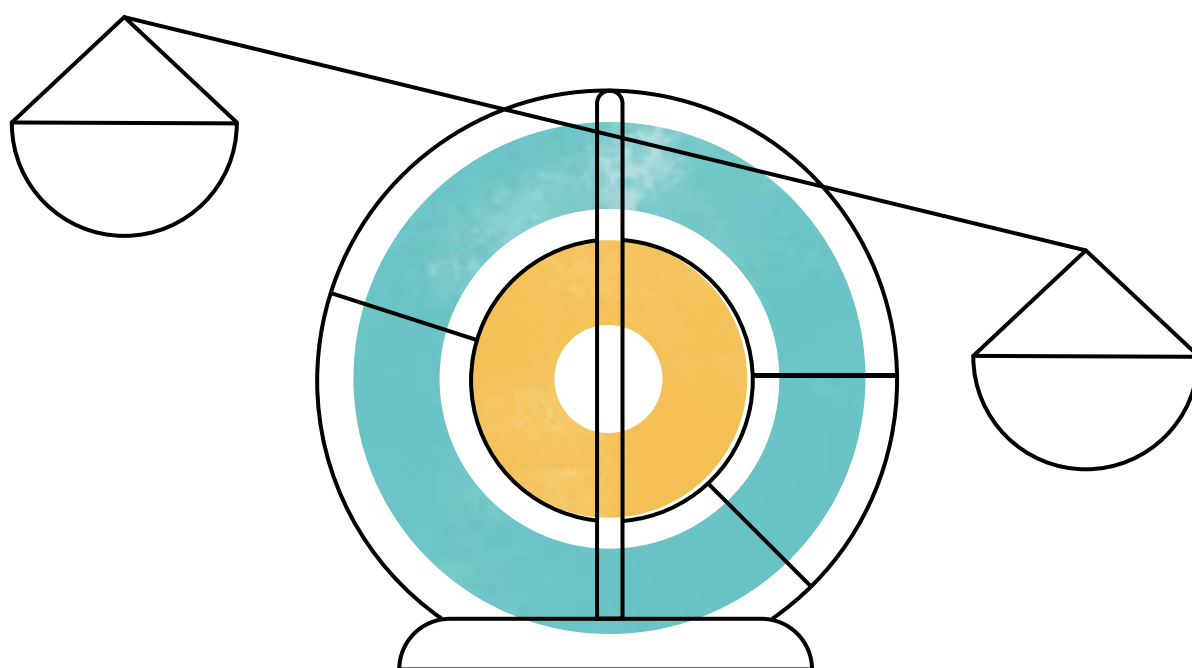
It is because of the significant volatility of pension deficits (and, in the past, surpluses) and their materiality compared to the assets and liabilities of the sponsoring employer that FRS102 requires summary data to be provided for the current year and at least the three prior years.

In this case, actuarial losses have increased by 29%, 3% and 6% respectively whilst assets have increased by 9%, 11% and 15% respectively; however, the resultant deficit has increased by 98% having reduced by 16% and 11% in the two previous years. This highlights the problem for employers being exposed to the difference between two very large numbers that have built up over many years, in some cases decades, in respect of pension promises that will exist for several decades to come.

The sensitivities regarding the principal assumptions used to measure the scheme liabilities are set out below:

Change in assumptions at 31 July 2019	Approximate % increase to Defined Benefit Obligation	2018 %
0.5% decrease in Real Discount Rate	13%	35,628
0.5% increase in the Salary Increase Rate	2%	4,629
0.5% increase in the Pension Increase Rate	10%	30,344

This last disclosure shows the sensitivities of key actuarial assumptions. As has been said above, relatively small changes in assumptions can result in incredibly significant changes to the value of the liabilities. This is simply because the liabilities stretch over such a long period.



Annex A:

Glossary of terms

The purpose of this section is to provide a description of some of the technical terms relevant to this document, which should supplement the definitions used in the text. They are taken largely from the glossary in Appendix 1 of FRS102, supplemented (*in italics*) where necessary for terms used specifically in the higher education sector.

A

Accounting policies

The specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting its **financial statements**.

Actuarial assumptions

An entity's unbiased and mutually compatible best estimates of the demographic and financial variables that will determine the ultimate cost of providing **post-employment benefits**.

Actuarial gains and losses

Changes in the **present value** of the **defined benefit obligations** resulting from:

- a. Experience adjustments (the effects of differences between the previous **actuarial assumptions** and what has actually occurred); and,
- b. The effects of changes in actuarial assumptions.

Annuity

A contract with an insurance company in which in return for a lump-sum payment or series of payments an individual will receive regular payments beginning either immediately or at some point in the future.

Asset

A resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.

Asset held by a long-term employee benefit fund

An **asset** (other than non-transferable financial instruments issued by the reporting entity) that:

- a. Is held by an entity (a fund) that is legally separate from the **reporting entity** and exists solely to pay or fund **employee benefits**; and.
- b. Is available to be used only to pay or fund employee benefits, is not available to the **reporting entity's** own creditors (even in bankruptcy), and cannot be returned to the reporting entity, unless either:
 - I. The remaining assets of the fund are sufficient to meet all the related employee benefit obligations of the plan or the **reporting entity**; or
 - II. The assets are returned to the reporting entity to reimburse it for the employee benefits already paid.



British Universities Finance Directors Group.



Cash

Cash on hand and demand deposits.

Cash equivalents

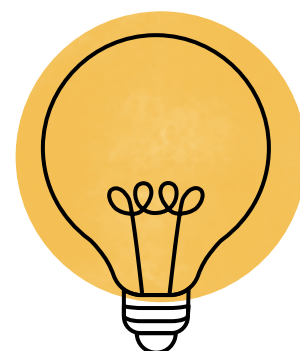
Short-term, highly liquid investments that are readily convertible to known amounts of **cash** and that are subject to an insignificant risk of changes in value.

Cash flows

Inflows and outflows of **cash** and **cash equivalents**.

Consolidated financial statements

The **financial statements** of a **parent** and its **subsidiaries** presented as those of a single economic entity.



Constructive obligation

An obligation that derives from an entity's actions where:

- a. By an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept certain responsibilities; and.
- b. As a result the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

Defined benefit obligation (present value of)

The **present value**, without deducting any **plan assets**, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

Defined benefit plans

Post-employment benefit plans other than **defined contribution plans**.

Defined contribution plans

Post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and has no legal or **constructive obligation** to pay further contributions or to make direct benefit payments to employees if the fund does not hold sufficient **assets** to pay all **employee benefits** relating to employee service in the current and prior periods.

Employee benefits

All forms of consideration given by an entity in exchange for service rendered by employees.

Equity

The residual interest in the **assets** of the entity after deducting all its **liabilities**.

Errors

Omissions from, and misstatements in, the entity's **financial statements** for one or more prior periods arising from a failure to use, or misuse of, reliable information that:

- a. Was available when the **financial statements** for those periods were authorised for issue; and,
- b. Could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those **financial statements**.

Expenses

Decreases in economic benefits during the **reporting period** in the form of outflows or depletions of **assets** or incurrences of **liabilities** that result in decreases in **equity**, other than those relating to distributions to equity investors.

Fair value

The amount for which an **asset** could be exchanged, a **liability** settled, or an equity instrument granted could be exchanged, between knowledgeable, willing parties in an arm's length transaction. In the absence of any specific guidance provided in the relevant section of this FRS, the guidance in the Appendix to Section 'Concepts and Pervasive Principles' shall be used in determining fair value.

FHE SORP

The Statement of Recommended Practice 'Accounting for Further and Higher Education'.

Financial position

The relationship of the **assets, liabilities** and **equity** of an entity as reported in the **statement of financial position**.

Financial risk	The risk of possible future change in one or more of a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index or other variable, provided in the case of a non-financial variable that the variable is not specific to a party of the contract.
Financial statements	Structured presentation of the financial position , financial performance and cash flows of an entity.
FRS102	FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'.
Funding (of post-employment benefits)	Contributions by an entity, and sometimes its employees, into an entity, or fund, that is legally separate from the reporting entity and from which the employee benefits are paid.
Funded defined benefit	A defined benefit that is backed by a particular fund.

HEI

Higher education institution.

Income

Increases in economic benefits during the **reporting period** in the form of inflows or enhancements of **assets** or decreases of **liabilities** that result in increases in **equity**, other than those relating to contributions from equity investors. (Universities in scope of this document do not have traditional equity investors such as shareholders.)

Income and expenditure

The total of **income** less **expenses**, excluding the components of **other comprehensive income**. In the for-profit sector this is known as **profit or loss**.

Liability

A present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

Materiality

Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions of users taken on the basis of the **financial statements**. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor.

Measurement

The process of determining the monetary amounts at which the elements of the **financial statements** are to be recognised and carried in the **statement of financial position** and **statement of comprehensive income**.

Money purchase schemes

A money purchase scheme (also known as **defined contribution**) is a scheme where the final value depends on:

- the amount of contributions made by the member, their employer and any third party
- the performance of the investments underlying the scheme
- the charges within the plan.

This means the benefits payable to or in respect of the member are calculated by reference to the capital value of the pension pot at the time of payment. As the contributions are normally invested in a range of funds or allowable investments, which can fluctuate in value, the value of benefits payable are not known in advance and the member bears the investment risk.

Multi-employer
(benefit) plans

Defined contribution plans (other than **state plans**) or **defined benefit plans** (other than **state plans**) that:

- a. Pool the **assets** contributed by various entities that are not under common control; and.
- b. Use those **assets** to provide benefits to employees of more than one entity, on the basis that contribution and benefit levels are determined without regard to the identity of the entity that employs the employees concerned.

Net assets available
for benefits

The **assets** of a plan less **liabilities** other than the actuarial **present value** of promised retirement benefits.

Net defined benefit
liability

The **present value** of the **defined benefit obligations** at the **reporting date** minus the **fair value** at the **reporting date** of **plan assets** (if any, out of which the obligations are to be settled).

Notes (to financial
statements)

Notes contain information in addition to that presented in the **statement of financial position, statement of comprehensive income**, income statement if presented), combined statement of income and retained earnings (if presented), **statements of changes in equity** and statement of cash flows. Notes provide narrative descriptions or disaggregations of items presented in those statement and information about items that do not qualify for **recognition** in those statements.

Objective of financial
statements

To provide information about the **financial position, performance** and, when required to be presented, cash flow of an entity that is useful for economic decision-making by a broad range of users who are not in a position to demand reports tailored to meet their particular information needs.

Other comprehensive income

Items of **income** and **expense** (including reclassification adjustments that are not recognised in **profit or loss** as required or permitted by this FRS or by law.

P Performance

The relationship of the **income** and **expenses** of an entity, as reported in the **statements of comprehensive income**.

Plan assets (of an employee benefit plan)

Plan assets (of an employee benefit plan) are:

- a. **Assets held by a long-term employee benefit fund;** and,
- b. Qualifying insurance policies.

Post-employment benefits

Employee benefits other than (**termination benefits** and short-term employee benefits) that are payable after the completion of employment.

Post-employment benefit plans

Formal or informal arrangements under which an entity provides **post-employment benefits** for one or more employees.

Present value

A current estimate of the present discounted value of the future net cash flows in normal course of business.

Private

*Provided by an entity that is not part of the **State**.*

Probable

More likely than not.

Profit or loss

The total of **income** less **expenses**, excluding the components of **other comprehensive income**.

Projected unit credit method

An actuarial valuation method that sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation (sometimes known as the accrued benefit method pro-rated on service or as the benefit/years of service method).

Provision	A liability of uncertain timing or amount.
Public	Provided by the State .
Public benefit entity	An entity whose primary objective is to provide goods or services for the general public, community or social benefit and where any equity is provided with a view to supporting the entity's primary objectives rather than with a view to providing a financial return to equity providers, shareholders or members.

R

Recognition

The process of incorporating in the **statement of financial** position or **statement of comprehensive** income an item that meets the definition of an **asset, liability, equity, income** or **expense** and satisfies the following criteria:

- a. It is **probable** that any future economic benefit associated with the item will flow to or from the entity; and,
- b. The item has a cost or value that can be measured with **reliability**.

Relevance The quality of information that allows it to influence the economic decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations.

Reliability The quality of information that make it free from **material error** and bias and represents faithfully that which it either purports to represent or could reasonably be expected to represent.

Reporting date The end of the latest period covered by **financial statements** or by an interim financial report.

Reporting entity The organisation that publishes financial reports - for the purposes of this guide, this means the university.

Reporting period	The period covered by financial statements or by an interim financial report.
Retirement benefit plan	Arrangements whereby an entity provides benefits for employees on or after termination of service (either in the form of an annual income or as a lump sum) when such benefits, or the contributions towards them, can be determined or estimated in advance of retirement from the provisions of a document or from the entity's practice.
Revenue	The gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity , other than increases relating to contributions from equity participants.

Statement of Recommended Practice (SORP)	An extant Statement of Recommended Practice developed in accordance with 'Policy on Developing Statements of Recommended Practice (SORPs)'. SORPs recommend accounting practices for specialised industries or sectors. They supplement accounting standards and other legal and regulatory requirements in the light of the special factors prevailing or transactions undertaken in a particular industry or sector.
---	--

State	A national, regional or local government.
State (employee benefit) plan	Employee benefit plans established by legislation to cover all entities (or all entities in a particular category, for example a specific industry) and operated by national, regional or local government or by another body (for example an autonomous agency created specifically for this purpose) which is not subject to control or influence by the reporting entity.

Statement of cash flows

Financial statement that provides information about the changes in **cash** and **cash equivalents** of an entity for a period, showing separately changes during the period from operating, investing and financing activities.

Statement of comprehensive income

Financial statement that presents all items of **income** and **expense** recognised in a period, including those items recognised in determining **profit or loss** (which is a sub-total in the **statement of comprehensive income**) and items of **other comprehensive income**. If an entity chooses to present both an **income statement** and a **statement of comprehensive income**, the **statement of comprehensive income** begins with **profit or loss** and then displays the items of **other comprehensive income**.

Statement of financial position

Financial statement that presents the relationship of an entity's **assets**, **liabilities** and **equity** as of a specific date (referred to as the balance sheet in the Companies Act 2006).

Statutory minimum pension contributions

The minimum amount of pension contributions set by Government for employees and employers

T Total comprehensive income

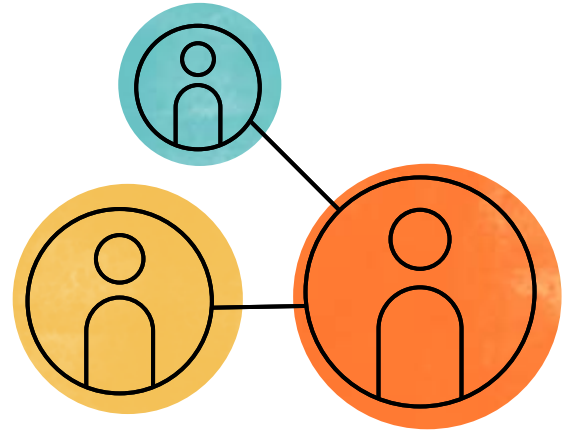
The change in **equity** during a period resulting from the transactions and other events, other than those changes resulting from transactions from equity participants (equal to the sum of **profit or loss** and **other comprehensive income**).

U *Unfunded defined benefit*

A **defined benefit** that is not backed by a particular fund but is rather paid out of an entity's income or, in the case of **state** plans, general taxation.

Vested benefits

Benefits, the rights to which, under the conditions of a **retirement benefit plan**, are not conditional on continued employment.



Further Reading

The purpose of this section is to provide information on where additional information on the topic of accounting for pensions and their impact on higher education institutions can be found.

A BUFDG Guide to Understanding University Finance, November 2019

FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland, The Financial Reporting Council Limited 2018

(Together with amendments that may be published from time-to-time by the FRC.)

Statement of Recommended Practice Accounting for Further and Higher Education, Universities UK 2019

All the major professional service firms, accountants and actuaries, provide commentaries and guidance on accounting for pensions, these can be found via the websites of the firms in question.

