CAMBRIDGE UNIVERSITY ASSISTANTS' CONTRIBUTORY PENSION SCHEME

Actuarial Valuation
as at 31 July 2015

Scheme Funding Report

Prepared for C U Pension Trustee Limited,
the Trustee of the Cambridge University Assistants' Contributory Pension Scheme

Robert Sweet
Cartwright Group Ltd
Mill Pool House
Mill Lane
Godalming
Surrey GU7 1EY

Tel: 01483.860201
Fax: 01483.860182
Email: robert.sweet@cartwrightgroup.co.uk

26 February 2016

Contents

ES Executive Summary

Introduction

This report sets out the results of the actuarial valuation of the Cambridge University Assistants' Contributory Pension Scheme ("the Scheme") as at 31 July 2015.

Current Funding Level

Using the assumptions agreed for the calculations, the Scheme's funding level on the Statutory Funding Objective at the valuation date was 90%, equivalent to a deficit of £61,484,000. At the previous valuation the ongoing funding level was 74%.

The main reasons for the improvement are better than expected investment returns and deficit reduction contributions paid by the Employers.

Future Service Cost

The overall ongoing future joint contribution rate for future service benefits, ignoring the past service position, as a percentage of Pensionable Salaries is 14.6%. This compares against the current contributions agreed by the Trustee and University which equate to an overall rate of 14.0% of Pensionable Salaries.

Subject to the payment of the additional Recovery Plan contributions below, the Trustee and University have agreed that the current ongoing contributions may continue until at least the results of the next valuation are known:

	Salary Sacrifice Members		Non Salary Sacrifice Members	
	Active Members	Employers	Active Members	Employers
	%	%	%	%
Pre-2013 Members paying additional contributions under Rule 45.6	Nil	20.0	8.5	11.5
Other Pre-2013 Members	Nil	16.5	5.0	11.5
Post-2013 Members	Nil	8.8	3.0	5.8

These rates include allowances for expenses, levies and death in service benefits.

Deficit Funding Contributions

In addition to the above contributions, the Employers will pay £14,595,000 per annum to pay off the funding deficit for a period of 3 years and 6 months from the valuation date.

Solvency Position	The solvency position of the Scheme has been measured by reference to the estimated cost of buying out the benefits with an insurance company. As at the valuation date the solvency funding level of the Scheme was 41%. If the Scheme was fully funded on the Statutory Funding Objective the solvency funding level would be 46%.
PPF Section 179 Position	The PPF Section 179 position of the Scheme has been measured in line with the prescribed assumptions and benefits as laid down by the PPF Board. At the valuation date the Section 179 funding position was 62%. This funding level is used by the PPF Board to help it determine the risk based portion of the PPF levy.
CETVs	We recommend that the Trustee continues to pay Cash Equivalent Transfer Values in full as, although the Scheme has a deficit on the Funding Basis, it has a surplus on the Neutral Basis.
Factors	The Scheme's commutation factors and other actuarial factors should be reviewed following the completion of the valuation to reflect changing economic and demographic conditions.
Timescale and Future Valuation Requirements	The next triennial valuation is due to take place as at 31 July 2018. As this Scheme has more than 100 members, interim actuarial reports will be required as at 31 July 2016 and 31 July 2017. As this Scheme has a Recovery Plan, a summary of this valuation report plus copies of the Recovery Plan and Schedule of Contributions needs to be sent to TPR within 10 working days of this report being signed.

1 Introduction

Background

This report on the actuarial valuation of the Cambridge University Assistants' Contributory Pension Scheme ("the Scheme"), as at 31 July 2015, was commissioned by and is addressed to the Trustee of the Scheme. It has been prepared under Rule 23 of the Ordinances & Rules and Section 224 of the Pensions Act 2004. These state that the Trustee is required to obtain an actuarial valuation at least every three years and actuarial reports in intervening years.

Purposes

The purposes of the valuation are:

- to review the Scheme's funding position relative to its funding target;
- to determine contribution rates for funding Scheme benefits;
- to assess the Scheme's solvency position; and
- to satisfy statutory requirements.

Previous Valuation

The Scheme was last valued as at 31 July 2012 and the results were contained in my report dated 26 April 2013.

Inter-valuation Review

The previous valuation recommended joint Employer and Member contributions to the Scheme to meet the cost of future accrual on the pre 2013 benefit structure of 25.5% of members' Pensionable Salaries inclusive of allowances for the expenses of administering the Scheme. From 1 August 2013 different rates were recommended and these are set out below:

	Salary Sacrifice Members		Non Salary Sacrifice Members	
	Active Members	Employers	Active Members	Employers
	%	%	%	%
Pre-2013 Members paying additional contributions under Rule 45.6	Nil	20.0	8.5	11.5
Other Pre-2013 Members	Nil	16.5	5.0	11.5
Post-2013 Members	Nil	8.8	3.0	5.8

In addition, to reduce the funding deficit, the Employers agreed to continue to pay additional contributions of £14,595,000 p.a. As at 31 July 2012 this rate of contributions was projected to fund the deficit disclosed by the 2012 valuation over a period of 10 years and 9 months, i.e. by 30 April 2023.

Contributions have been paid in accordance with these recommendations.

Member contributions have been paid in accordance with the Rules of the Scheme.

References for earlier advice on this valuation

An earlier discussion document, the Memorandum on the Actuarial Valuation dated 21 November 2014, set out my initial advice to the Trustee regarding the commencement of the valuation process. It included drawing the Trustee's attention to the Pension Regulator's Code of Practice 3 dated July 2014 ("the Code") and the different funding methods that are available to them and how they may choose a set of assumptions. It also included detail of the 9 Principles set out in the Code including the Management of Risk and Working Collaboratively with the Employers to reach a funding solution that strikes the right balance between the needs of the Scheme and those of the Employers.

I have not provided any advice to the Trustee on Employer matters. In particular in recommending assumptions to the Trustee I provided no advice on factors affecting the Employers or their industry which may affect such factors as pay increases or rates of withdrawal of Scheme membership. In addition, in calculating the contribution rates in accordance with the Statement of Funding Principles, I have not provided any advice on other related Employer matters such as business plans, expenditure commitments or Industry reports.

Initial valuation results were set out in my Summary of Initial Results Report dated 18 November 2015.

The above advice was reviewed by the Trustee, and following discussion with the University, the agreed assumptions to be used are set out in Appendix E.

Third Party Statement

The calculations in this report use methods and bases appropriate for the purpose described above. Figures required for other purposes, such as Employer accounting, should be calculated in accordance with the specific requirements for such purposes and it should not be assumed that the figures contained in this report are appropriate. The report may be provided to the Employers and to Scheme members in accordance with the disclosure legislation and regulations, but may only be disclosed to other parties with our consent. Such parties may rely upon the results only for the purposes described above. The report does not grant any rights to Scheme members or other third parties and may not necessarily cover all the implications for a third party. I and Cartwright Group Ltd do not accept any liability to any third parties in respect of the contents of this report.

Reporting Requirements

This report, when read in conjunction with the reference material set out above, is compliant with the following Standards issued by the Financial Reporting Council:

- Technical Actuarial Standard: Pensions TAS;
- Technical Actuarial Standard R: Reporting Actuarial Information (TAS R); and
- Technical Actuarial Standard D: Data (TAS D).

The calculations in this report have been undertaken using models that are compliant with Technical Actuarial Standard M: Models (TAS M).

The actuarial information contained in this report has been peer reviewed in accordance with Actuarial Profession Standards (APS) X2 – Review of Actuarial Work.

It should be noted that the calculation of Technical Provisions and future contribution rates in this report are defined as a “Planning Exercise” under TAS R. The calculation of the solvency position and the PPF Section 179 funding position is defined as a “Valuation Exercise” under TAS R. This report is a “Scheme Funding Report” for the purposes of the Pensions TAS and Section 224 of the Pensions Act 2004.

2 Background

The Scheme

The Scheme is deemed to be a registered pension scheme under the terms of Schedule 36 of the Finance Act 2004.

The Scheme is open to existing members and future new entrants. The employees covered by the Scheme were contracted out of the State Second Pension (S2P) up to 31 December 2012. From 1 January 2013 the Scheme members were contracted back into S2P.

Core Benefits Under Rules

We have valued the Scheme benefits set out in the Ordinances and Rules last updated by a Grace on 8 August 2014. References to Pensionable Salary in this report have the same meaning ascribed to them as in the Rules.

Members may pay Additional Voluntary Contributions (AVCs) to increase benefits payable from the Scheme. Liabilities and assets shown in this report exclude money purchase AVCs, but do include AVCs used to provide additional service credits.

Allowance for Discretionary Benefits

The Scheme Rules allow discretionary benefits to be provided to members.

In recent years this option has not been exercised and therefore no discretionary benefits have been granted. As such the valuation does not allow for any discretionary benefits and assumes that any that are granted will be funded at the time.

Allowance for Insured Benefits

The Trustee does not insure death in service benefits.

A very small minority of the pensions in payment are partly insured with an insurance company. These have been excluded from the funding valuation as they are **exactly matched** by an insurance policy. As required by legislation, we have allowed for them in the PPF Section 179 valuation.

In addition, since the previous valuation, the Scheme has been responsible for insured annuities resulting from the bulk transfer of liabilities from the Strangeways Research Laboratory Pension Scheme. These insured annuities are treated in the same way as the existing insured annuities.

Allowance for Member Options

Allowance has been made for members retiring earlier than Normal Pension Age, using assumptions based on actual Scheme experience.

No allowance has been made for other member options which, if chosen, could reduce or increase the overall Scheme technical provisions.

GMP Equalisation

Please note that no allowance has been made for any additional liability that might arise from the impact of equalising Guaranteed Minimum Pensions (GMPs) between men and women. This is because the Government has not yet issued its promised further guidance on this matter.

Scheme Changes since previous valuation

Since the last valuation, the following changes have been made to the Scheme benefits:

New Benefit Structure

From 1 January 2013 the Scheme's benefit structure has been revised for benefits accruing after that date. The Scheme now has 3 different groups of members:

- UNI 1 - Members who joined before 1 December 2009
- UNI 2 - Members who joined after 30 November 2009 and before 1 January 2013
- UNI 3 - Members who join after 31 December 2012

The Scheme provides Career Revalued Benefits (CRB) for future service.

These changes to benefits were incorporated into the Rules by a Grace dated 2 November 2012. The most important features of the new structure are as follows:

UNI 1

- Benefits accrue at the rate of 1/95th pension + 3/95th cash for the period to 31 December 2017 and then 1/100th pension + 3/100th cash for the period from 1 January 2018 onwards;
- Member contributions of 5%;
- Spouse's pensions of 75% of members' pensions;
- Each years' accrual is to be revalued in line with increases in the RPI;
- The earliest age from which members can draw benefits without reduction has changed from age 60 to age 63.
- Members have the option to pay an additional contribution of 3½% of Pensionable Salary if they wish to draw benefits without reduction from age 60.

UNI 2

- Benefits accrue at the rate of 1/95th pension + 3/95th cash for the period to 31 December 2017 and then 1/100th pension + 3/100th cash for the period from 1 January 2018 onwards;
- Member contributions of 5%
- Each year's accrual is to be revalued in line with the increase in the RPI.

UNI 3

As for UNI 2 except:

- The accrual rate is 1/150ths pension + 3/150ths cash;
- Member contributions of 3%;
- Death-in-Service lump sum of 5 x salary;
- Each years' accrual is to be revalued in line with CPI rather than being based on RPI;
- Pensions in payment will increase in line with the CPI rather than the RPI.

These changes were all taken into consideration for the 2012 valuation and the current future service contribution rate.

Strangeways Research Laboratory Pension Scheme

Under the terms of a Merger Deed dated 24 July 2014, the assets and liabilities of the Strangeways Research Laboratory Pension Scheme were transferred into the Scheme.

The transfer related to a very small group of members, and had an insignificant impact on the Scheme's funding position. The benefits for these members differ from those of other Scheme members. Valuing these benefits therefore requires adjustments to the assumptions set out in this Summary. Because this relates to a very limited number of members, for clarity I have not detailed these adjustments in this Summary, but I confirm that we have made the appropriate adjustments when undertaking our calculations.

Same Sex Marriages

A Grace dated 8 August 2014 amended the Rules to extend the Scheme's provisions on spouse's pensions to spouses in same-sex marriages.

Legislative changes since previous valuation

There have been no recent legislative changes that have impacted on the Scheme benefits at the valuation date since the previous valuation.

Membership Data

The data for the valuation was provided by the Pensions Office on behalf of the Trustee. Whilst we have taken reasonable steps to satisfy ourselves that the data provided is of adequate quality for the purposes of the valuation, ultimately we have relied on the accuracy of the information provided. The membership data covered details of 4,447 active members, 3,366 deferred pensioners, 128 pending members and 2,949 pensioners. Pending members are members who have ceased Pensionable Service but who have yet to choose between the benefit options available to them. We have valued the pending members as deferred pensioners and included them in the Deferred member statistics. A more detailed membership summary is provided in Appendix A of this report.

We carried out the following data checks:

- Comparison and reconciliation with previous valuation data;
- Missing data and consistency checks;
- Checking Pensionable Salaries against previous data and for reasonableness;
- Checking Final Pensionable Salaries against previous data and for reasonableness;
- Checking part time member data; and
- Checking deferred pensions and pensions in payment against previous data.

We are grateful to the Pensions Office for their assistance in answering our queries.

Asset Data

The audited Scheme accounts show that the market value of the Scheme's assets at 31 July 2015 amounted to £551,094,475. This includes assets in relation to members' added years AVCs but excludes money purchase assets and insured pensions. Appendix B provides a more detailed breakdown of the Scheme's assets.

Note that the above assets are slightly lower than those set out in the unaudited accounts and as indicated in the Summary of Initial Results.

Employer Matters

We have not provided any advice to the Trustee in connection with the Employer.

Material Post Valuation Date Events

We are not aware of any material events that have occurred after the valuation date which would affect the results set out in this report.

3 Funding Principles

Statutory Funding Objective

The Statutory Funding Objective is set out in the Statement of Funding Principles dated 26 February 2016 included as Appendix D to this report.

Under Rule 44 of the Rules, each Employer must pay contributions at rates decided by the University as Principal Employer, after taking actuarial advice. However, this is overridden by the Pensions Act 2004, under which the Principal Employer and Trustee jointly agree to the Statement of Funding Principles and the contribution rates payable to the Scheme.

Agreed Funding Target

The agreed funding target for the Scheme is the Technical Provisions. I would stress that achieving this target may mean that other targets may still not be met. In particular, in current market conditions if the Scheme were to be 100% funded on the Technical Provision, it would only be 46% funded on the Solvency target, i.e. Technical Provisions are not the same as wind up costs. Unless further funds were to be available, on a winding-up of the Scheme it would not be possible to secure members' benefits in full.

Funding Objectives

Based on the Technical Provisions as a funding target, the agreed funding objectives are as follows:

- to assume that the Scheme will invest in some return seeking equity type assets as well as bonds, and overall credit should be taken for a real long term investment return of up to 4% per annum;
- subject to the above, to adopt a set of assumptions which is prudent;
- not to make any allowance for any mis-matching of assets and liabilities;
- not to make any allowance for discretionary benefit increases; and
- to eliminate any deficit relative to the funding target by increases in the rate of contributions over a period that does not exceed 16 years.

Changes to Funding Objectives

No changes have been made to the funding objectives since the previous valuation.

Funding Implications on Stability of Contribution Rate	The funding objective includes allowance for investment in equity type assets, and makes no allowance for mis-matching of assets and liabilities. Since the returns on equities can be volatile over even relatively short periods of time, this means that the contribution rate will be less stable than would apply were these factors not included.
Funding Implications for paying CETVs in full	The funding objective adopted is such that if the Scheme meets its objective there will be more than sufficient assets to pay unreduced transfer values.

4 Valuation Method and Assumptions

Funding Method

The cost of the future benefit accrual within the Scheme has been determined in this valuation using the Projected Unit Method.

Under this method, the capital value of the benefits accruing over the year following the valuation date, based on members' Pensionable Salaries projected to the date of their retirement, death or earlier exit, is expressed as a percentage of the total current Pensionable Salaries, to give the future service contribution rate.

This method will result in a relatively stable future service contribution rate provided the profile of the active membership, by age, sex and salary, does not change significantly between actuarial valuations. There is therefore an implicit assumption that there are new entrants to the Scheme. If there are not any new entrants to the Scheme the future service contribution rate will be expected to rise as the active membership ages.

As mentioned in Section 2, new joiners to the Scheme are on a different benefit structure to existing members. This will act to reduce the cost of benefit accrual. Consequently, the overall future service contribution rate may be expected to reduce in the future as the proportion of active members on the new benefit structure increases.

As a result of these changes, the Trustee agreed to introduce a control period for the calculation of future service contribution rates at the 2012 valuation. At this valuation date, the remaining control period was 7 years and 9 months.

Previous Funding Method

The same funding method was used for the previous actuarial valuation, however the control period at that time was 10 years and 9 months.

Factors to Consider in choosing funding method

Under the Code the Trustee is required to consider the following factors (inter alia) when choosing a funding method:

- the ability and willingness of the Employers to make advance provision for future events; and
- the likely number of new entrants to the Scheme in future.

We have not provided any advice to the Trustee in connection with these factors. The Trustee will need to be satisfied that the chosen funding method is appropriate bearing in mind the above factors.

The past service funding position is calculated by comparing the value placed on the existing Scheme assets with the value placed on members' benefits accrued before the valuation date allowing for future Pensionable Salary increases to retirement, death or earlier exit. Any deficiency is expressed as an increase in the contribution rate payable for a stated period.

Valuation Assumptions

The valuation assumptions are given in Appendix E. Details of how they were derived are set out in the Trustee's Statement of Funding Principles included in Appendix D.

Note that the Trustee has considered each assumption individually. They have not adjusted any assumption as a proxy to compensate for shortfalls in another assumption.

Assets

As for the previous valuation, we have used a market-related basis to value both the assets and liabilities of the Scheme. Assets are included at their market value, whilst liabilities are valued using financial assumptions based on the yields implied by these market values. This does lead to a degree of volatility in the valuation results from one valuation to the next but I believe it ensures that a compatible and consistent approach is adopted to valuing both assets and liabilities, and that it will provide a more appropriate estimate of the cost of the Scheme benefits in current market conditions.

Recovery Plan

The Statement of Funding Principles describes a Recovery Plan for removing any funding deficit. The Recovery Plan requires the deficit to be removed by additional contributions payable over 3 years and 6 months by fixed annual payments payable monthly.

Under the Code the Trustee should aim for any shortfall to be eliminated as quickly as the Employers can reasonably afford. What is possible and reasonable, however, will depend on the Trustees' assessment of the Employers' covenant.

When considering the structure of the Recovery Plan and the contribution required, the Trustee should take into account the following matters:

- the Employers' business plans and the likely effect any potential recovery plan would have on the future viability of the Employers;
- the Scheme's membership profile. A longer recovery period may be more appropriate in a scheme where most members have many years to go before retirement than in one where the vast majority are already receiving pensions.
- the ability of the Trustee to pursue an Employer to make good a deficiency in the event of a scheme wind-up.

- the Employers' expenditure commitments.
- the value of any contingent security provided by the Employers bearing in mind both the term and enforceability.
- whether there are any impending member movements which would have a potentially significant effect on funding, such as major retirements or bulk transfer (in or out);
- the anticipated level of the risk-based element of the Pension Protection Fund levy, year on year, over the course of the recovery period and how this is met by the Employers;

We have not provided any advice to the Trustee in connection with the above factors. The Trustee should consider whether there is a need to seek advice on these factors before determining the appropriate period over which the deficit should be paid.

5 Funding Valuation Results

Results

The following Section summarises the results of the valuation on the Scheme's funding objective using the basis described in Section 4 and Appendix E.

Past Service Position/Technical Provisions

Value of benefits in respect of service on or before 31 July 2015:		£000's
Active Members		237,837
Deferred Pensioners		119,883
Current Pensioners		248,793
Expenses		6,065
Technical Provisions	[a]	612,578
Market Value of Scheme Assets	[b]	551,094
Past Service Surplus/(Deficit)	[b-a]	**(61,484)**
Level of Funding of Past Service Benefits	[b/a]	90%

The appropriate actuarial certification of the Scheme's technical provisions is included as Appendix F to this report.

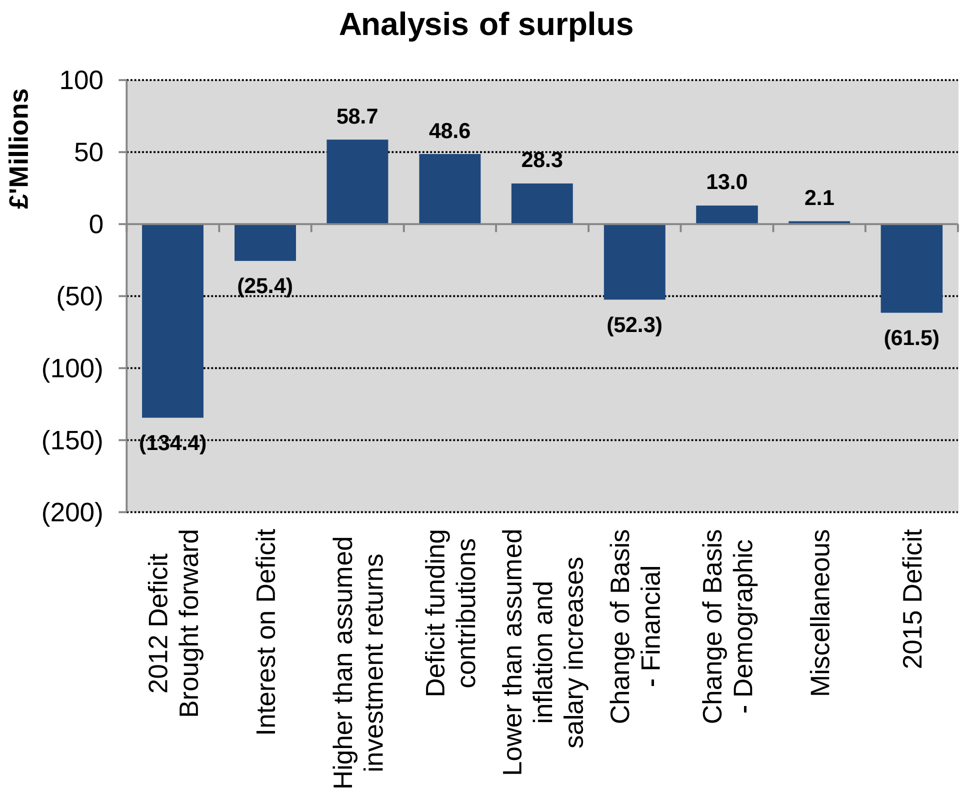
The Trustee and the Employers should be aware that the Technical Provisions are not the same as the cost of winding up the Scheme. This is shown in Section 8 of the report.

The past service deficit of £61,484,000 compares to the deficit disclosed by the previous valuation of £134,375,000. An approximate analysis of the principal factors affecting the level of deficit since the last valuation is given below.

The miscellaneous item in the analysis includes, for example, the effects of variations over the inter-valuation period between actual experience and the assumptions made for mortality, withdrawals and expenses used in the previous valuation. We would be pleased to analyse this item further, if required.

Analysis of Surplus/(Deficit)

	£000's
(Deficit)/Surplus as at 31 July 2012	**(134,375)**
Interest on (Deficit)/Surplus	(25,441)
Investment returns higher than assumed	58,690
Value of contributions paid since last valuation to reduce deficit	48,631
Actual inflation and salary increases lower than assumed	28,267
Changes in Mortality assumptions	12,971
Changes in Financial assumptions	(52,332)
Miscellaneous	2,105
(Deficit)/Surplus as at 31 July 2015	**(61,484)**



Significant Variations

The most significant variations in the analysis are as a result of:

- Investment returns were much higher than assumed over the 3 year period;
- Deficit reduction contributions paid by the Employer;
- An experience gain as a result of actual inflation being less than assumed (resulting in pension increases being lower than assumed) and salary increases being below expectations;
- Changes in financial assumptions, mainly as a result of assuming a lower real future rate of return on Scheme assets;
- Changes in the mortality assumptions. As explained in the Memorandum, we have updated both the base table and the allowance for future improvements to the latest tables available. Because actual improvements in life expectancy in recent years have been lower than previously assumed, this results in slightly shorter future life expectancies, which reduces the value placed on the Scheme's liabilities.

Expenses

I have reviewed the allowances for the ongoing expenses of the Scheme and compared them to recent actual experience. Over the past 3 years the ongoing expenses have averaged just under 0.95% p.a. of Pensionable Salaries. A large element of this is the PPF levy, accounting for over half of overall expenses at 0.5% of Pensionable Salaries. PPF levies are likely to continue at current levels for the next few years.

The Trustee and the University have agreed to increase the allowance for future expenses to 0.9% p.a. of Pensionable Salaries plus 1.0% of the Technical Provisions.

Future Service Cost

The total contribution rate is made up of two parts; the cost of the future benefit accrual and the contribution to remove the past service deficit, shown above. The rates shown do not include any allowance for members' AVCs. They are based on a control period of 7 years and 9 months, consistent with the 10 years and 9 months adopted at the previous valuation.

The normal joint contribution rate to fund future benefit accrual is 14.6% of Pensionable Salaries (2012: 14.0%). This includes allowances for members' contributions, the cost of self insuring the death in service benefit and for the expenses of running the Scheme. This can be split as shown below. The equivalent rates calculated at the 2012 valuation are shown in brackets for comparison:

	Salary Sacrifice Members		**Non Salary Sacrifice Members**	
	Active Members	**Employers**	**Active Members**	**Employers**
	%	**%**	**%**	**%**
Pre-2013 Members paying additional contributions under Rule 45.6	Nil	21.4 (20.0)	8.5	12.9 (11.5)
Other Pre-2013 Members	Nil	17.9 (16.5)	5.0	12.9 (11.5)
Post-2013 Members	Nil	8.7 (8.8)	3.0	5.7 (5.8)

Subject to the payment of the Deficit Reduction Contributions, as set out below, the Trustee and University have agreed to maintain the existing 2012 ongoing contribution rates until at least the results of the next valuation are known.

Deficit Funding Contributions

The Trustee and the University have agreed that the Employers will fund the deficit by paying additional contributions of £14,595,000 p.a. from the valuation date for 3 years 6 months.

All contributions are payable monthly.

The assumptions used in drawing up the Recovery Plan are those defined in the Statement of Funding Principles as set out in Appendix D.

Future progression and Material developments

Based upon the above total contributions and assuming that experience matches the adopted assumptions for the funding calculations the above funding level is expected to improve to 99% over the period to the next actuarial valuation. This is because Employer contributions are more than sufficient to meet the expected interest on the deficit and the cost of future pension accrual.

I am not aware of any material developments that would affect funding over the next 3 years.

Further Issues:

CETVs	As the Scheme has a surplus on the Neutral Basis (see Section 6), we recommend that CETVs continue to be paid in full.
Scheme Factors	The Scheme's administration and other actuarial factors are due for review following the valuation to reflect the change in economic and demographic conditions since the previous valuation.

6 Funding Risks and Sensitivities

Funding Risks	There are risks inherent with any funding objective, even if the funding target is met, and the following risks should be appreciated and where possible mitigated.
Sponsor Risk	If an Employer becomes insolvent or is otherwise unable to meet the contribution rate set then the risk is that members may not receive all benefits they expect. The Trustee takes a prudent approach to funding to mitigate this risk to some extent.
Investment Return	If the assets under-perform the returns assumed in setting the funding target then additional contributions may be required at subsequent valuations.
Investment Matching Risk	The Scheme invests significantly in equity type assets, whereas the solvency target is closely related to the return on bonds. If the Scheme were to wind-up when these equity type assets have fallen in value relative to the matching assets of bonds, members may not receive their full expected benefits. If the Scheme were not to wind-up, additional contributions may be required.
Longevity Risk	If future improvements in mortality exceed the assumptions made then additional contributions may be required. The Trustee has taken a prudent approach to possible future improvements in longevity to help mitigate this risk.
Solvency Risk	As the funding target is not a solvency target, and the investment strategy does not follow that required for a solvency target, the assets of the Scheme may not be sufficient to provide all members with the full value of their benefits on a Scheme wind-up.
Inflation Risk	Some Scheme benefits are linked to inflation (RPI/CPI). If actual inflation is higher than expected or if future inflation expectation increases then additional contributions may be required at subsequent valuations.

Concentration of Assets

If the Scheme invests a significant proportion of its assets in one class of investments for example UK equities, or in one specific investment it is exposed to an increased risk from falls in that investment. This may reduce the level of funding and require additional contributions to correct. The Trustee has no such investment.

Self-Investment Risk

If the Scheme invests in the Employers in any form it is at risk that the value of this investment will fall if the Employers perform badly. This will coincide with the time the Employers are least able to make additional contributions to correct the situation. The Trustee does not invest in the Employers to help avoid this risk.

Member Option Risk

If members of the Scheme exercise options allowed by the Scheme on a scale which is sufficient to lead to an increase in costs, the Scheme funding position may worsen. Members who joined prior to 1 December 2009 have the right to retire at age 60. If all members chose to do so then costs would increase above those assumed. The Trustee investigates Scheme experience regularly to check on such trends.

Summary

The above list is not exhaustive but covers the main risks for the Scheme. Some of the risks can be reduced by adjusting the funding strategy, for example investment matching risk. Other risks cannot be removed, for example longevity risk, and the Trustee must be aware of these risks and monitor them closely.

Sensitivities

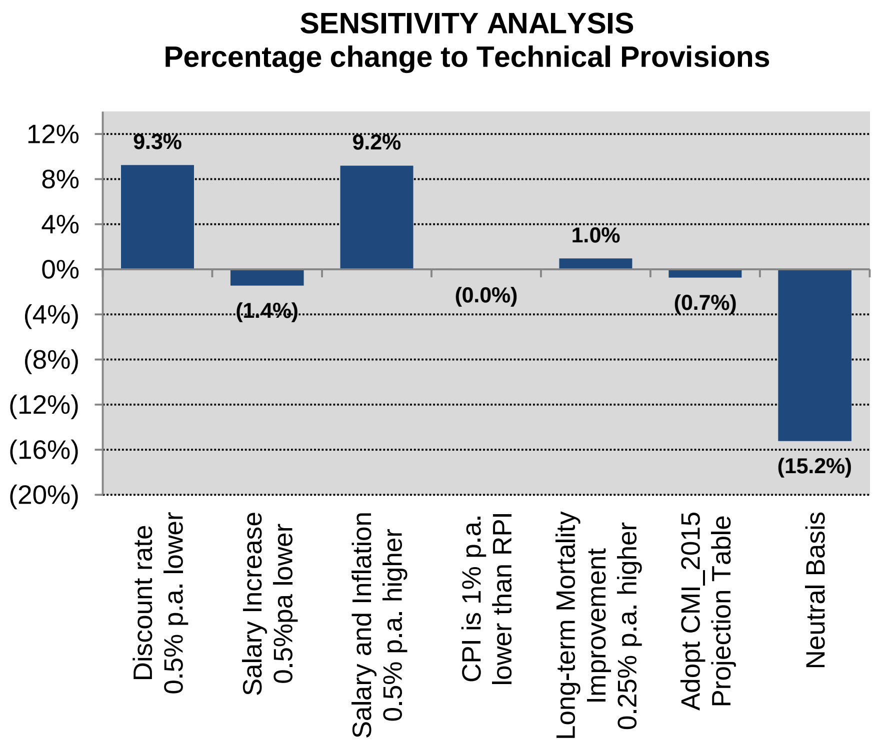
The risks discussed above can have a significant impact on the results of the valuation. For example, the financial assumptions that have the most significant effect on the results of the valuation relate to the investment return, the rate of increase in Pensionable Salaries and the rates of increase of pensions in payment or deferment. In addition, improving longevity can also result in increased Scheme liabilities.

The chart below shows the approximate percentage increase in the Scheme's funding objective liabilities if each of the financial assumptions was changed by the specified amount. The figures shown are for a guide only as the effects of changing the assumptions are interdependent.

We have also included a 'neutral' valuation assuming that margins for prudence are removed from the funding assumptions. This leads to the following main assumptions:

- Investment return of 7.0% p.a.
- Long term mortality improvement rate of 1% p.a.

The impact of these changes is to reduce the value of the liabilities by 15.2%.



The chart shows that the discount rate and inflation assumptions have the greatest impact on the size of the Scheme's liabilities. As a result, the Scheme's funding position is likely to deteriorate significantly if the Scheme's assets do not attain the real investment return of 2.7% p.a. assumed for Scheme funding.

7 Pension Protection Fund – Section 179 Valuation

Background

Since April 2005 the Scheme has been required to pay levies to the Pensions Protection Fund (PPF). The PPF provides a minimum level of benefit for members of pension schemes that wind-up in deficit.

In order to assess the appropriate levy the PPF require pension schemes to submit Section 179 valuations at least every three years. The Section 179 valuation requires the Scheme Actuary to value the PPF level of benefits using a method and assumptions defined by the PPF board, and detailed on their website.

Section 179 Position

		£000's
Value of benefits in respect of:		
Active Members		351,126
Deferred Pensioners		223,764
Current non insured Pensioners		298,610
Current insured Pensioners		732
Expenses of winding up		10,242
Expenses of benefit installation		9,957
Total Section 179 Liabilities	**[a]**	**894,431**
Market value of assets		551,094
Value of insured pensions		992
Total Value of Scheme Assets	**[b]**	**552,086**
Section 179 Surplus/(Deficit)	**[b-a]**	**(342,345)**
Level of Section 179 Funding	**[b/a]**	**62%**

Additional Information

Once these results have been finalised using the audited accounts they will need to be supplied to the Pensions Regulator and the PPF Board via the Pensions Regulator's online Exchange system. When submitting information on Exchange the following additional information is required:

S179 Guidance and Assumptions	
S179 Guidance used	G6
S179 Assumptions used	A7

Percentage of the assets shown above held in the form of a contract of insurance where this is not included in the asset value recorded in the relevant Scheme accounts : 0.2%

The percentage of liabilities shown above that are matched by insured annuity contracts for:

Active Members	0
Deferred Members	0
Pensioner Members	0.2%

The proportion of liabilities which relate to each period of service:

	Before 6 April 1997	6 April 1997 to 5 April 2009 (*)	On or after 6 April 2009
Active members	12%	45%	43%
Deferred Members	19%	65%	16%
Pensioners	49%	51%	

(*) to the valuation date for pensioners.

Number of members and averages ages:

	Number of members	Average age*
Active members	4,447	50
Deferred Members	3,494	46
Pensioners	2,949	69

*Average age (weighted by protected liabilities) as at the effective date of this valuation.

8 Solvency Position

Solvency

The figures in the previous Sections relate to Scheme funding on the funding objective. We have separately considered the solvency position, assuming that the Scheme was wound-up at the valuation date and members' accrued benefits were secured by the purchase of deferred and immediate annuity policies issued by an insurance company.

Assumptions

Insurance companies price deferred and immediate annuity policies by reference to the yields available on UK Government gilts. At the valuation date such investments were yielding approximately 2.5% per annum.

We have used the investment return assumptions underlying the PPF's Section 179 valuation basis as these are intended to be close to the assumptions used by insurance companies (albeit at the more competitive end of the range). I would regard this approach as appropriate for calculating the solvency position.

Other Economic and Demographic Assumptions

Demographic assumptions, such as mortality, are consistent with the PPF assumptions. Pension increases and revaluation rates are set with regard to long term gilt yields and appropriate index linked yields.

This approach is an estimate which should be used as a guide only. Market changes in both interest rates and the supply and demand for this business mean that no one estimate can be relied upon. The actual true position can only be established by completing a buy-out.

Expenses

We have included an estimate of the expenses associated with organising a wind-up equal to 1% of the liabilities. This is an estimate only. The true cost of winding-up the Scheme may be higher or lower than this estimate.

Summary

On this basis the solvency position of the Scheme at the valuation date is shown below. The equivalent position at the previous valuation is shown for comparison.

		Solvency Valuation £000's	Previous Solvency Valuation £000's
Value of benefits in respect of:			
Active Members		574,108	454,573
Deferred Pensioners		346,975	217,814
Current Pensioners		402,643	317,004
Expenses		13,237	9,894
Total Solvency Liabilities	**[a]**	**1,336,963**	**999,285**
Market Value of Scheme Assets	**[b]**	**551,094**	**377,169**
Solvency Surplus/(Deficit)	**[b-a]**	**(785,869)**	**(622,117)**
Level of Solvency Funding	[b/a]%	41%	38%

If the Scheme's funding objective had been met in full the level of solvency funding would have increased to 46%.

Changes since previous valuation

The solvency level has improved from 38% to 41%, although the size of the shortfall has increased.

Good investment returns and the payment of deficit funding contributions by the Employers have improved the position, but this has been offset by the fall in yields on index-linked gilts, which has acted to increase the cost of purchasing annuities.

Debt on Employer

Under current legislation if the Scheme were to be wound-up the deficit on the solvency basis would be imposed as a debt due from the Employers. If the Employers are unable to pay the debt in full, then the liabilities would be met in the order of priority set out in the Scheme's Trust Deed and Rules as overridden by the Pensions Act 1995 and subsequent Regulations.

Priority Order

The cover, on the solvency basis, of the Scheme benefits using the order of priority which would apply as at the date of signature of this report is as follows:

Liability	Cover
Expenses & Money Purchase Benefits	100%
Benefits provided by the Pensions Protection Fund	61%
Benefits in excess of those provided by the Pensions Protection Fund	0%

This table shows that at the valuation date the benefits provided by the Pensions Protection Fund (PPF) were not covered in full. Therefore at this date if the Scheme had wound up without a solvent employer it would have entered the PPF. This would have resulted in members' benefits being reduced below their full entitlements.

Expected Solvency level at next triennial valuation

Assuming that all actuarial assumptions in this Section are borne out in practice and that contributions are paid in accordance with the Schedule of Contributions, then I expect the solvency level to improve to around 42% by the date of the next valuation. The priority order is unlikely to materially change from that set out above.

9 Investment Strategy

Background

The Pensions Act 1995 requires the Trustee regularly to review its Statement of Investment Principles to ensure that it is consistent and compliant with Section 36 ("Choosing Investments"). We have therefore set out below some comments on the nature of the Scheme's liabilities to assist in this review.

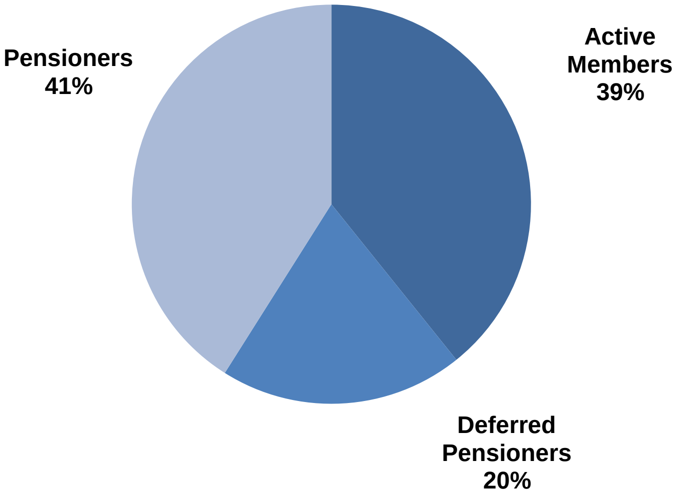
Asset Split

Appendix B provides details of the Scheme's assets at the valuation date. At that time approximately 83% of the assets were invested in equity, hedge funds and property assets, which provide unknown future returns. The remainder of the assets were invested in bonds and cash, which, if held until maturity, provide known returns assuming there are no defaults.

Liability Split

The chart below shows the breakdown of the Scheme's technical provisions by Member Category.

Technical Provisions by member categories



Equities, hedge funds and property are typically assumed to provide some level of out-performance, but their returns are volatile. Therefore, any scheme that includes assets of this type and/or uses investment return assumptions allowing for out-performance will experience a more volatile funding level.

In many schemes pensioner members are often matched by the scheme holding bonds because these provide a known return and their values will change in a similar way when interest rates change. The other scheme liabilities are backed by more volatile out-performance assets.

Comparison

Looking at the chart, the Scheme has a significant proportion (41%) of its liabilities directly related to pensioners. The Scheme assets are only 17% invested in bonds and cash and so this will increase the volatility of the funding level as the assets and liabilities will not change value in the same way.

Recommendation

There are a number of different funding measures the Scheme can match against in order to reduce risk with respect to the funding measure.

Alternatively, the Trustee might wish to accept a certain degree of mismatching in the expectation of higher investment returns. I understand that the Trustee have reviewed their investment policy and appreciate the risks associated with this element of mismatching. Given the great strength of the Employer covenant this does not appear to be an unreasonable approach.

Should the Trustee wish to move towards a more matched asset position then I recommend that they consider obtaining an asset liability report. This would help analyse their current investment strategy and determine alternative strategies to meet their objectives.

10 Conclusions

Funding Level, Contributions and Recovery Plan

Using the assumptions agreed for the calculations, the Scheme's funding level on the Statutory Funding Objective at the valuation date was 90%, equivalent to a deficit of £61,484,000. At the previous valuation the ongoing funding level was 74%.

The main reasons for the improvement are better than expected investment returns and deficit reduction contributions paid by the Employers.

The overall ongoing future joint contribution rate for future service benefits, ignoring the past service position, as a percentage of Pensionable Salaries is 14.6%. However, subject to the payment of the Deficit Reduction Contributions below, the Trustee and University have agreed to continue ongoing contributions at the current levels:

	Salary Sacrifice Members		Non Salary Sacrifice Members	
	Active Members	Employers	Active Members	Employers
	%	%	%	%
Pre-2013 Members paying additional contributions under Rule 45.6	Nil	20.0	8.5	11.5
Other Pre-2013 Members	Nil	16.5	5.0	11.5
Post-2013 Members	Nil	8.8	3.0	5.8

In addition to the above contributions, the Employers will pay £14,595,000 p.a. to pay off the Funding deficit for a period of 3 years and 6 months from the valuation date.

Solvency Level

The solvency position of the Scheme is a funding level of 41% at the valuation date. Contributions at the rates above are more than sufficient to fund the solvency basis. Consequently the above solvency position is expected to improve over the period to the next actuarial valuation.

PPF Section 179 Position

The PPF Section 179 position of the Scheme has been measured in line with the prescribed assumptions and benefits as laid down by the PPF Board. At the valuation date the Section 179 funding position was 62%.

This funding level is used by the PPF Board to help it determine the risk based portion of the PPF levy.

CETVs	As the Scheme has a surplus on the Neutral Basis, we recommend that CETVs continue to be paid in full.
Factors	The Scheme's commutation factors and other administrative factors should be reviewed following the valuation to reflect changing economic and demographic conditions.
Timescale and Future Valuation Requirements	The next triennial valuation is due to take place as at 31 July 2018. As this Scheme has more than 100 members, interim actuarial reports will be required as at 31 July 2016 and 31 July 2017. As this Scheme has a Recovery Plan, a summary of this valuation report plus copies of the Recovery Plan and Schedule of Contributions needs to be sent to TPR within 10 working days of this report being signed.

R J SWEET
Scheme Actuary
Fellow of the Institute and Faculty of Actuaries

26 February 2016

RJS/SC/ds/Jo

A Membership Data

The Scheme membership data was supplied by the Pensions Office on behalf of the Trustee. We have relied on the accuracy of the information provided.

The data used in the valuation is summarised below, the previous valuation data is summarised in brackets for comparison.

ACTIVE MEMBERS	**Males**	**Females**	**Total**
Number of Members	1,696 (1,344)	2,751 (2,299)	4,447 (3,643)
Total Pensionable Salary p.a.	£40,357,399 (£31,208,935)	£59,546,578 (£48,024,461)	£99,903,977 (£79,233,396)
Average Pensionable Salary p.a.	£23,796 (£23,221)	£21,645 (£20,889)	£22,465 (£21,749)
Average Pre 2013 past service (years)	6.8	4.8	5.6
Post 1 January 2013 Accrued pension p.a.	£843,047	£1,184,532	£2,027,579
Average age (unweighted)	42.6	42.1	42.3
Discounted Mean Term to Retirement (years)	10.9	11.6	11.3

Notes

1. The member numbers have been reconciled and confirmed with the Administration team. There are 4,455 active members stated in the audited accounts; the differences stem from timing issues with the data extractions.

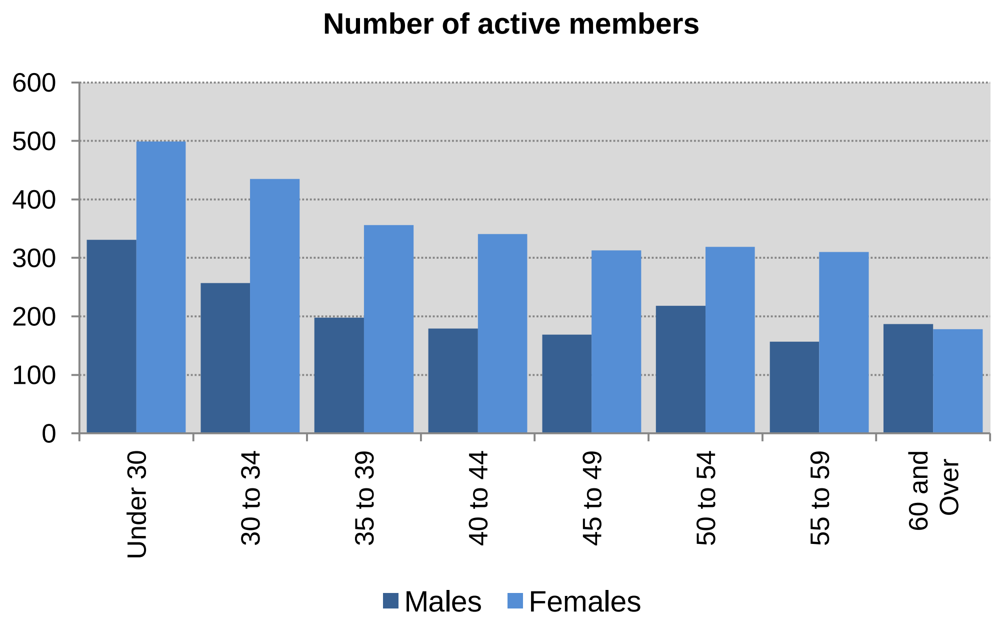
2. The figures for the previous actuarial valuation are shown in brackets where available.

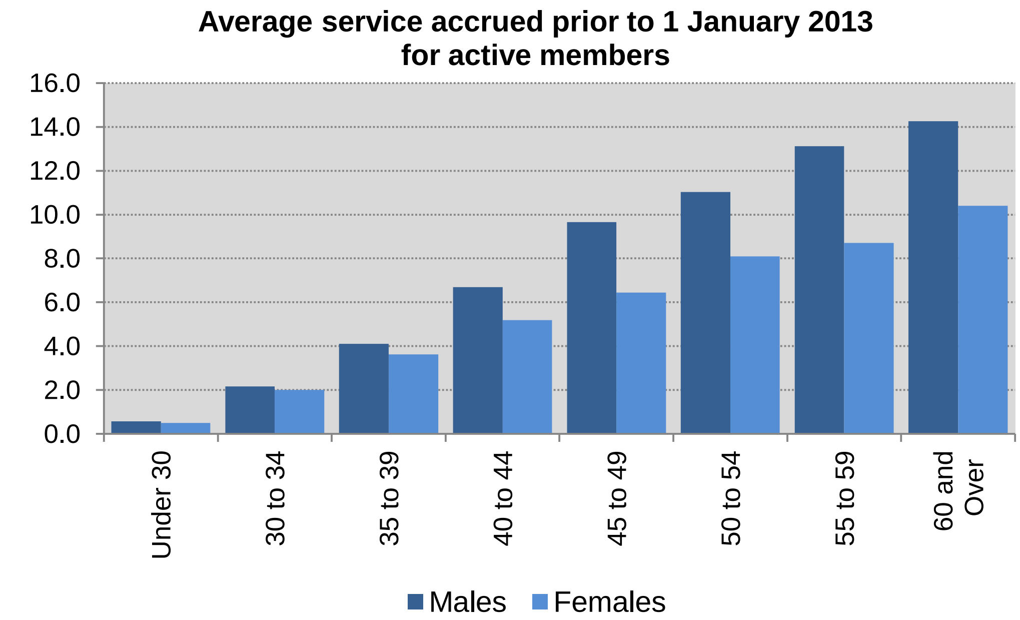
3. Included in these statistics are 365 active members who have not yet retired, but who have passed age 60.

4. Total Pensionable Salaries shown above are the actual salaries paid to members (i.e. not full time equivalent for part-timers) as provided to us by the Scheme's administrator.

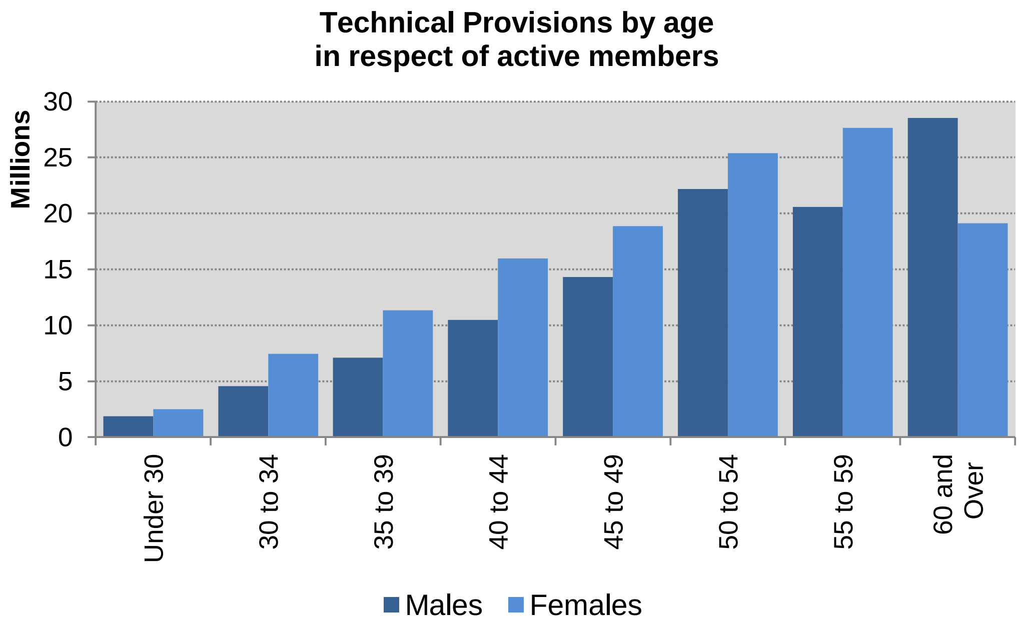
5. The Average Past Service is the full time equivalent past service for all members and is represented in the graph below. It includes transferred-in added years, augmentations and AVC added years where appropriate.

6. The discounted Mean Term to Retirement is the average term to the assumed retirement date, weighted by members' Technical Provisions.





Average service accrued prior to 1 January 2013
for active members
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Under 30
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 and Over
Males
Females

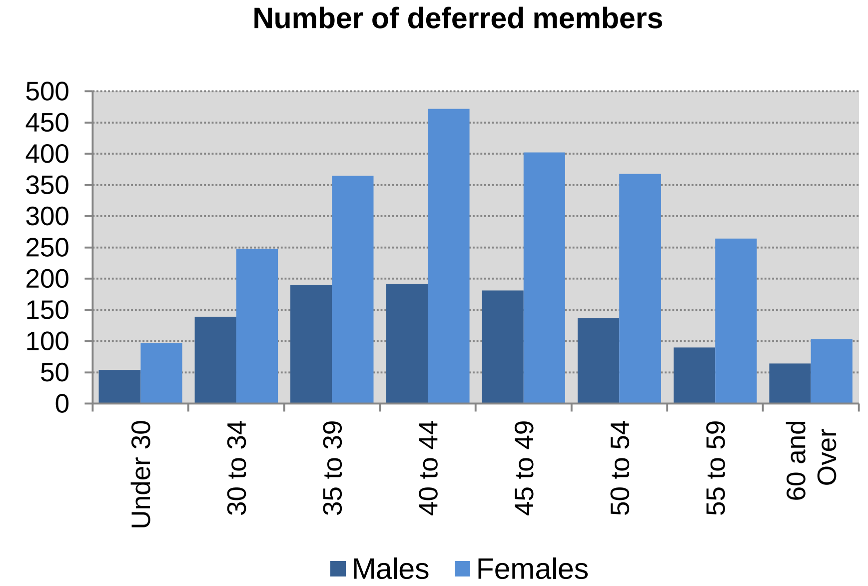


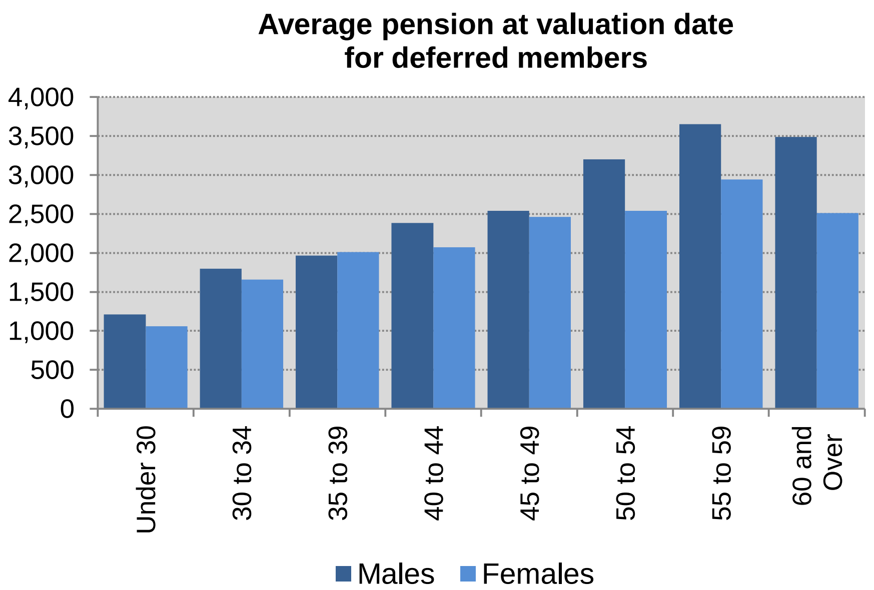
Technical Provisions by age
in respect of active members
Millions
30
25
20
15
10
5
0
Under 30
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 and Over
Males
Females

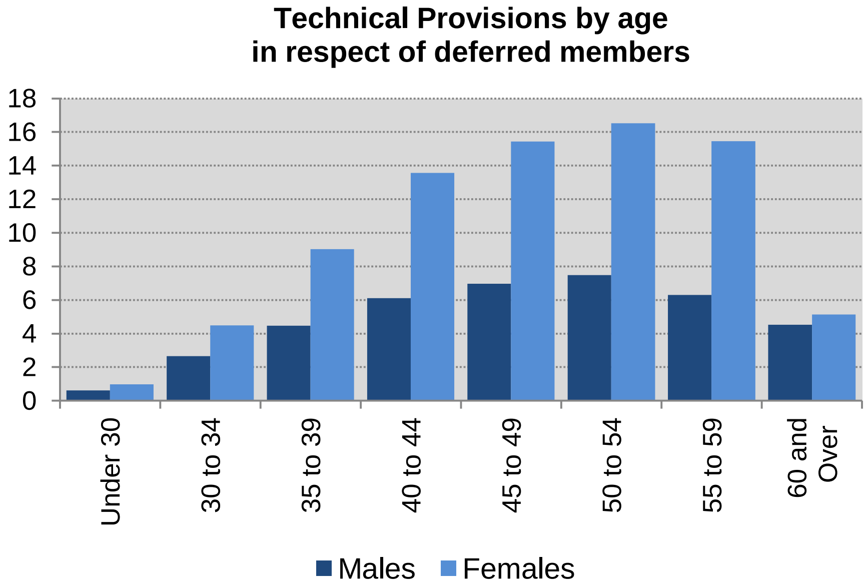
DEFERRED PENSIONERS	**Males**	**Females**	**Total**
Number	1,047 (920)	2,319 (1,984)	3,366 (2,904)
Total deferred pensions p.a. payable as at the valuation date	£2,596,986 (£2,143,272)	£5,186,087 (£3,947,110)	£7,783,073 (£6,090,383)
Average deferred pension p.a. payable as at valuation date	£2,480 (£2,330)	£2,236 (£1,989)	£2,312 (£2,097)
Average age (unweighted)	44.2	45.1	44.8
Discounted Mean Term to Retirement (years)	12.7	11.9	12.2

Notes

1. Member numbers have been reconciled and confirmed with the Administration team. There are 3,368 deferred members stated in the audited accounts; the differences stem from timing issues with the data extractions.
2. The figures for the previous actuarial valuation are shown in brackets where available.
3. Included in these statistics are 170 deferred pensioners who have not yet retired, but who have passed age 60.
4. The following graphs illustrate the current statistics in greater detail.
5. The discounted Mean Term to Retirement is the average term to the assumed retirement date weighted by members' Technical Provisions.
6. In addition to the above, there are 128 short service Pending Members who are due either a Refund of Contributions or Transfer Values, which we have valued accordingly.


Number of deferred members
500
450
400
350
300
250
200
150
100
50
0
Under 30
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 and Over
Males
Females


Average pension at valuation date for deferred members
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Under 30
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 and Over
Males
Females



Technical Provisions by age
in respect of deferred members
18
16
14
12
10
8
6
4
2
0
Under 30
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 and Over
Males
Females

PENSIONERS	**Males**	**Females**	**Total**
Number	1,138 (1,093)	1,811 (1,307)	2,949 (2,260)
Total pensions p.a. payable as at valuation date	£8,269,763 (£7,644,409)	£8,449,510 (£6,900,440)	£16,719,273 (£14,544,850)
Average pension p.a. payable at valuation date	£7,267 (£6,994)	£4,666 (£4,400)	£5,669 (£5,465)
Average age (unweighted)	71.8	71.2	71.4

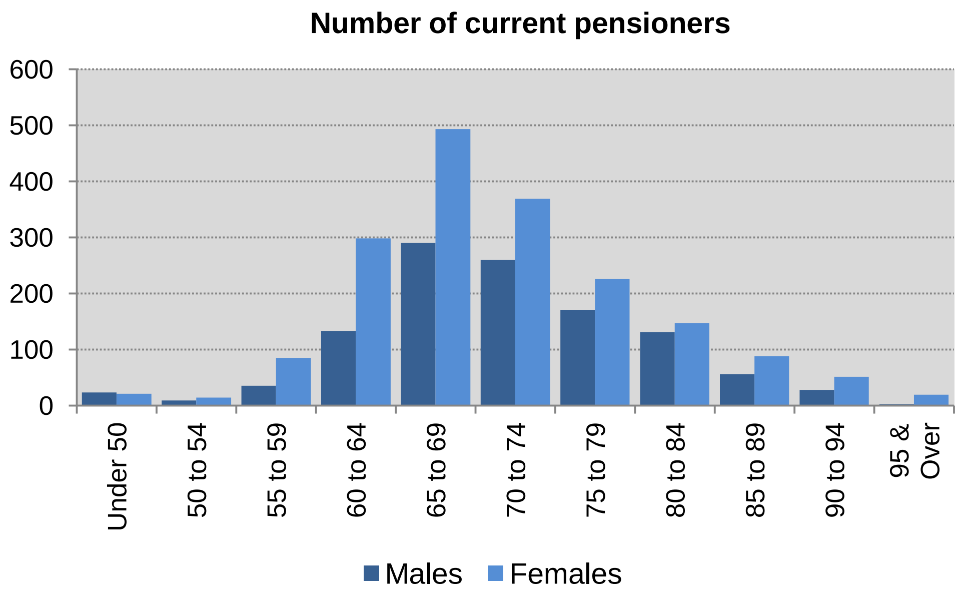
Notes

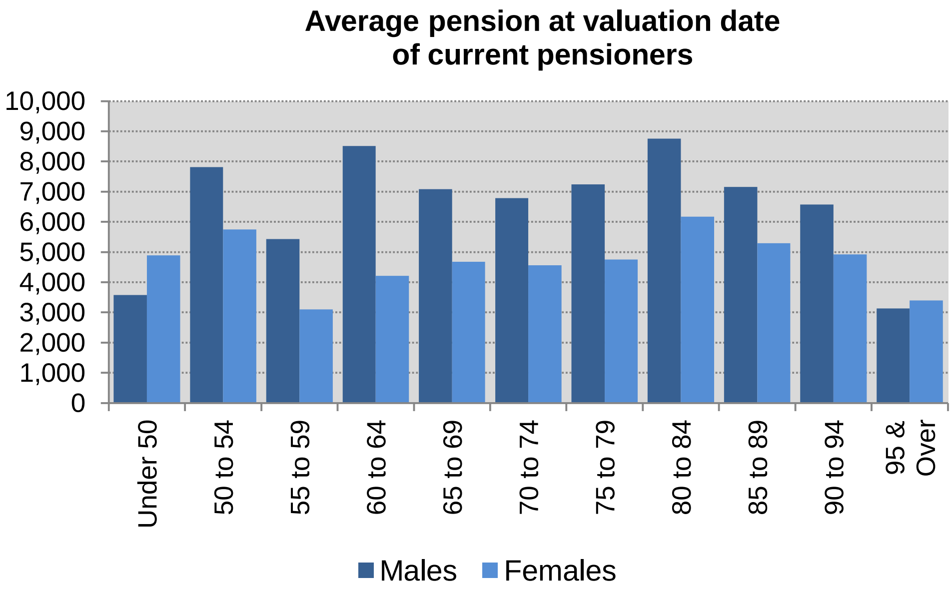
1. The pensioner numbers have been reconciled and agreed with the Administration team. There are 2,950 pensioners stated in the audited accounts; the differences stem from timing issues with the data extractions.

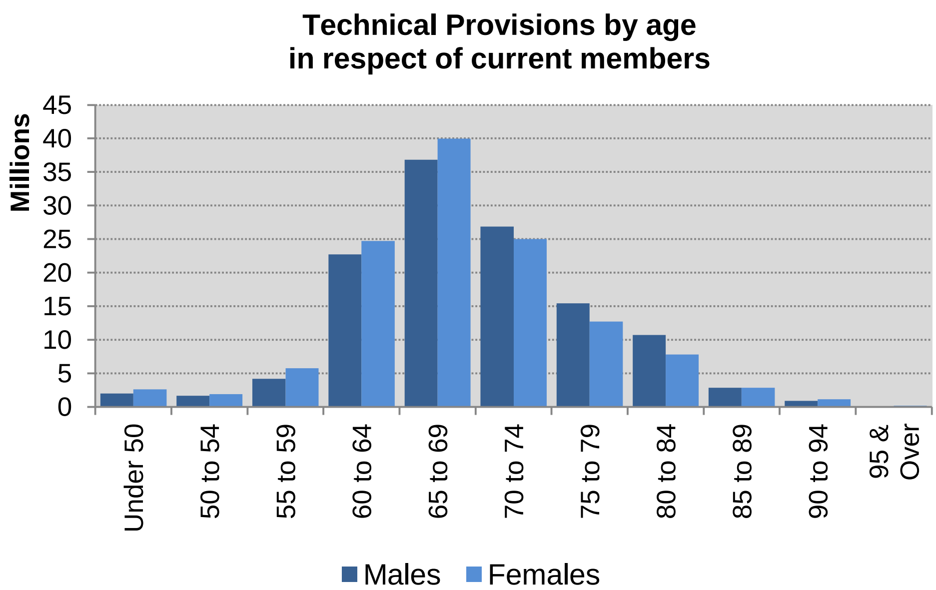
2. The figures for the previous actuarial valuation are shown in brackets where available.

3. There are 408 dependant pensioners included in the above statistics and 15 children. Two of the dependants are former children treated as dependants because of their financial dependency.

4. The following graphs illustrate the current statistics in greater detail.




Average pension at valuation date
of current pensioners
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Under 50
50 to 54
55 to 59
60 to 64
65 to 69
70 to 74
75 to 79
80 to 84
85 to 89
90 to 94
95 & Over
Males
Females


Technical Provisions by age
in respect of current members
Millions
45
40
35
30
25
20
15
10
5
0
Under 50
50 to 54
55 to 59
60 to 64
65 to 69
70 to 74
75 to 79
80 to 84
85 to 89
90 to 94
95 & Over
Males
Females

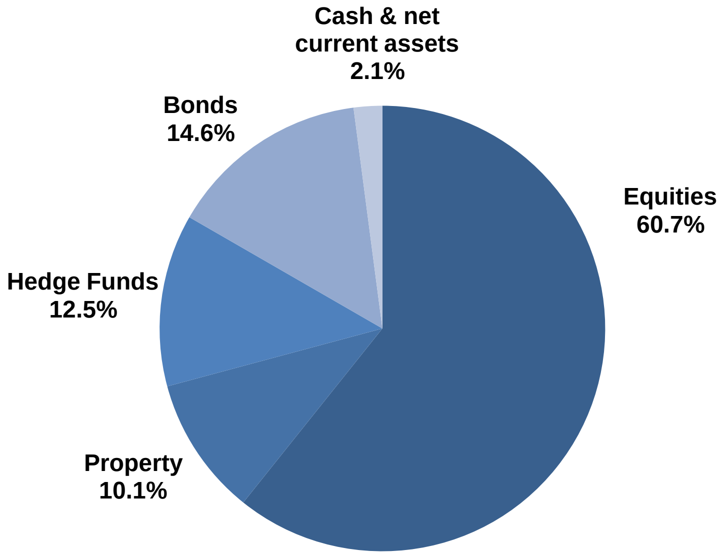
B Scheme Assets

The audited Scheme accounts and a split of the assets provided by the Pensions Office, show that the Scheme held the following assets as at 31 July 2015:

Market Value of Scheme Assets	Amount £	Percentage of Total Assets %
Equities		
State Street Global Advisers	250,697,397	45.5
Majedie	59,778,971	10.8
Genesis	24,047,675	4.4
Property		
Kames	55,542,598	10.1
Bonds		
Payden and Rygel	50,060,502	9.1
Credit Suisse	30,388,385	5.5
Hedge Funds		
Och Ziff	28,354,647	5.1
Blackrock	40,809,169	7.4
Cash & Net Current Assets	11,415,132	2.1
Total	**551,094,475**	**100.0**

The chart below shows the breakdown of the assets by asset class.

Asset Split by Class



C

Summary of Benefits and Member Contributions

For Scheme Service accrued prior to 1 January 2013

1. Normal Pension Age (NPA)	The NPA for all members is 65, although all members may retire at any time after age 60 and receive an immediate unreduced pension.
2. Pensionable Salary	Basic salary plus any allowances that have been determined to be pensionable by the Employer. It is the amount notified to the Trustee by the Employer which would have applied had the Member not been in the Salary Sacrifice Arrangement.
3. Final Pensionable Salary	The greatest of: • Pensionable Salary for the last 12 months • Best indexed Pensionable Salary in the 12 month period starting 3 years before retirement, termination or death • Highest indexed average of 3 years Pensionable Salaries in the last 13 years preceding retirement, termination or death • Pensionable Salary in the 12 months ending 3 years before retirement, termination or death – no indexation • Pensionable Salary in the 12 months ending 4 years before retirement, termination or death – no indexation.
4. Pensionable Service	Pensionable Service is composed of: • the number of years and days contributory membership of the Scheme with a Participating Employer; plus • the number of years and days service, if any, granted in respect of a transfer value paid to the Scheme; plus • the number of years and days service, if any, granted in respect of AVCs.
5. Normal Retirement Pension	At NPA an annual pension of: 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service.

6.	Early Retirement Pension in Normal Health	Members may retire after age 55 with the consent of the Employer and the Trustee. <u>All members retiring at or after age 60:</u> 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service. <u>All members retiring between age 55 and 60:</u> 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service, reduced by an actuarial factor depending on the period to age 60.
7.	Exchange of pension for cash	Part of the above pension may be exchanged for a tax free cash lump sum, subject to HM Revenue & Customs limits.
8.	Benefits on Death after Retirement	• The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum <u>plus</u> • A spouse's pension of two thirds of the member's pension at the date of death before any exchange of pension for cash <u>plus</u> • A funeral grant of £2,500. This is payable net of any tax liability if the member is over age 75 at date of death and retired on or after 6 April 2006.
9.	Increases to Pensions in payment	The increase in the Retail Prices Index (RPI) in the year ending each May, applied at 1 August, subject to a maximum of 12% per annum. Any increase above 12% in any year would be at the discretion of the Managing Committee of the Scheme. If the RPI is below 3% in any year, an increase of more than RPI up to a maximum of 3% could be paid at the discretion of the Managing Committee.

For a Member who joins the Scheme on or after 1 December 2009 and a Former Member who rejoins the Scheme on or after that date, the benefit provisions are the same as the above benefits except where set out separately below:

1.	Normal Pension Age (NPA)	The NPA is 65.
2.	Normal Retirement Benefits	At NPA an annual pension of: **1/80th** of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service. plus **A cash lump sum of 3/80th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service.**
3.	Early Retirement Benefits in Normal Health	Members may retire after age 55 with the consent of the Employer and the Trustee. The benefits provided to the Member are a pension of **1/80th** of Final Pensionable Salary **plus a lump sum of 3/80ths of Final Pensionable Salary** for each year (and proportionately for days) of Pensionable Service, in both cases reduced by an actuarial factor depending on the period to age 65.
4.	Benefits on Death after Retirement	• The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum plus • A spouse's pension of **one half** of the member's pension at the date of death before any exchange of pension for cash plus • A funeral grant of £2,500. This is payable net of any tax liability if the member is over age 75 at date of death and retired on or after 6 April 2006.

For Scheme Service accrued on and after 1 January 2013

With effect from 1 January 2013 a new benefit structure has applied to both existing members and those joining the Scheme on or after that date. The Scheme now has 3 different groups of members:

- UNI 1 - Members who joined before 1 December 2009
- UNI 2 - Members who joined after 30 November 2009 and before 1 January 2013
- UNI 3 – Members who join on or after 1 January 2013

Benefits accruing on and after 1 January 2013 are a Career Average Revaluing Earnings pension. It is referred to in the Rules as "CRB Pension".

UNI 1

1. Normal Pension Age (NPA)	The NPA is 65, but benefits can be drawn unreduced from age 63 onwards Members have the option to pay an additional contribution of 3½% of Pensionable Salary if they wish to draw benefits without reduction from age 60. These members are referred to as UNI4 members.
2. Scheme Year	A period of 12 months ending on 31 July
3. Annual CRB Pension	At NPA an annual pension received by Members whilst in the Pensionable Service in the relevant Scheme Year: **1/95th** of Pensionable Salary in relation to each Scheme Year ending on or before 31 July 2017 **1/95th** up to 1 January 2018 and **1/100th** between 1 January 2018 and 31 July 2018 of Pensionable Salary in relation to the Scheme Year ending 31 July 2018 **1/100th** of Pensionable Salary in relation to each Scheme Year ending on or after 31 July 2019. plus A cash lump sum of 3 times the Annual CRB Pensions for each Scheme Year.
4. CRB Revaluation Percentage	The lesser of 5% per annum and the annual rate of the increase in the Retail Prices Index in the 12 months to the previous May in respect of the relevant Scheme Year
5. CRB Pension Increase in payment	The lesser of 5% per annum and the annual rate of the increase in the Retail Prices Index in the 12 months to the previous May.
6. Early Retirement Benefits in Normal Health	Members may retire after age 55 with the consent of the Employer and the Trustee. Actuarial reduction will apply.

7. Benefits on Death after Retirement	• The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum plus • A spouse's pension of **75%** of the member's pension at the date of death before any exchange of pension for cash
8. Benefits on Death in Service	• A lump sum of 4 **times** annual salary at the date of death plus • A spouse's pension of **75%** of the member's CRB pensions that the member would have accrued to the Normal Pension Date. plus • A child's pension of 25% of the spouse's pension for each child, (up to a maximum of **two**) while below age 18 or, if later, receiving full time education to a maximum of age 23. The total of all the spouse's and children's pensions may not exceed the member's prospective pension.
9. Benefits on Termination of Service	(i) If the member has completed less than 2 years of Qualifying Service, he/she will be entitled to a Short Service Benefit. (ii) If the member has completed 2 or more years Qualifying Service, he/she will be entitled to a CRB Pension accrued to the date of leaving. The benefits will revalue between termination and NRA in line with the CRB Revaluation Percentage.
10. Member Contribution	5% of Pensionable Salary

UNI 2

1. Normal Pension Age (NPA)	The NPA is **65**.
2. Scheme Year	A period of 12 months ending on 31 July
3. Annual CRB Pension	At NPA an annual pension received by Members whilst in the Pensionable Service in the relevant Scheme Year: **1/95th** of Pensionable Salary in relation to each Scheme Year ending on or before 31 July 2017

1/95th up to 1 January 2018 and **1/100th** between 1 January 2018 and 31 July 2018 of Pensionable Salary in relation to the Scheme Year ending 31 July 2018

1/100th of Pensionable Salary in relation to each Scheme Year ending on or after 31 July 2019.

plus
A cash lump sum of 3 times the Annual CRB Pensions for each Scheme Year.

4. CRB Revaluation Percentage	The lesser of 5% per annum and the annual rate of the increase in the Retail Prices Index in the 12 months to the previous May in respect of the relevant Scheme Year
5. CRB Pension Increase in payment	The lesser of 5% per annum and the annual rate of the increase in the Retail Prices Index in the 12 months to the previous May.
6. Early Retirement Benefits in Normal Health	Members may retire after age 55 with the consent of the Employer and the Trustee. Actuarial reduction will apply.
7. Benefits on Death after Retirement	• The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum plus • A spouse's pension of **50%** of the member's pension at the date of death before any exchange of pension for cash
8. Benefits on Death in Service	• A lump sum of **3 times** annual salary at the date of death plus • A spouse's pension of **50%** of the member's CRB pensions that the member would have accrued to the Normal Pension Date. plus • A child's pension of 25% of the spouse's pension for each child, (up to a maximum of **two**) while below age 18 or, if later, receiving full time education to a maximum of age 23. The total of all the spouse's and children's pensions may not exceed the member's prospective pension.

9.	Benefits on Termination of Service	(i) If the member has completed less than 2 years of Qualifying Service, he/she will be entitled to a Short Service Benefit. (ii) If the member has completed 2 or more years Qualifying Service, he/she will be entitled to a CRB Pension accrued to the date of leaving. The benefits will revalue between termination and NRA in line with the CRB Revaluation Percentage.
10.	Member Contribution	5% of Pensionable Salary

UNI 3

1.	Normal Pension Age (NPA)	The NPA is **65**.
2.	Scheme Year	A period of 12 months ending on 31 July
3.	Annual CRB Pension	At NPA an annual pension received by Members whilst in the Pensionable Service in the relevant Scheme Year: **$1/150^{th}$** of Pensionable Salary in relation to each Scheme Year. plus A cash lump sum of 3 times the Annual CRB Pensions for each Scheme Year.
4.	CRB Revaluation Percentage	The lesser of 5% per annum and the annual rate of the increase in the **Consumer Prices Index** in the 12 months to the previous May in respect of the relevant Scheme Year
5.	CRB Pension Increase in payment	The lesser of 5% per annum and the annual rate of the increase in the **Consumer Prices Index** in the 12 months to the previous May.
6.	Early Retirement Benefits in Normal Health	Members may retire after age 55 with the consent of the Employer and the Trustee. Actuarial reduction will apply.
7.	Benefits on Death after Retirement	• The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum plus • A spouse's pension of **50%** of the member's pension at the date of death before any exchange of pension for cash

8	Benefits on Death in Service	• A lump sum of **5 times** annual salary at the date of death <u>plus</u> • A spouse's pension of **50%** of the member's CRB pensions that the member would have accrued to the Normal Pension Date. <u>plus</u> • A child's pension of 25% of the spouse's pension for each child, (up to a maximum of **two**) while below age 18 or, if later, receiving full time education to a maximum of age 23. The total of all the spouse's and children's pensions may not exceed the member's prospective pension.
9.	Benefits on Termination of Service	(i) If the member has completed less than 2 years of Qualifying Service, he/she will be entitled to a Short Service Benefit. (ii) If the member has completed 2 or more years Qualifying Service, he/she will be entitled to a CRB Pension accrued to the date of leaving. The benefits will revalue between termination and NRA in line with the CRB Revaluation Percentage.
10.	Member Contribution	**3%** of Pensionable Salary

D Statement of Funding Principles

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Status	This statement was prepared by C U Pension Trustee Limited ("the Trustee"), acting as Trustee of the Scheme, for the purposes of the actuarial valuation as at 31 July 2015 after taking advice from Robert Sweet of Cartwright Group Limited, the current Actuary to the Scheme. It replaces an earlier version dated 26 April 2013 prepared for the actuarial valuation as at 31 July 2012.
Statutory Funding Objective	This statement sets out the Trustee's policy for securing that the statutory funding objective is met. The statutory funding objective is defined in Section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover its technical provisions.
Technical Provisions – Method	The actuarial method used in the calculation of the technical provisions is the Projected Unit Method.

Technical Provisions - Assumptions

The following sets out the principles behind setting the actuarial assumptions for the funding of the Scheme.

Discount Rate (also referred to as "interest rate")

Technical provisions are determined using a single rate of interest for all pre and post retirement benefits.

On retirement, Members' pensions are paid from the fund. Assets providing a risk free rate of return, such as Government bonds (gilts) provide a good match for pensions in payment.

The Trustee invests in a wide range of assets including equities and property, which are expected to give long term returns in excess of those available on gilts. The Trustee wishes to take credit for some of this out-performance and to that end will use an interest rate of Retail Price Inflation (RPI, as defined below) plus a margin of **up to 4% pa** to allow for this expected out-performance. The Trustee has determined that for the purposes of the calculations as at 31 July 2015 the margin to be adopted is 2.7% p.a.

Pension increases in deferment

For all pension earned prior to 2013, the Trustee's main revaluation assumption is set to be the same as the assumption for future increases in the Retail Prices Index (RPI).

The Retail Prices Index (RPI) assumption will be determined at the valuation date based on the Bank of England spot yield at a point consistent with the duration of the Scheme liabilities. This rate will be rounded to the nearer 0.05% p.a. At this valuation the weighted duration of the liabilities has been calculated as 19 years, and the spot yield at the valuation date is 3.40% p.a. The RPI assumption is therefore 3.40% p.a.

There is also a revaluation underpin based on statutory revaluation. Statutory revaluation on the pension in excess of any GMP is in line with increases in the Consumer Prices Index (CPI). The Trustee has agreed that this assumption should be equal to the assumption for future RPI increases less 0.7% p.a.

For pension earned on or after 1 January 2013, increases to pensions accrued in service and after leaving service are to be calculated by reference to the RPI (or CPI for joiners on or after 1 January 2013) capped at a maximum of 5% p.a. compound.

Salary Increases

Pay increases are expected to exceed RPI increases by up to 1.5% p.a. compound. This relationship with RPI is monitored for accuracy and may be subject to change in future valuations.

Pension increases in payment

Pension increases in payment are defined in the Rules.

Pensions earned prior to 2013 increase in line with the RPI up to a maximum of 12% p.a. compound.

For pensions earned on or after 1 January 2013:

For Pre 2013 joiners, pensions increase in line with the RPI up to a maximum of 5% p.a. compound.

For joiners on or after 1 January 2013, pensions increase in line with CPI up to a maximum of 5% p.a. compound.

For all pension increases the Trustee will use the same assumption as that used for RPI/CPI above up to the maximum.

Mortality

It is the intention of the Trustee to use both pre- and post-retirement mortality tables that reflect as much as possible, actual Scheme experience with a suitable allowance for likely mortality improvements over the medium to long term.

Currently the Trustee is using S2 base tables produced by the Continuous Mortality Investigation Bureau based upon mortality experience of Self Administered Pension Schemes centred on 2007 but then projected to allow for subsequent improvements in longevity.

After carrying out a mortality investigation on Scheme experience on data up to 31 July 2008 the Actuary recommended and the Trustee agreed to adjust the SAPS "Light" base tables for males and females by 125% and 95% respectively. The S2LPA base table has been used for the 2015 valuation.

In addition, the Actuary recommended and the Trustee agreed to make allowance for future longevity improvements using the CMI 2014 projection table, with long term rates of improvement of 1.25% p.a.

These tables and adjustments are subject to regular review and will be updated in future valuations as more up-to-date data becomes available.

New Entrants

The Scheme is open to new entrants. The Trustee does not allow explicitly for new entrants. However, by adopting the Projected Unit Method, to give a stable normal contribution rate, they are implicitly assuming that the active membership average age remains relatively constant – i.e. that new entrants will continue to join the Scheme.

Commutation

On retirement, no allowance is made for Members who commute part of their pension for a cash lump sum at retirement.

Leaving Service

The Scheme is relatively large; as it is prudent to assume that no-one leaves early, the Trustee therefore makes no allowance for early leavers. Any members leaving early are likely to release a surplus from the Scheme; this will be used to reduce future contribution rates when appropriate.

Retirement

The Scheme Normal Retirement Age is 65 although members who joined prior to 1 December 2009 have the right to retire without actuarial reduction at age 60. The Trustee wishes to fund benefits to the average expected age of retirement of such members.

Investigations of the pattern of retirements between 2003 and 2008 (investigated as at 31 July 2008) suggest that, on average, Active males currently retire at age 63 and females retire at age 61, whilst Deferred males retire at age 61 and females retire at age 60.

These average retirement ages will be reviewed by the actuary at each subsequent triennial valuation to ensure that they remain in line with actual Scheme experience.

Members who joined on or after 1 December 2009 are assumed to retire at age 65.

Age Difference of Dependants

Husbands are assumed to be 3 years' older than their wives.

Percentage with Dependant's Benefits at Death

85% of male and female members are assumed to be married at death.

Expenses

Expenses of administering the Scheme are borne by the Scheme. Part of the expenses relates to past service and part relates to current and future service.

The Trustee's policy is for the actuary to review the allowance for expenses at each valuation and make a recommendation for both elements.

The current assumption is for a past service reserve of 1% of the Technical Provisions and a future allowance of 0.9% of Pensionable Salaries (including an allowance of 0.5% to meet PPF levies). This is to cover all expenses and levies of administering the Scheme.

Policy on Discretionary Increases and Funding Strategy

In the past when RPI has been less than 3% p.a. the Trustee has reviewed the pension increase to be paid and has increased it, on occasion, at up to 3% p.a. The current policy is not to fund for increases in excess of RPI, but to review the cost in such years when this situation occurs and decide on whether the Scheme and/or the Employers can afford the additional increase.

Period within which and manner in which a failure to meet the statutory funding objective is to be rectified	The Trustee and the University have agreed that any funding shortfalls identified at an actuarial valuation should be eliminated as quickly as the Employers can reasonably afford by the payment of additional contributions. In determining the actual recovery period at any particular valuation the Trustee's principles are to take into account the following factors: • the size of the funding shortfall; • the business plans of the University and other Employers; • the Trustee's assessment of the financial covenant of the University and other Employers (and in making this assessment the Trustee will make use of appropriate credit assessment providers); and • any contingent security offered by the University and other Employers. The assumptions to be used in calculating the additional contributions required will be those set out above for calculation of the Technical Provisions, except that the expected rate of return (the return on existing assets and on new contributions during the period of the Recovery Plan) may be set at a higher rate than the discount rate. For the purposes of the Recovery Plan the Trustee has decided that the appropriate expected rate of return is 0.9% p.a. higher than the prudent discount rate, i.e. 7.0% p.a.
Arrangements by a person other than the University or a Scheme member to contribute to the Scheme	No such arrangements exist.
Policy on reduction of cash equivalent transfer values (CETVs)	The Trustee asks the Scheme Actuary to advise them at each valuation of the extent to which assets are sufficient to provide CETVs for all non pensioners without adversely affecting the security of the benefits of other members and beneficiaries. If at any time, after obtaining advice from the Scheme Actuary, the Trustee are of the opinion that the payment of CETVs at a previously agreed level may adversely affect the security of the benefits of other members and beneficiaries, the Trustee will commission a report from the Scheme Actuary to decide whether, and to what extent, CETVs should be reduced.

Payments to the University

If the Scheme is not being wound up and the assets of the Scheme exceed the estimate by the Scheme Actuary of the cost of buying out the benefits of all beneficiaries from an insurance company, including the expenses of doing so, the University may receive a payment of the excess. If the Scheme Actuary certifies that the requirements of the Pensions Act 2004 have been met and certifies the maximum amount that may be paid, the Trustee will consider whether a payment would be in the interest of the members, and if so, the Trustee will give notice to the members of the proposal.

Frequency of valuations and circumstances for extra valuations

The Scheme's most recent actuarial valuation under Part 3 of the Pensions Act 2004 was carried out as at the effective date of 31 July 2015 and subsequent valuations will in normal circumstances be carried out every three years thereafter. An actuarial report on developments affecting the Scheme's funding level will be obtained as at each intermediate anniversary of that date.

The Trustee may call for a full actuarial valuation instead of an actuarial report when, after considering the Scheme Actuary's advice, they are of the opinion that events have made it unsafe to continue to rely on the results of the previous valuation as the basis for future contributions. However, the Trustee will consult with the University before doing so.

On behalf of the University of Cambridge ("the Principal Employer")

Signed ....

Name : A M Reid

Position : Director of Finance

Date : 26 February 2016

On behalf of CU Pension Trustee Limited ("the Trustee")

Signed ....

Name : H R Jacobs

Position : Director

Date : 26 February 2016

This Statement of Funding Principles has been agreed by the Trustee after obtaining my actuarial advice.

Signed	:	Robert. J. Sweet
Name	:	Robert Sweet
Position	:	Scheme Actuary
Date	:	26 February 2016

E Assumptions

The 2015 Funding Basis is based on Statutory Funding Objective and the Statement of Funding Principles adopted by the Trustee. The 2012 Funding Basis sets out the assumptions used in the previous valuation for comparison purposes.

Under the Code, when choosing the assumptions the Trustee is required to consider the factors particular to the Employers, or the Employers' industry, affecting matters such as pay increases, rate of withdrawal from membership and recruitment. The Trustee is satisfied that the chosen assumptions set out below are appropriate bearing in mind the above factors.

	Assumptions for valuation as at <u>31 July 2015</u> (% per annum compound)	**Assumptions for valuation as at <u>31 July 2012</u> (% per annum compound)**
<u>Economic</u>		
Investment Return:	6.1%	5.95%
Asset return for Recovery Plan:	7.0%	6.35%
Rate of salary increases:	4.9%	4.25%
Rate of increase to pensions in payment:		
• RPI related	3.4%	2.75%
• CPI related	2.7%	2.05%
Rate of increases to pensions in deferment:		
• GMP	4.9%	4.25%
• Pension in excess of GMP		
○ RPI	3.4%	2.75%
○ CPI	2.7%	2.05%

	Assumptions for valuation as at 31 July 2015 (% per annum compound)	Assumptions for valuation as at 31 July 2012 (% per annum compound)
Other		
Valuation of assets:	Surrender value of the assets	Surrender value of the assets
Expenses • past service	1.0% of the liability excluding expenses	1.0% of the liability excluding expenses
• future service	0.9% of Pensionable Salary This includes an allowance of 0.5% of Pensionable Salary to cover ongoing PPF levies	0.4% of Pensionable Salary
Death in Service Premiums:	Not applicable	Not applicable
Pension Protection Fund levy:	Included in the future service cost expenses	Included in the future service cost expenses

Demographic		
Rate of Mortality:	125% of S2LPA Pensioner Mortality tables for males and 95% of S2LPA Pensioner Mortality tables for females. Plus a projection based upon the CMI_2014 model with a long-term 1.25% p.a. improvement.	125% of S1LPA Pensioner Mortality tables for males and 95% of S1LPA Pensioner Mortality tables for females. Plus a projection based upon the CMI_2011 model with a long-term 1.25% p.a. improvement.
Assumed Age at Retirement:		
UNI 1 • Active members	Males 63 Females 61	Males 63 Females 61
• Deferred members	Males 61 Females 60	Males 61 Females 60
UNI 2 & UNI 3	Males 65 Females 65	Males 65 Females 65

Note that for solvency and PPF purposes most UNI1 benefits are valued to age 60, the earliest age at which they may be taken without consent or reduction.

	Assumptions for valuation as at 31 July 2015 (% per annum compound)	Assumptions for valuation as at 31 July 2012 (% per annum compound)
Proportion Married:	85%	85%
Age Difference:	Women 3 years younger than their partner	Women 3 years younger than their partner
Withdrawal rates	No allowance	No allowance
Member Options:	No allowance	No allowance

F Actuary's Certification of the Calculation of Technical Provisions

Name of Scheme: **Cambridge University Assistants' Contributory Pension Scheme**

Calculation of Technical Provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 31 July 2015 is made in accordance with regulations under Section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Scheme and set out in the Statement of Funding Principles dated 26 February 2016.

Signed :	Robert. J. Sweet	Date:	26 February 2016
Name :	Robert J Sweet	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address :	Mill Pool House Mill Lane Godalming Surrey GU7 1EY	Employer	Cartwright Group Ltd

G Glossary

Actuarial Report

Introduced by the Pensions Act 2004, this is a written report, prepared and signed by the Scheme Actuary, on developments affecting the Scheme's Technical Provisions since the last actuarial valuation. It must also include an assessment of changes in the value of the Scheme's assets.

Actuarial Valuation

Defined by the Pensions Act 2004 as a written report, prepared and signed by the Scheme Actuary, valuing the Scheme's assets and calculating its Technical Provisions.

Code of Practice 3 – Funding Defined Benefit Schemes

This is a written document dated July 2014 setting out the Pension Regulator's guidance and standards of conduct for trustees with regard to funding their defined benefit pension scheme.

Planning Exercise (as defined in TAS R)

This involves the estimation of an amount for budgeting or target setting purposes. The setting of future service contribution rates and the calculation of Technical Provisions are an example of a Planning Exercise, as they help set the pace of Scheme funding.

Recovery Plan

Where a scheme has a deficit on the Statutory Funding Objective a Recovery Plan is needed to remove the deficit. The Plan should detail the period and means by which the deficit will be eliminated.

Schedule of Contributions

This is a written document detailing the contributions payable to the Scheme from the date of the Schedule for a period of 5 years or such longer period as the Recovery Plan applies. The contributions on the Schedule must be sufficient to ensure the Scheme's assets cover the Technical Provisions by the end of the period it covers.

Statement of Funding Principles

This is a document produced by the Trustee and agreed by the Employer. It sets out details of the method and assumptions to use to meet the Statutory Funding Objective as well as any other objectives the Trustee has and details of the Recovery Plan.

Statutory Funding Objective

Introduced by the Pensions Act 2004, this is the funding target the Scheme must meet. The assumptions chosen to calculate the target must be chosen in a prudent manner and reflect market conditions.

Technical Provisions

This is the name given to the Scheme's liabilities calculated using the method and assumptions set out in the Statement of Funding Principles. The Trustee and the Employers should aim to fund 100% of the Scheme's Technical Provisions.

Valuation Exercise (as defined in TAS R)

This involves the quantification of an amount for recording in a formal document, for example the calculation of the Solvency liabilities in this report.

Statement of Funding Principles

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Status	This statement was prepared by C U Pension Trustee Limited ("the Trustee"), acting as Trustee of the Scheme, for the purposes of the actuarial valuation as at 31 July 2015 after taking advice from Robert Sweet of Cartwright Group Limited, the current Actuary to the Scheme. It replaces an earlier version dated 26 April 2013 prepared for the actuarial valuation as at 31 July 2012.
Statutory Funding Objective	This statement sets out the Trustee's policy for securing that the statutory funding objective is met. The statutory funding objective is defined in Section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover its technical provisions.
Technical Provisions – Method	The actuarial method used in the calculation of the technical provisions is the Projected Unit Method.
Technical Provisions - Assumptions	The following sets out the principles behind setting the actuarial assumptions for the funding of the Scheme. **Discount Rate (also referred to as "interest rate")** Technical provisions are determined using a single rate of interest for all pre and post retirement benefits. On retirement, Members' pensions are paid from the fund. Assets providing a risk free rate of return, such as Government bonds (gilts) provide a good match for pensions in payment. The Trustee invests in a wide range of assets including equities and property, which are expected to give long term returns in excess of those available on gilts. The Trustee wishes to take credit for some of this out-performance and to that end will use an interest rate of Retail Price Inflation (RPI, as defined below) plus a margin of **up to 4% pa** to allow for this expected out-performance. The Trustee has determined that for the purposes of the calculations as at 31 July 2015 the margin to be adopted is 2.7% p.a.

Pension increases in deferment

For all pension earned prior to 2013, the Trustee's main revaluation assumption is set to be the same as the assumption for future increases in the Retail Prices Index (RPI).

The Retail Prices Index (RPI) assumption will be determined at the valuation date based on the Bank of England spot yield at a point consistent with the duration of the Scheme liabilities. This rate will be rounded to the nearer 0.05% p.a. At this valuation the weighted duration of the liabilities has been calculated as 19 years, and the spot yield at the valuation date is 3.40% p.a. The RPI assumption is therefore 3.40% p.a.

There is also a revaluation underpin based on statutory revaluation. Statutory revaluation on the pension in excess of any GMP is in line with increases in the Consumer Prices Index (CPI). The Trustee has agreed that this assumption should be equal to the assumption for future RPI increases less 0.7% p.a.

For pension earned on or after 1 January 2013, increases to pensions accrued in service and after leaving service are to be calculated by reference to the RPI (or CPI for joiners on or after 1 January 2013) capped at a maximum of 5% p.a. compound.

Salary Increases

Pay increases are expected to exceed RPI increases by up to 1.5% p.a. compound. This relationship with RPI is monitored for accuracy and may be subject to change in future valuations.

Pension increases in payment

Pension increases in payment are defined in the Rules.

Pensions earned prior to 2013 increase in line with the RPI up to a maximum of 12% p.a. compound.

For pensions earned on or after 1 January 2013:

For Pre 2013 joiners, pensions increase in line with the RPI up to a maximum of 5% p.a. compound.

For joiners on or after 1 January 2013, pensions increase in line with CPI up to a maximum of 5% p.a. compound.

For all pension increases the Trustee will use the same assumption as that used for RPI/CPI above up to the maximum.

Mortality

It is the intention of the Trustee to use both pre- and post-retirement mortality tables that reflect as much as possible, actual Scheme experience with a suitable allowance for likely mortality improvements over the medium to long term.

Currently the Trustee is using S2 base tables produced by the Continuous Mortality Investigation Bureau based upon mortality experience of Self Administered Pension Schemes centred on 2007 but then projected to allow for subsequent improvements in longevity.

After carrying out a mortality investigation on Scheme experience on data up to 31 July 2008 the Actuary recommended and the Trustee agreed to adjust the SAPS "Light" base tables for males and females by 125% and 95% respectively. The S2LPA base table has been used for the 2015 valuation.

In addition, the Actuary recommended and the Trustee agreed to make allowance for future longevity improvements using the CMI 2014 projection table, with long term rates of improvement of 1.25% p.a.

These tables and adjustments are subject to regular review and will be updated in future valuations as more up-to-date data becomes available.

New Entrants

The Scheme is open to new entrants. The Trustee does not allow explicitly for new entrants. However, by adopting the Projected Unit Method, to give a stable normal contribution rate, they are implicitly assuming that the active membership average age remains relatively constant – i.e. that new entrants will continue to join the Scheme.

Commutation

On retirement, no allowance is made for Members who commute part of their pension for a cash lump sum at retirement.

Leaving Service

The Scheme is relatively large; as it is prudent to assume that no-one leaves early, the Trustee therefore makes no allowance for early leavers. Any members leaving early are likely to release a surplus from the Scheme; this will be used to reduce future contribution rates when appropriate.

Retirement

The Scheme Normal Retirement Age is 65 although members who joined prior to 1 December 2009 have the right to retire without actuarial reduction at age 60. The Trustee wishes to fund benefits to the average expected age of retirement of such members.

Investigations of the pattern of retirements between 2003 and 2008 (investigated as at 31 July 2008) suggest that, on average, Active males currently retire at age 63 and females retire at age 61, whilst Deferred males retire at age 61 and females retire at age 60.

These average retirement ages will be reviewed by the actuary at each subsequent triennial valuation to ensure that they remain in line with actual Scheme experience.

Members who joined on or after 1 December 2009 are assumed to retire at age 65.

Age Difference of Dependants
Husbands are assumed to be 3 years' older than their wives.

Percentage with Dependant's Benefits at Death
85% of male and female members are assumed to be married at death.

Expenses
Expenses of administering the Scheme are borne by the Scheme. Part of the expenses relates to past service and part relates to current and future service.

The Trustee's policy is for the actuary to review the allowance for expenses at each valuation and make a recommendation for both elements.

The current assumption is for a past service reserve of 1% of the Technical Provisions and a future allowance of 0.9% of Pensionable Salaries (including an allowance of 0.5% to meet PPF levies). This is to cover all expenses and levies of administering the Scheme.

Policy on Discretionary Increases and Funding Strategy

In the past when RPI has been less than 3% p.a. the Trustee has reviewed the pension increase to be paid and has increased it, on occasion, at up to 3% p.a. The current policy is not to fund for increases in excess of RPI, but to review the cost in such years when this situation occurs and decide on whether the Scheme and/or the Employers can afford the additional increase.

Period within which and manner in which a failure to meet the statutory funding objective is to be rectified	The Trustee and the University have agreed that any funding shortfalls identified at an actuarial valuation should be eliminated as quickly as the Employers can reasonably afford by the payment of additional contributions. In determining the actual recovery period at any particular valuation the Trustee's principles are to take into account the following factors: • the size of the funding shortfall; • the business plans of the University and other Employers; • the Trustee's assessment of the financial covenant of the University and other Employers (and in making this assessment the Trustee will make use of appropriate credit assessment providers); and • any contingent security offered by the University and other Employers. The assumptions to be used in calculating the additional contributions required will be those set out above for calculation of the Technical Provisions, except that the expected rate of return (the return on existing assets and on new contributions during the period of the Recovery Plan) may be set at a higher rate than the discount rate. For the purposes of the Recovery Plan the Trustee has decided that the appropriate expected rate of return is 0.9% p.a. higher than the prudent discount rate, i.e. 7.0% p.a.
Arrangements by a person other than the University or a Scheme member to contribute to the Scheme	No such arrangements exist.
Policy on reduction of cash equivalent transfer values (CETVs)	The Trustee asks the Scheme Actuary to advise at each valuation of the extent to which assets are sufficient to provide CETVs for all non pensioners without adversely affecting the security of the benefits of other members and beneficiaries. If at any time, after obtaining advice from the Scheme Actuary, the Trustee is of the opinion that the payment of CETVs at a previously agreed level may adversely affect the security of the benefits of other members and beneficiaries, the Trustee will commission a report from the Scheme Actuary to decide whether, and to what extent, CETVs should be reduced.

Payments to the University	If the Scheme is not being wound up and the assets of the Scheme exceed the estimate by the Scheme Actuary of the cost of buying out the benefits of all beneficiaries from an insurance company, including the expenses of doing so, the University may receive a payment of the excess. If the Scheme Actuary certifies that the requirements of the Pensions Act 2004 have been met and certifies the maximum amount that may be paid, the Trustee will consider whether a payment would be in the interest of the members, and if so, the Trustee will give notice to the members of the proposal.
Frequency of valuations and circumstances for extra valuations	The Scheme's most recent actuarial valuation under Part 3 of the Pensions Act 2004 was carried out as at the effective date of 31 July 2015 and subsequent valuations will in normal circumstances be carried out every three years thereafter. An actuarial report on developments affecting the Scheme's funding level will be obtained as at each intermediate anniversary of that date. The Trustee may call for a full actuarial valuation instead of an actuarial report when, after considering the Scheme Actuary's advice, they are of the opinion that events have made it unsafe to continue to rely on the results of the previous valuation as the basis for future contributions. However, the Trustee will consult with the University before doing so.

On behalf of the University of Cambridge ("the Principal Employer")

Signed ....

Name : A M Reid

Position : Director of Finance

Date : 26 February 2016

On behalf of CU Pension Trustee Limited ("the Trustee")

Signed ....

Name : H R Jacobs

Position : Director

Date : 26 February 2016

This Statement of Funding Principles has been agreed by the Trustee after obtaining my actuarial advice.

Signed : Robert. J. Sweet

Name : Robert Sweet

Position : Scheme Actuary

Date : 26 February 2016

Schedule of Contributions

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Status	This Schedule of Contributions has been prepared by C U Pension Trustee Limited ("the Trustee" of the Scheme) on 26 February 2016, after obtaining the advice of Robert Sweet, the Actuary to the Scheme.

Contributions to be paid to the Scheme from 1 March 2016 to 28 February 2021

1. In respect of the future accrual of benefits, the expenses of administering the Scheme, death in service benefits and PPF levies, the Members and the Employers will pay contributions at the following rates of Members' Pensionable Salaries:

	Salary Sacrifice Members		Non Salary Sacrifice Members	
	Active Members	Employers	Active Members	Employers
	%	%	%	%
Pre-2013 Members paying additional contributions under Rule 45.6	Nil	20.0	8.5	11.5
Other Pre-2013 Members	Nil	16.5	5.0	11.5
Post-2013 Members	Nil	8.8	3.0	5.8

   Active Members' contributions are to be deducted from their Pensionable Salary by their Employer and, together with the Employers' own contributions, are to be paid to the Scheme on or before the 19th day of the calendar month following that to which the payment relates.

2. In respect of the shortfall in funding, in accordance with the Recovery Plan dated 26 February 2016 the Employers will pay an additional contribution of £14,595,000 per annum payable in monthly instalments over the period from 1 March 2016 to 31 January 2019, the allocation of this amount between the Employers to be decided by the Principal Employer.

   To be paid to the Scheme on or before the 19th of the calendar month following that to which the payment relates

Post-2013 Member	A Member who joined the Scheme on or after 1 January 2013.
Pre-2013 Member	A Member who joined the Scheme on or before 31 December 2012.
Pensionable Salary	Basic salary plus any allowances and other emoluments that have been determined to be pensionable by the Employers. For Members who are participating in a Salary Sacrifice Arrangement, Pensionable Salary is deemed to be the amount which it would have been if the Member was not participating in a Salary Sacrifice Arrangement.
Salary Sacrifice Members	Members who are participating in a Salary Sacrifice Arrangement and who as a result of which have been relieved of the duty to pay Member's contributions.

On behalf of the University of Cambridge ("the Principal Employer")

Signed ....

Name : A M Reid

Position : Director of Finance

Date : 26 February 2016

On behalf of CU Pension Trustee Limited ("the Trustee")

Signed ....

Name : H R Jacobs

Position : Director

Date : 26 February 2016

Actuary's Certification of Schedule of Contributions

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Adequacy of Contribution Rates	I certify that, in my opinion, the rates of contributions shown in this Schedule of Contributions are such that the statutory funding objective could have been expected on 31 July 2015 to be met by the end of the period specified in the Recovery Plan dated 26 February 2016
Adherence to Statement of Funding Principles	I hereby certify that, in my opinion, this schedule of contributions is consistent with the Statement of Funding Principles dated 26 February 2016.
Adequacy of Contribution Rates on Winding Up	The certification of the adequacy of the rates of contributions for the purposes of securing that the statutory funding objective can be expected to be met is not a certification of their adequacy for the purpose of securing the Scheme's liabilities by the purchase of annuities, if the Scheme were to be wound up.

Signature:	Robert. J. Sweet	Date:	26 February 2016
Name:	R J Sweet	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address:	Mill Pool House Mill Lane Godalming Surrey GU7 1EY	Name of Employer:	Cartwright Group Ltd

Recovery Plan

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Status	This Recovery Plan has been prepared by C U Pension Trustee Limited (the "Trustee" of the Scheme) on 26 February 2016 after obtaining the advice of Robert J Sweet, the Scheme Actuary. The actuarial valuation of the Scheme as at 31 July 2015 revealed a funding shortfall (technical provisions minus value of assets) of £61,484,000.
Steps to be taken to ensure that the Statutory Funding Objective is met	To eliminate the funding shortfall, the Trustee and the Principal Employer have agreed that additional contributions will be paid to the Scheme by the Employers at a rate of not less than £14,595,000 p.a., payable monthly, from 1 March 2016 to 31 January 2019. The Statutory Funding Objective is defined in Section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover its technical provisions
Period in which the Statutory Funding Objective should be met	The funding shortfall is expected to be eliminated by 31 January 2019. This expectation is based on the following assumptions: • Technical Provisions calculated according to the method and assumptions set out in the Statement of Funding Principles dated 26 February 2016; • the return on existing assets and the return on new contributions during the period as set out in the Statement of Funding Principles dated 26 February 2016; • an allowance for the deficit funding contributions already paid since 31 July 2015.
Progress towards meeting the Statutory Funding Objective	It is expected that 50% of the above additional contributions will be paid by 31 August 2017.

For and on behalf of the University of Cambridge ("the Principal Employer")

Signed ....

Name : A M Reid

Position : Director of Finance

Date : 26 February 2016

For and on behalf of C U Pension Trustee Limited ("the Trustee")

Signed ....

Name : H R Jacobs

Position : Director

Date : 26 February 2016

This Recovery Plan has been agreed by the Trustees after obtaining my actuarial advice.

Signed : Robert. J. Sweet

Name : R J Sweet

Position : Scheme Actuary

Date : 26 February 2016
