CAMBRIDGE UNIVERSITY ASSISTANTS' CONTRIBUTORY PENSION SCHEME

Actuarial Valuation as at 31 July 2009

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

23 April 2010

Contents

ES Executive Summary

This report sets out the results of the actuarial valuation of the Cambridge University Assistants' Contributory Pension Scheme ("the Scheme") as at 31 July 2009.

Current Funding Level

The Scheme's funding level on the Statutory Funding Objective at the valuation date was 67%, equivalent to a deficit of £138.8 million. At the previous valuation the ongoing funding level was 97%. The main reasons for the deterioration are poor investment returns and changes in the valuation basis, in particular the adoption of a lower discount rate and a higher assumption for price inflation.

Future Service Cost and Deficit Funding Contribution

The ongoing future joint contribution rate is 26.3% of Pensionable Salaries, ignoring the past service deficit. The Statement of Funding Principles agreed between the Trustee and the Principal Employer requires a Recovery Plan to eliminate the funding deficit within 16 years of the valuation date. This results in the following additional contributions:

- 3.4% of Pensionable Salaries until 31 July 2011, followed by
- £14,595,000 per annum from 1 August 2011 to 31 July 2025

These compare with the current rate at which contributions are being paid of 29.7% of Pensionable Salaries.

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 42%.

If the Scheme was fully funded on the Statutory Funding Objective the solvency funding level would be 63%.

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 59%.

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 considers whether Cash Equivalent Transfer Values should be reduced to reflect the degree of underfunding in the Scheme.
Factors	The Scheme's commutation factors and other administrative factors should be updated following the valuation to reflect changes in economic and demographic conditions.
Timescale and Future Valuation Requirements	The next triennial valuation should take place no later than 31 July 2012. As this Scheme has more than 100 members an interim actuarial report will be required as at 31 July 2010. As the Scheme has a deficit, a summary of this valuation report plus copies of the Recovery Plan and Schedule of Contributions need to be sent to TPR within 10 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 2009, was commissioned by and is addressed to C U Pension Trustee Limited ("the Trustee") acting as the Trustee to the Scheme.

It has been prepared under Rule 23 of the Ordinances and Rules of the Scheme ("the Rules") dated 24 March 2004 and Section 224 of the Pensions Act 2004. The Act states that valuations should be undertaken at least once every 3 years. Rule 23 gives no time limit for the frequency of valuations but, in practice, a valuation has been undertaken every 3 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 2006 and the results were contained in a report dated April 2007 by the previous Actuary to the Scheme, Paul Barnes FIA of Barnes & Sherwood Ltd.

Inter-valuation Review

The previous valuation recommended total joint contributions to the Scheme of 25.7% of members' Pensionable Salaries inclusive of allowances for the expenses of administering the Scheme, death-in-service benefits and PPF levies. This rate also included an allowance of 3.8% of Pensionable Salaries to fund the deficit disclosed by the previous valuation. Contributions have actually been paid to the Scheme at the following rates:

- 25.7% of Pensionable Salaries from 1 August 2006 to 31 July 2009;
- 29.7% of Pensionable Salaries from 1 August 2009.

This includes contributions from the non salary sacrifice members at the rate of 6% of Pensionable Salaries.

References for earlier advice on this valuation

An earlier discussion document – the Memorandum on the Actuarial Valuation dated 9 April 2009, 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 and in particular paragraphs 75, 79 & 102, the different funding methods that are available to them and how they may choose a set of assumptions. However, it should be noted that 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 Employer or its Industry which may affect such factors as pay increases or rates of withdrawal of Plan membership (paragraph 79 of the Code of Practice).

The above advice was reviewed by the Trustee at their meeting on 24 April 2009. In addition we have provided the following documents setting out details of the results of the valuation:

a) Updated initial assumptions letter dated 4 August 2009;
b) Summary of Results dated 27 October 2009;
c) Results letter dated 10 November 2009;
d) Results letter dated 21 December 2009;
e) Results letter dated 12 January 2010.

The final agreed assumptions to be used for Scheme funding are set out in Appendix B.

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 (paragraph 102 of the Code of Practice).

Third Party Statement

The calculations in the report use methods and bases appropriate for the purposes 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 Employer 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.

Allowance for 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 there is no consensus on whether or how they should be equalised.

Reporting Requirements

This report has been prepared in accordance with the Guidance Note GN9: "Funding Defined Benefits – Presentation of Actuarial Advice" adopted and amended by The Board for Actuarial Standards and current at the date of this report. It has also been peer reviewed under Guidance Note GN48 by a qualified actuary.

This report, when read in conjunction with the reference material detailed above, is compliant with:

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

Both these Standards have been introduced by The Board for Actuarial Standards in 2010.

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. These terms are also covered in the Glossary.

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 and the employees covered by the Scheme are contracted out of the State Second Pension (S2P).

Core Benefits Under Rules

We have valued the Scheme benefits set out in the Rules, together with subsequent amendments and announcements issued to members. References to Pensionable Salary in this report have the same meaning ascribed to them as in the above documents. A Summary of the benefits valued is set out in Appendix D, although it should be borne in mind that in the event of any discrepancy between the Summary and the Rules, the Rules will prevail.

Members may pay Additional Voluntary Contributions (AVCs) to increase benefits payable from the Scheme. Liabilities and assets shown in this report include added years AVCs and contributions but exclude money purchase AVC assets and liabilities.

Allowance for Discretionary Benefits

The Scheme Rules allow discretionary benefits to be provided to members. In recent years, including 2009, 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 in the future will be funded at the time.

Allowance for Insured Benefits

The Trustee does not insure any death in service benefits. Such benefits are paid directly from the Scheme.

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

Allowance for Member Options

No allowance has been made for Members commuting some of their pension for cash at retirement or other options that may be available to the member on retirement.

Scheme changes since previous valuation

Since the previous valuation, the Employer has introduced a Salary Sacrifice Arrangement whereby participating members are relieved of the duty to pay members' contributions in exchange for a reduction in salary. The amount which would otherwise have been paid by such members is instead paid by their Employer.

Further minor changes have been made to the Scheme Rules to reflect the requirements of the Finance Act 2004, the Civil Partnership Act 2004 and the Employment Equality (Age) Regulations 2006. These have no significant financial implications.

Legislative changes since previous valuation

The Trustee became responsible for the calculation of all transfer values on or after 1 October 2008. I wrote to the Trustee setting out a recommended basis on 10 June 2008. This was accepted by the Trustee and all transfer values are now calculated on that basis.

Statutory revaluation for members leaving on or after 6 April 2009 with service on or after that date has changed. Previously, pension in excess of any Guaranteed Minimum Pensions (GMPs) would have a minimum revaluation rate in line with increases in the Retail Price Index (RPI) to a maximum of 5%pa. This maximum has been reduced to 2.5%pa. The Scheme itself guarantees to revalue the total pension in line with increases in RPI and it is only in certain instances that the minimum underpin will bite.

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 3,677 active members, 2,593 deferred pensioners (including 57 pending members) and 2,260 pensioners. A more detailed 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.

All queries were resolved quickly.

The membership figures included in the audited accounts are produced from a data extract at a later date than the valuation extract. As a result these membership numbers are slightly different to those used in the valuation, as follows:

- Actives – 3688 members, 11 higher as a result of members joining the Scheme just before the valuation date but being processed after this date; and
- Deferred Pensioners – 2537 members (1 higher), excluding "pending" members, i.e. those awaiting refunds of contributions and who were noted as additional members in the Scheme in Appendix A.

These differences have no material impact on the results set out in this report.

Asset Data

The audited Scheme accounts show that the market value of the Scheme's assets at 31 July 2009 amounted to £275,925,000. This excludes any assets in relation to members' money purchase AVC assets and insured pensions. Appendix C provides a more detailed breakdown of the Scheme's assets.

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.

It should be noted that from 1 December 2009 a new benefit structure was being introduced for new joiners to the Scheme. Overall this provides a lower level of benefit than the benefit structure for existing members. As a result, this may be expected to reduce over time the future costs of pension accrual within the Scheme.

3 Funding Principles

Statutory Funding Objective

The Statutory Funding Objective is set out in the Statement of Funding Principles dated 23 April 2010.

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 Provisions, it would only be 63% 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.

I can confirm that should this target be met then the Scheme would have more than sufficient funds to pay full unreduced transfer values.

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/ Principles

The following changes have been made to the funding objectives since the previous valuation:

- The repayment of any deficit under the Recovery Plan has been extended from 10 to 16 years from the valuation date;
- The Statement of Funding Principles allows the Trustee to use a rate of overall investment return in line with increases in the Retail Prices Index plus up to 4%. For this valuation, the actual real rate of return in excess of inflation has been reduced from 3.9% pa to 3.2% pa.
- Mortality tables have been updated in line with Scheme experience and to include greater allowances for future improvements in longevity.

Funding Implications on Stability of Contribution Rate

The funding objective includes allowance for investment in return seeking 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.

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

Change in Funding Method

The same funding method was used for the previous actuarial valuation.

Factors to Consider in choosing funding method

Under Section 75 of the Code of Practice 03 Funding Defined Benefits ("the Code of Practice") issued by The Pensions Regulator, 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).

Valuation Assumptions

The valuation assumptions are detailed in Appendix B. Details of how they were derived are set out in the Trustee's Statement of Funding Principles.

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 16 years. This can be either as fixed monthly payments or as a percentage of Pensionable Salaries.

Under Section 102 of the Code of Practice the Trustee is required to consider the following factors when considering the structure of the recovery plan:

- the Employers' business plans and the likely effect any potential recovery plan would have on the future viability of the Employers;
- 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 will therefore 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 B.

Past Service Position/Technical Provisions

Value of Benefits in respect of:		**£000's**
Active Members' service before 31 July 2009		191,088
Deferred pensioners		61,052
Current pensioners		155,440
Funeral Grant		3,060
Expenses		4,106
Technical Provisions	**(A)**	**414,746**
Market Value of Assets	**(B)**	**275,925**
Past Service Surplus/(Deficit) (B)-(A)		**(138,821)**
Funding Level	**(B/A)**	67%

The appropriate actuarial certification of the Scheme's Technical Provisions is included as Appendix E to this report.

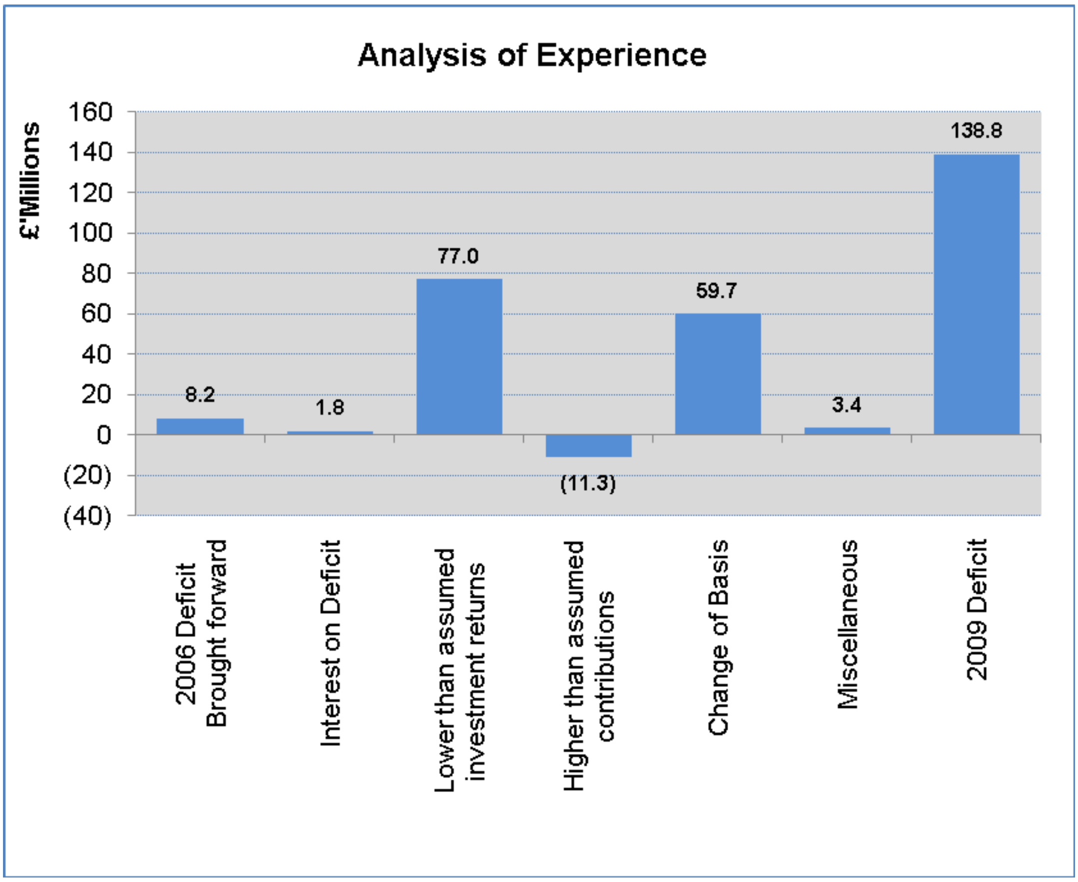
The Trustee and Employers should be aware that the Technical Provisions are not the same as the cost of winding up the Scheme. This is shown in Section 8 of this report.

The past service deficit of £138.8 million compares to the deficit disclosed by the previous valuation of £8.2 million. An approximate analysis of the principal factors affecting the level of deficiency since the previous valuation is given below.

The miscellaneous item in the analysis includes, for example, the effects of variations between actual experience and the assumptions made for mortality, withdrawals and expenses used in the previous valuation.

Analysis of Experience

	£000's
Deficit as at 31 July 2006	**8,205**
Interest on Deficit	1,818
Investment Returns lower than assumed	76,967
Contributions paid at increased rates since previous valuation	(11,349)
Changes in assumptions	59,749
Miscellaneous	3,430
Deficit as at 31 July 2009	**138,821**



Significant Variations

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

- Investment returns were much lower than expected over the 3 year period; and

- Changes in the valuation basis, mainly as a result of lower assumed investment returns and a higher inflation assumption. These changes in financial assumptions account for approximately £51m of the deficit arising from the change in assumptions. The remaining £9m arises from changes in the demographic assumptions, and in particular factoring in an increased allowance for future improvements in longevity.

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.

The contribution rate to fund future benefit accrual is 26.3% of Pensionable Salaries. This includes allowances for members' contributions and for the expenses of running the Scheme including PPF levies. It also includes the costs of the death in service benefits provided by the Scheme.

At the previous valuation, the total future service contribution rate was determined as 21.9% of Pensionable Salaries. The increase to 26.3% is mainly due to changes in the valuation basis.

Pensionable Salary is as defined in Appendix D.

Deficit Funding Contribution

The Trustee and the Principal Employer have agreed that total contributions will continue to be paid until 31 July 2011 at the current rate of 29.7% of Pensionable Salaries. This therefore represents an additional contribution rate of 3.4% of Pensionable Salaries towards meeting the deficit.

The Trustee and Principal Employer have agreed that thereafter the additional contributions should be in the form of fixed monthly amounts. Therefore, additional monthly contributions of £1,216,250 are required from 1 August 2011 for 14 years.

All contributions are paid monthly.

The assumptions used in drawing up the Recovery Plan are those defined in the Statement of Funding Principles and set out in Appendix B. These are the same assumptions as have been used to value the Technical Provisions, except that allowance is made for an expected rate of return on Scheme assets and on new contributions of 7.0% pa.

Total Contribution Cost

	% of Pensionable Salaries
Total Cost of Accruing Benefits	26.3
Employer's Contribution Rate to Fund Past Service Deficit *	3.4
Total Contribution Rate	29.7

*To 31 July 2011, then the Employer will increase this to a fixed annual contribution of £14,595,000.

The above rates include the 6% of Pensionable Salaries paid by non salary sacrifice members.

The contribution rates in the above table include allowances for Scheme expenses, levies and the cost of providing death in service benefits within the fund. No allowance is made for any Additional Voluntary Contributions (AVCs) which members may decide to make to the Scheme. Contributions are payable monthly in arrears.

Contributions would be paid at the above rates on a monthly basis with effect from the valuation date.

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 73% 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.

As previously mentioned, the introduction of a new benefit structure for new joiners is expected to reduce the cost of benefit accrual. I am not aware of any other material developments that would affect funding over the next 3 years.

Further Issues:

CETVs

As the Scheme has a deficit, the Trustee is permitted, should it so decide, to offer reduced Cash Equivalent Transfer Values (CETVs) to members asking for a transfer value quotation, to reflect the level of underfunding.

When assessing the level of reduced transfer values, it is appropriate to have regard to the order of priority for securing the members' liabilities should the Scheme be wound up.

If the Trustee wishes to reduce transfer values to reflect the degree of underfunding in the Scheme, we would be pleased to calculate the appropriately reduced amounts, taking into consideration the priority order of liabilities.

Scheme Factors

In addition the Scheme's administration factors are due for review following the valuation to reflect changes 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 Trustees take a prudent approach to funding to mitigate this risk to some extent.
Investment Return	If the assets underperform the returns assumed in setting the funding target then additional contributions may be required at subsequent valuations. After taking appropriate investment advice the Trustee have taken a prudent view with regard to future long term investments but accept that there may be short term fluctuations.
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.
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 invests in a wide range of investment classes.

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 an Employer performs badly. This may coincide with the time when an Employer is 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. Currently there are no such options that apply without Trustee and Employer consent. The Trustee would request that the exercise of such options would be funded by the Employers at that time.

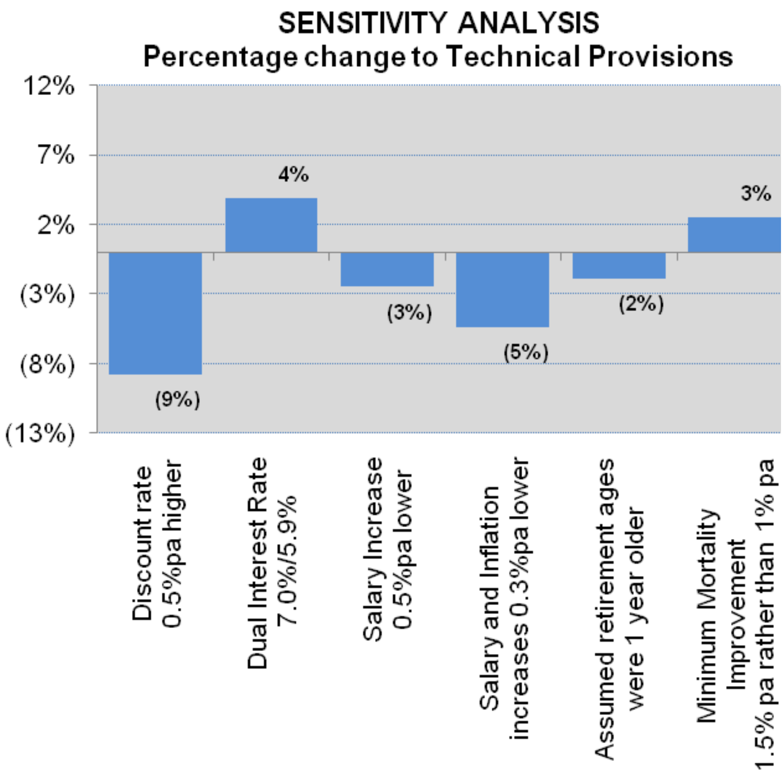
Summary

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 and demographic assumptions is changed. The figures shown are for a guide only as the effects of changing the assumptions are interdependent.



The chart shows that the investment return and salary/inflation assumptions have the greatest impact on the size of the Scheme's liabilities. Therefore the Scheme's funding position is likely to deteriorate significantly if the Scheme's assets do not attain the real investment return assumed.

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' service before 31 July 2009		223,696
Deferred Pensioners		83,270
Current non insured Pensioners		152,580
Insured Pensioners		32
Expenses of winding up		6,096
Expenses of benefit installation		3,916
Total Section 179 Liabilities	**(A)**	**469,590**
Market Value of Scheme Assets	**(B)**	
Invested assets		275,925
Insured pensioners		32
		275,957
Section 179 Surplus/(Deficit)	**(B-A)**	**(193,633)**
Level of Section 179 Funding	**(B/A)**	**59%**

Additional Information

Section 179 guidance used	G5
Section 179 assumptions used	A4
Percentage of assets held as insurance contracts	0%
Percentage of liabilities matched by insurance contracts:	
Active members	0%
Deferred pensioners	0%
Pensioners	0%

Proportion of liabilities related to period of service:

	Pre 6 April 1997	**6 April 1997 to 5 April 2009**	**Post 5 April 2009**
Active members	21%	79%	0%
Deferred pensioners	37%	63%	0%
Pensioners	66%	34%	0%

Average ages:

Active members	49
Deferred pensioners	45
Pensioners	68

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: - Investment Return

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 4.5% per annum.

We have reduced this rate by 0.5% per annum pre retirement as an approximation to the adjustments which an insurance company will make in their pricing basis to cover the risk that benefits will not be met by their investments, an allowance for mis-matching, and margins for profit and expenses. In addition, we have assumed that the inflation assumption would be set at 3.7%.

Other Economic and Demographic Assumptions

Other assumptions are in line with those used for the funding objective valuation except that all active members are assumed to leave service at the valuation date. Therefore the salary increase rate is replaced by the assumptions for future RPI. A summary of the funding assumptions is set out in Appendix B.

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.

	Current Valuation £000's	Previous Valuation £000's
Value of benefits in respect of:		
Active Members	316,221	239,964
Deferred Pensioners	128,149	88,662
Current Pensioners	202,791	165,705
Funeral Grants	4,986	4,741
Expenses	6,521	4,991
Total Solvency Liabilities **(A)**	**658,668**	504,063
Market Value of Scheme Assets **(B)**	**275,925**	276,703
Solvency Surplus/(Deficit) **(B–A)**	**(382,793)**	**(227,270)**
Level of Solvency Funding **(B/A)**	42%	55%

If the Scheme's funding objective had been met in full the level of solvency funding would have increased to 63%.

Changes since previous valuation

The solvency level has deteriorated since the previous valuation mainly as a result of:

- A stronger basis mainly as a result of higher inflation expectations;
- continuing poor investment returns;
- contributions by the Employer being insufficient to cover the costs of pension accrual on a solvency basis; and
- interest on the solvency deficiency from previous valuation.

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 Employer. If the Employer is 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	58%
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.

Future progression and Material developments

Based upon the assumptions adopted for the solvency calculations payments of Employer contributions at the rate detailed in Section 10 are projected to be more than sufficient to fund on the solvency basis. Therefore the above solvency position is expected to improve over the period to the next actuarial valuation to 45%.

Employer contributions at the rate detailed in Section 10 are also likely to improve slightly the level of coverage on the current order of priorities. However in the period to the next valuation the change is unlikely to be significant.

9 Investment Strategy

Background

The Pensions Act 1995 requires trustees regularly to review their 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 C provides details of the Scheme's assets at the valuation date. At that time approximately 80% of the assets were invested in equities, hedge funds and property assets, which provide unknown future returns. The remainder of the assets were invested in gilts, corporate bonds and cash, which, if held until maturity, provide known returns assuming there are no defaults.

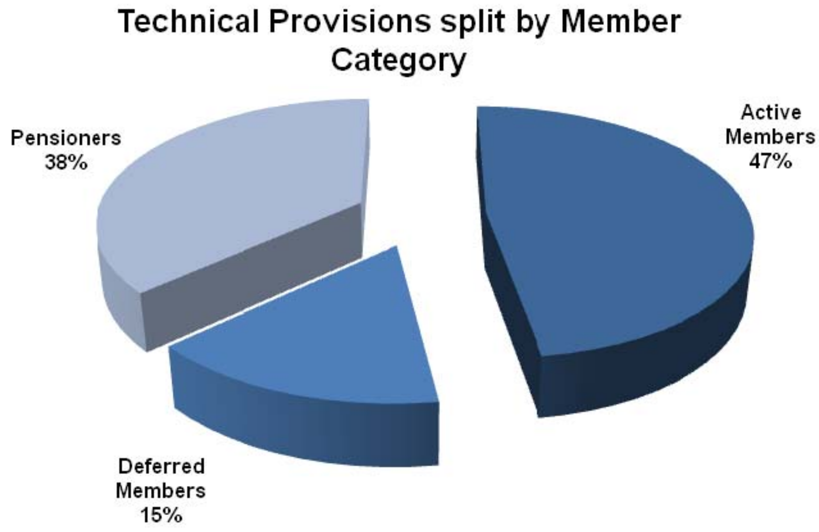
Liability Split

The valuation investment return assumption is based on a single interest rate approach. In this case the assets as a whole are used to match the Scheme liabilities.

Equity, hedge fund and property assets are typically assumed to provide some level of outperformance, 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 volatile funding level.

In many schemes pensioner members are often matched by the scheme holding gilts and/or 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 matched by more volatile out-performance assets.

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



Comparison

Looking at the chart, the Scheme has a significant proportion (38%) of its liabilities directly related to pensioners. The Scheme assets are only 20% invested in bonds and cash and therefore this will increase the volatility of the funding level as the assets and liabilities will not change value in the same way.

Recovery Plan

The Trustee has agreed to use a best estimate rate of return of 7% p.a. in the calculation of contributions to be paid under the Recovery Plan. The best estimate rate of return is based on investment advice from AON Consulting, the Scheme's investment consultant.

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 has reviewed its investment policy and appreciate the risks associated with this element of mismatching. Given the 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 and Recovery Plan

The Scheme's funding objectives in Section 3 show the Scheme's assets at the valuation date are insufficient to meet the funding target. The Trustee and Principal Employer have agreed that the following contributions will be paid:

Total Contributions of 26.3% of Pensionable Salaries to meet the cost of future accrual.

The Statement of Funding Principles agreed between the Trustee and the Principal Employer requires a Recovery Plan to eliminate the funding deficit within 16 years of the valuation date. This results in the following additional contributions:

- 3.4% of Pensionable Salaries until 31 July 2011, followed by
- £14,595,000 per annum from 1 August 2011 to 31 July 2025

This compares with the current rate at which Employer contributions are being paid of 29.7% of Pensionable Salaries.

Solvency Level

The solvency position of the Scheme is weak with a funding level of 42% at the valuation date. Contributions at the rates above are more than sufficient to fund future benefits on the solvency basis. Therefore, the above solvency position is expected to improve to 45% over the period to the next actuarial valuation.

CETVs

Based on the current level of underfunding in the Scheme, the Trustees should consider whether or not to reduce cash equivalent transfer values from the Scheme.

Timescale and Future Valuation Requirements

The next triennial valuation should take place no later than 31 July 2012. As this Scheme has more than 100 members an interim actuarial report will be required as at 31 July 2010. As this Scheme has a deficit, a summary of this valuation report plus copies of the Recovery Plan and Schedule of Contributions need to be sent to TPR within 10 days of this report being signed.

Robert J Sweet
Scheme Actuary
Fellow of the Institute of Actuaries

23 April 2010

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	1,401 (1,314)	2,276 (2,107)	3,677 (3,421)
Total Pensionable Salary p.a.	£32,014,162 (£26,229,468)	£45,611,118 (£36,872,107)	£77,625,280 (£63,101,575)
Average Pensionable Salary p.a.	£22,851 (£19,962)	£20,040 (£17,500)	£21,111 (£18,445)
Average past service (years)	9.9 (10.3)	6.7 (6.7)	8.0 (8.1)
Average age (unweighted)	44.6 (44.8)	42.8 (42.8)	43.4 (43.6)
Discounted Mean Term to Retirement (years)	11.5	12.5	12.0

1. The member numbers in the audited accounts show 3,688 members. The audited accounts are produced using a data extract at a later date. As a result, additional members joining on or before 31 July 2009 but processed later are included in these figures. These members have no significant past service liability at the valuation date and so do not affect the results set out in this report.

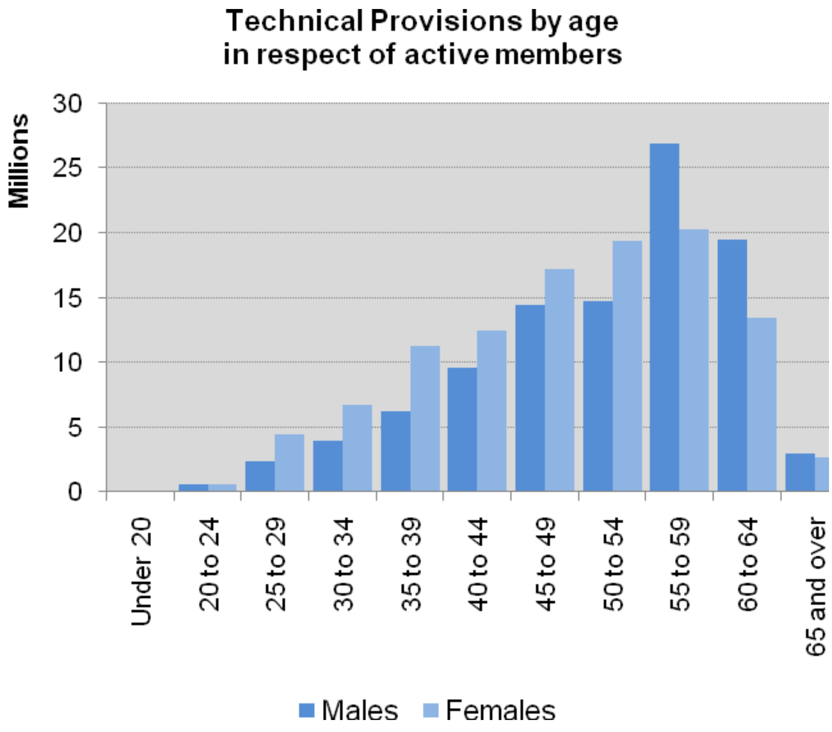
2. The figures for the 2006 actuarial valuation are shown in brackets.

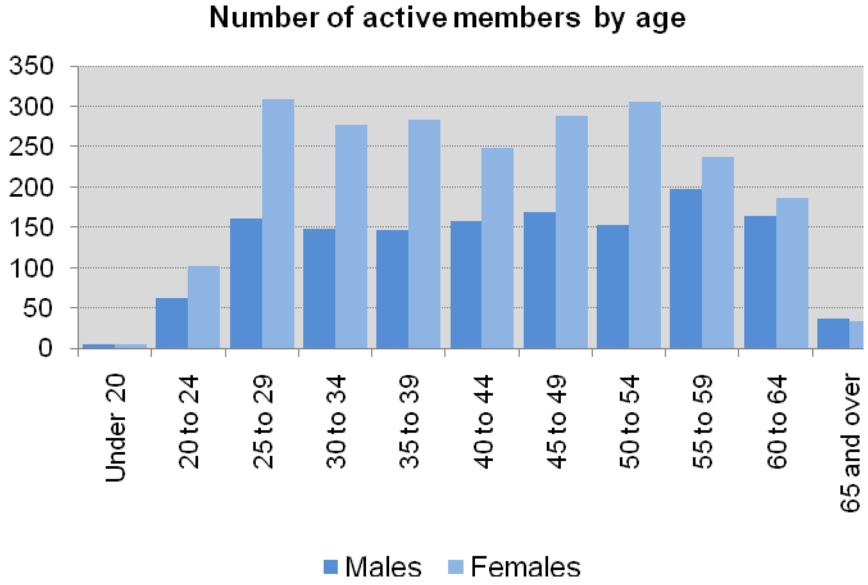
3. Included in these statistics are 378 active members who have not yet retired, but who have passed age 60. There were 289 such members in the 2006 actuarial valuation.

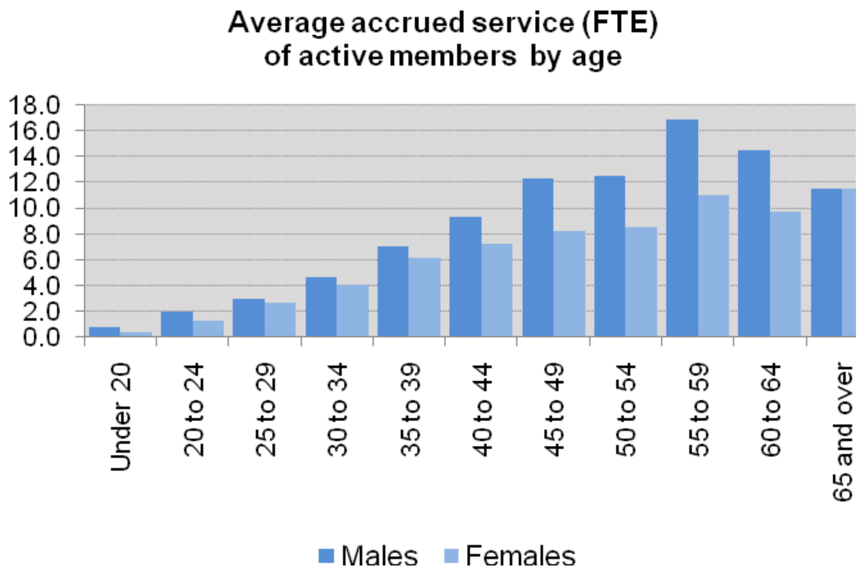
4. Total Pensionable Salaries shown above are the actual salaries paid to members (i.e. not full time equivalent for part-timers) as provided to us by the Pensions Office.

5. The Average Past Service is the full time equivalent past service for all members and is represented in the graph on page 11. It includes transferred-in added years, augmentations and AVC added years.

6. The discounted Mean Term to Retirement is the weighted average term to the assumed retirement date by member's Technical Provisions. These were not included in the 2006 report.




Number of active members by age
350
300
250
200
150
100
50
0
Under 20
20 to 24
25 to 29
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 to 64
65 and over
Males
Females


Average accrued service (FTE)
of active members by age
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Under 20
20 to 24
25 to 29
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 to 64
65 and over
Males
Females

DEFERRED PENSIONERS	Males	Females	Total
Number	800 (711)	1,736 (1,477)	2,536 (2,188)
Total deferred pensions p.a. payable as at valuation date	£1,697,177 (£1,319,667)	£3,032,373 (£2,228,814)	£4,729,550 (£3,548,481)
Average deferred pension p.a. payable as at valuation date	£2,121 (£1,856)	£1,747 (£1,509)	£1,865 (£1,622)
Average age (unweighted)	42.9 (41.5)	43.2 (42.4)	43.1 (42.1)
Discounted Mean Term to Retirement (years)	13.4	13.7	13.6

Notes

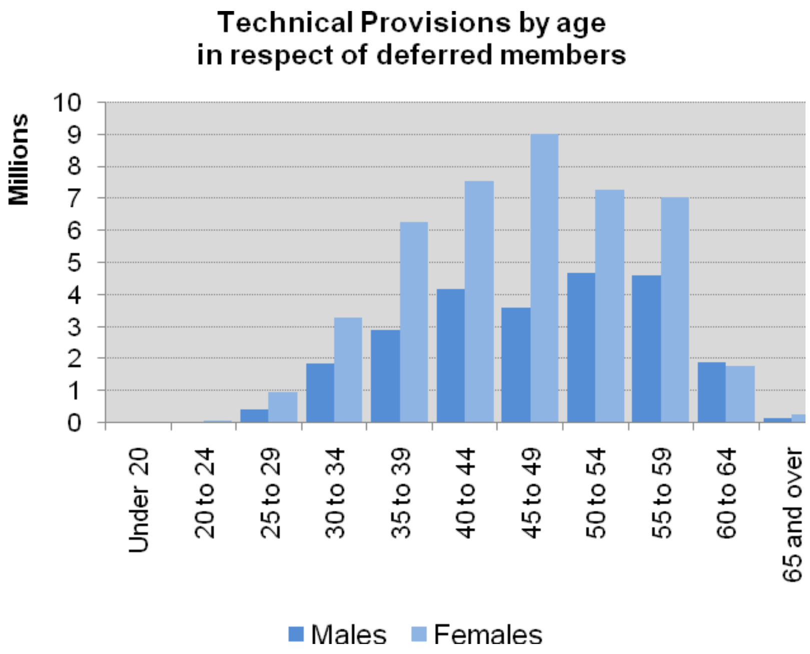
1. Member numbers in the audited accounts reveal 2,537 deferred members. This extract was produced at a different date to the valuation extract and has no material impact on the results of this valuation.

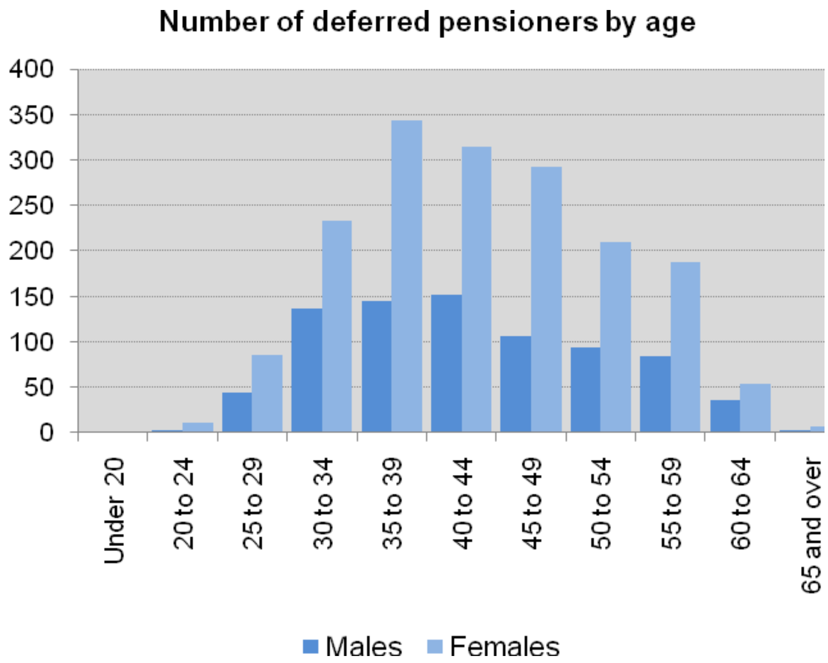
2. The figures for the 2006 actuarial valuation are shown in brackets.

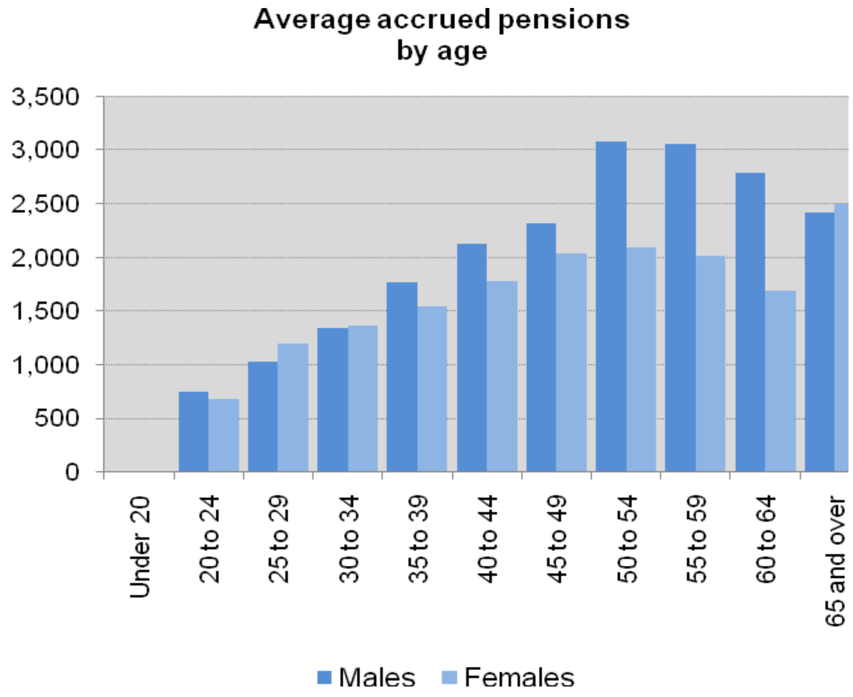
3. Included in these statistics are 75 deferred pensioners who have not yet retired, but who have passed age 60. There were 31 deferred members who were over age 60 in the 2006 actuarial valuation.

4. In addition, there are 57 (44) members classed as deferred, who are awaiting a refund of contributions or transfer value payment at the valuation date. These have been valued in line with the current cash equivalent transfer value basis.

5. The following graphs illustrate the 2009 statistics in greater detail.


Technical Provisions by age
in respect of deferred members
Millions
10
9
8
7
6
5
4
3
2
1
0
Under 20
20 to 24
25 to 29
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 to 64
65 and over
Males
Females


Number of deferred pensioners by age
400
350
300
250
200
150
100
50
0
Under 20
20 to 24
25 to 29
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 to 64
65 and over
Males
Females

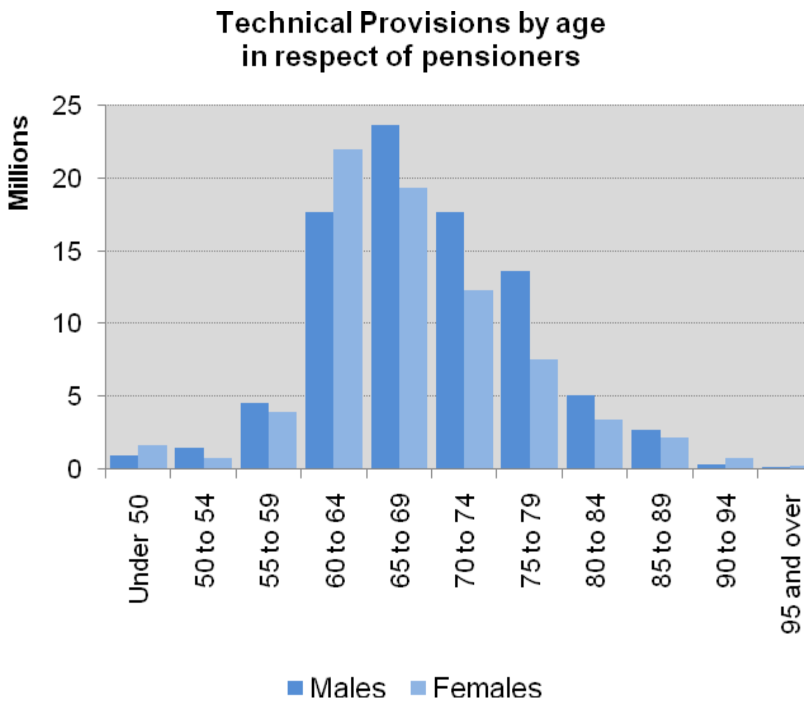


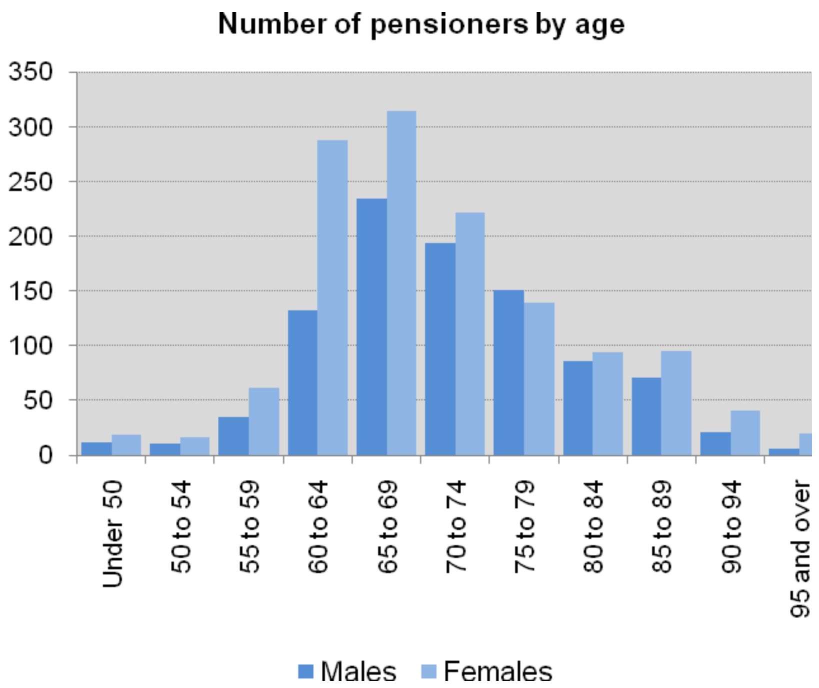
Average accrued pensions
by age
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Under 20
20 to 24
25 to 29
30 to 34
35 to 39
40 to 44
45 to 49
50 to 54
55 to 59
60 to 64
65 and over
Males
Females

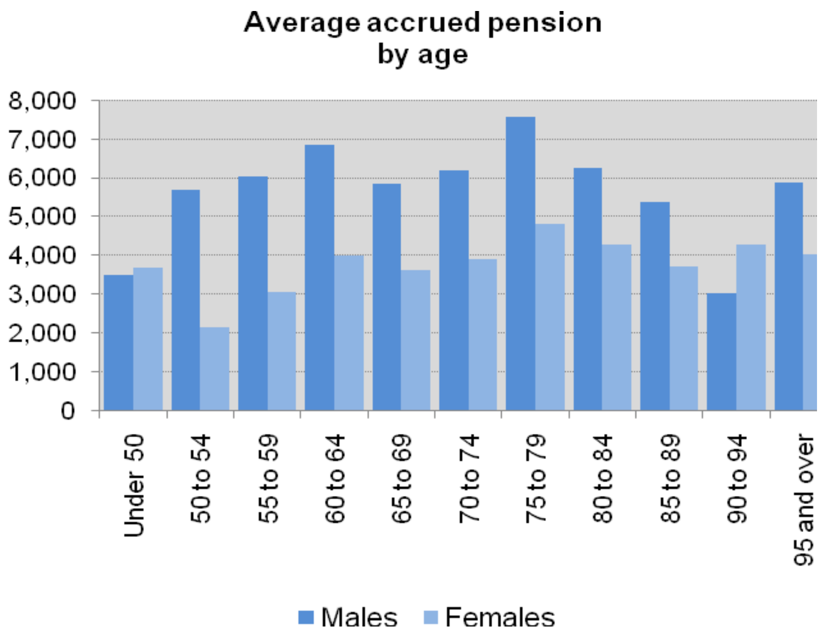
PENSIONERS	**Males**	**Females**	**Total**
Number	953 (855)	1,307 (1,109)	2,260 (1,964)
Total pensions p.a. payable from valuation date	£5,944,506 (£4,933,221)	£5,114,772 (£3,940,591)	£11,059,278 (£8,873,812)
Average pension p.a. payable at valuation date	£6,238 (£5,770)	£3,913 (£3,553)	£4,893 (£4,518)
Average age (unweighted)	71.5 (71.0)	70.4 (70.6)	70.9 (70.8)

Notes

1. The audited account member numbers tie up with the above figures.
2. The figures for the 2006 actuarial valuation are shown in brackets.
3. There are 366 (355) dependant pensioners included in the above statistics – including 10 (7) child dependants. Note that one child dependant has been reclassified as a financial dependant.
4. For some of the pensioners, part of their pension is payable from outside the Scheme. The total pensions payable from other sources are excluded from the above statistics. The value of the pensions payable from other sources have been excluded from the technical provisions but included in the PPF Section 179 valuation.
5. The total pensions payable, shown above, are the annual rates of pensions in payment after the increase awarded as at 1 August 2009, although this increase was nil apart from any statutory awards.
6. The following graphs illustrate the 2009 statistics in greater detail.


Technical Provisions by age
in respect of pensioners
Millions
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 and over
Males
Females


Number of pensioners by age
350
300
250
200
150
100
50
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 and over
Males
Females



Average accrued pension
by age
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 and over
Males
Females

B Assumptions

The 2009 Funding Basis is based on Statutory Funding Objective and the current Statement of Funding Principles adopted by the Trustee. These assumptions have been adjusted by the Trustee in line with actuarial advice, as required by legislation. The 2006 Funding Basis sets out the assumptions used in the previous valuation for comparison purposes.

Under Section 79 of the Code of Practice, when choosing the assumptions the Trustees are 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 Trustees are satisfied that the chosen assumptions set out below are appropriate bearing in mind the above factors.

Economic	**Assumptions for valuation as at 31 July 2009 (% per annum compound)**	**Assumptions for valuation as at 31 July 2006 (% per annum compound)**
Rate of interest:		
• before retirement	6.6%	6.9%
• after retirement	6.6%	6.9%
• Recovery Plan	7.0%	6.9%
Rate of salary increases:	4.9%	4.5%
Rate of increase in pensions in payment:	3.4%	3.0%
Rate of increases to pensions in deferment:	3.4%	3.0%
Other		
Valuation of assets:	Surrender value of the assets	Surrender value of the assets

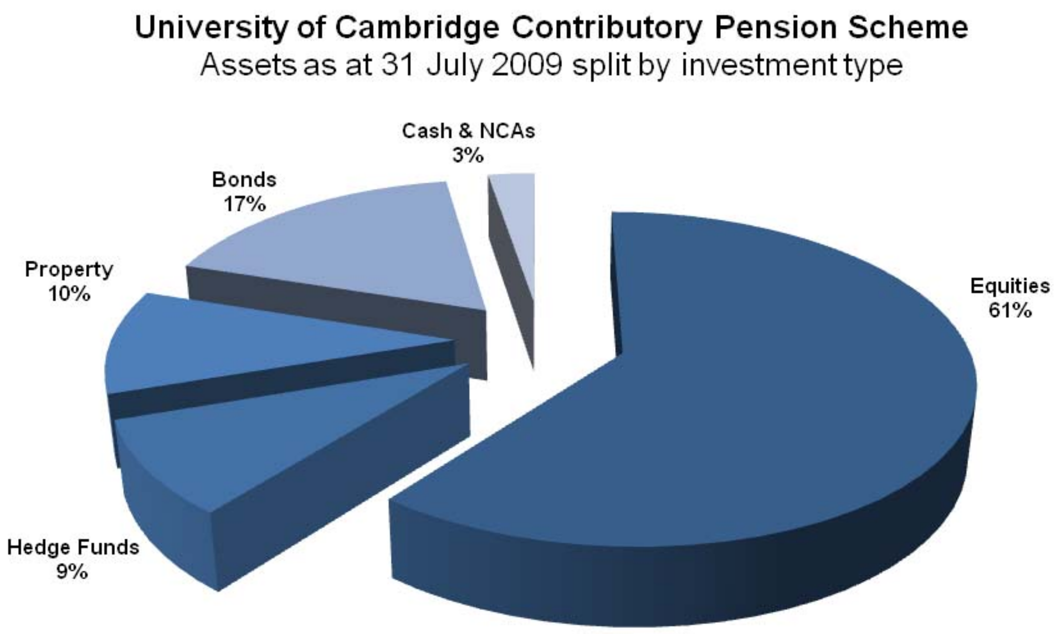
Expenses	**Assumptions for valuation as at 31 July 2009**	**Assumptions for valuation as at 31 July 2006**
• past service • future service	• 1.0% of the liability excluding expenses • 0.4% of Pensionable Salary	• 1.0% of the liability excluding expenses • 0.4% of Pensionable Salary
Death in Service Premiums:	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:		
• before and after retirement	125% of SAPs Light Pensioner Mortality tables for males and 95% of SAPs Light Pensioner Mortality tables for females. Plus a projection based upon the Medium Cohort year of birth table from the CMIB and with a minimum 1%pa improvement.	Pre Retirement - A92 males and females both rated down 2 years Post Retirement – PA92C20 for males and females
Age at Retirement • Active members • Deferred members	Males 63 Females 61 Males 61 Females 60	Males 63 Females 61 Males 61 Females 60
Proportion Married:	Males and females 90%	Males and females 90%
Age Difference:	Wives 3 years younger than their husbands	Wives 3 years younger than their husbands
Withdrawal rates	No allowance	No allowance
Member Options:	No allowance	No allowance

C Scheme Assets

The Scheme's audited accounts show that the Scheme held the following assets as at 31 July 2009. This excludes the value of members' money purchase AVC funds, but include added years' AVCs.

Market Value of Scheme Assets (£)	
Invested Assets	268,692,818
Cash and Net Current Assets	7,231,944
Total	**275,924,752**

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



D Summary of Benefits and Member Contributions

1	Effective Date	31 July 2009
2	Eligibility	• University assistants employed on a permanent basis • Aged 18 to 65
3	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.
4	Pensionable Salary	Basic salary plus any allowances and that has been determined to be pensionable by the Employer. It is the amount notified to the Trustees by the Employer which would have applied had the Member not been in the Salary Sacrifice Arrangement.
5	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.
6	Member contributions	6% of Pensionable Salary for non salary sacrifice members; otherwise Nil AVCs may be paid, either to provide additional service credits or into an account with the Cambridge Building Society.

7	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.
8	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.
9	Ranking Service	Pensionable service excluding service provided by AVCs.
10	Early Retirement Pension in Normal Health	Members may retire after age 50 (age 55 after 5th April 2010) 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 50 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.
11	Early Retirement Pension in ill-health or on grounds of incapacity	<u>Members retiring in ill-health:</u> 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service, increased by one year for each complete period of 5 years of Ranking Service (such additional service being limited to the member's prospective Service to age 65). <u>Members retiring on grounds of incapacity:</u> 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service <u>plus</u> prospective Service to age 65.

12 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.
13 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 two thirds 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.
14 Benefits on Death in Service	• A lump sum of 4 times annual salary at the date of death plus • A refund of the member's contributions to the Scheme returned with interest plus • A spouse's pension of two thirds of the member's incapacity pension at the date of death continuing on death of the spouse until the youngest child reaches age 18 or ceases full time education, whichever is earlier plus • A child's pension of 25% of the spouse's pension for each child, (up to a maximum of 4) 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.
15 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.

16 Benefits on Termination of Service

(i) If the member has completed less than 2 years of Ranking Service, an appropriate payment is made to the Department for Work and Pensions (DWP) to reinstate the member into S2P, and a refund of the member's contributions plus interest is paid to the member, less the member's share of the payment to the DWP, less tax, subject to a minimum payment of zero.

(ii) If the member has completed 2 or more years Ranking Service, the pension at termination is: 1/60th of Final Pensionable Salary for each year (and proportionately for days) of Pensionable Service.

Alternatively, the member may choose to transfer out of the Scheme.

The total pension calculated under (ii) will revalue between termination and NRA in line with the increase in the RPI in the year ending each May, applied at 1 August, subject to a maximum of 12% per annum. The 12% per annum limit may be disapplied at the discretion of the Managing Committee. This is subject to a minimum of statutory revaluation.

17 Pension Schemes Act 1993

Members are contracted-out of the State Second Pension (S2P) using the Reference Scheme Test.

E 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 2009 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 23 April 2010

Robert. J. Sweet

Date : 23 April 2010

Robert J Sweet

Qualification: Fellow of the Institute of Actuaries

Mill Pool House
Mill Lane
Godalming
Surrey GU7 1EY

Cartwright Group Ltd

F

Glossary

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.

Statement of Funding Principles

This is a document produced by the Trustee and agreed by the Principal 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.

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.

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 Principal Employer should aim to fund 100% of the Scheme’s technical provisions.

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.

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 previous actuarial valuation. It must also include an assessment of changes in the value of the Scheme’s assets.

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.

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 and Section 179 valuation results in this report.

Planning Exercise (as defined in TAS R)

This involves the estimation of an amount for budgeting or target setting purposes. The setting of Technical Provisions for funding purposes and future service contribution rates is an example of a Planning Exercise.

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 2009 after taking advice from Robert Sweet of Cartwright Group Limited, the current Actuary to the Scheme.

It replaces an earlier version dated 23 February 2007 prepared for the actuarial valuation as at 31 July 2006.

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 to be 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. A full set of the assumptions used in the actuary's triennial valuation is set out as an Appendix to this document.

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 2009 the margin to be adopted is 3.2% p.a.

Pension increases in deferment

The Trustee's assumption is the same as the expected future increase in the Retail Prices Index (RPI).

RPI will be determined at the valuation date and is based on the difference between the real yield on over 15 years duration Index Linked Gilts (average of 0% and 5%pa inflation) and the gross redemption yield on nominal Gilts of 20 years duration. This rate will be rounded to the nearer 0.1%pa.From time to time this market rate is overstated due to excessive demand for index linked gilts. At such times the Trustee may reduce this rate by up to 0.3%pa. Such a reduction has been applied for the purposes of the calculations as at 31 July 2009.

Salary Increases

Pay increases are expected to exceed RPI increases by up to 1.5%pa 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 as increasing in line with the RPI up to a maximum of 12%pa compound. The Trustee does have discretion to pay a minimum of 3%pa if RPI is less than this.

The Trustee will use the same assumption as that used for RPI above.

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 base tables produced by the Continuous Mortality Investigation Bureau based upon mortality experience of Self Administered Pension Schemes centred on 2003 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.

In addition, the Actuary recommended and the Trustee agreed to change the allowance for future longevity improvements to the medium cohort year of birth tables, with minimum rates of improvement of 1% per annum.

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.

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 all members have the right to retire without actuarial reduction at age 60. The Trustee wishes to fund benefits to the average expected age of retirement.

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.

Age difference of dependants

The average age difference between partners is also to be reviewed on a triennial basis at each valuation, subject to the data being available.

Female spouses are assumed to be 3 years younger than their male partner.

Percentage with dependants' benefits at death

The average percentage of Members with partners at date of death will be reviewed on a triennial basis at each valuation, subject to the data being available. The current assumption is that 90% of Members are married at date of 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 0.4% of Pensionable Salaries. 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%pa. 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 Trustee normally expects the recovery period to be no longer than 16 years from the valuation date for funding deficiencies. 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 prepared on 23 April 2010 the Trustee has decided that the appropriate expected rate of return is 7.0% per annum.
Arrangements by a person other than the University or other Employer 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 Actuary to advise it 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 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 actuary to decide whether, and to what extent, CETVs should be reduced.

Frequency of valuations and circumstances for extra valuations

The Scheme's first actuarial valuation under Part 3 of the Pensions Act 2004 was carried out as at the effective date of 31 July 2006 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 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")	On behalf of CU Pension Trustee Limited ("the Trustee")
Signed	Signed ....
Name : A M Reid	Name : R K HINKLEY
Position : Director of Finance	Position : Director/Company Secretary
Date : 23.04.10	Date : 23-04-2010

This Statement of Funding Principles has been agreed by the Trustee at its meeting on 23 April 2010 after obtaining my actuarial advice.

Signed : Robert. J. Sweet

Name : R J Sweet

Position : Scheme Actuary

Date : 23 April 2010

Appendix to the Statement of Funding Principles

Market conditions as at 31 July 2009

Gross redemption yield on FTSE Gilt Index – 20 years:	4.46%
Real yield on over 15 years duration Index Linked Gilts (0% inflation):	0.86%
Real yield on over 15 years duration Index Linked Gilts (5% inflation)	0.81%
Calculated Retail Price Inflation Index (RPI)	3.7%
Trustee adjustment to inflation	0.3%

Economic (% per annum compound)	**2009 Funding Basis**
Real Rate of Return on Scheme Assets	3.2%
Rate of interest:	6.6%
Rate of Pensionable Salary increases:	4.9%
Rate of increase in pensions in payment:	3.4%
Rate of increases in pensions in deferment:	3.4%
Expected return on assets and contributions for Recovery Plan	7.0%

Assets & Expenses

Valuation of assets:	Value of the assets as shown in accounts
Expenses:	
• past service	1% of Technical Provisions
• future service	0.4% of Pensionable Salaries
Death in Service Premiums:	Not applicable
Pension Protection Fund levy:	Included in the future service expenses

Demographic Assumptions

Rates of mortality – before and after retirement		125% of SAPs Light Pensioner Mortality tables for males and 95% of SAPs Light Pensioner Mortality tables for females. Plus a projection based upon the Medium Cohort year of birth table from the CMIB and with a minimum 1%pa improvement.
Age at Retirement:		
Active Members:	Males:	63
	Females:	61
Deferred Members:	Males:	61
	Females:	60
Proportion Married:		90% (males and females)
Withdrawal Rates:		Nil
Age Difference:		Wives 3 years younger than their husbands
Member Options:		None allowed for

Illustrative death rates

Death rates (probabilities of death within one year) for a member aged x as at 31 July 2009.

Age x	Death rates at 2009		Death rates projected to 2029	
	Male	Female	Male	Female
20	0.000223	0.000130	0.000139	0.000081
25	0.000239	0.000202	0.000149	0.000125
30	0.000272	0.000357	0.000169	0.000222
35	0.000338	0.000645	0.000210	0.000402
40	0.000466	0.001094	0.000290	0.000681
45	0.000705	0.001670	0.000439	0.001039
50	0.001131	0.002251	0.000704	0.001401
55	0.001861	0.002663	0.001159	0.001658
60	0.002966	0.003196	0.001846	0.001989
65	0.005302	0.004961	0.003745	0.003504
70	0.009555	0.008491	0.007338	0.006520
75	0.017517	0.015071	0.014157	0.012180
80	0.032939	0.026775	0.026941	0.021899
85	0.066065	0.050313	0.054035	0.041152
90	0.131463	0.100003	0.107525	0.081793
95	0.193456	0.173241	0.158229	0.141695
100	0.258880	0.261818	0.211740	0.214143
Life expectancy of a 60 years old	85.7	89.6	87.7	91.6

Recovery Plan

Name of Scheme	Cambridge University Assistants' Contributory Pension Scheme
Status	This Recovery Plan has been prepared by CU Pension Trustee Limited (the "Trustee" of the Scheme) on 23 April 2010 after obtaining the advice of Robert J Sweet, the Actuary to the Scheme. The actuarial valuation of the Scheme as at 31 July 2009 revealed a funding shortfall (technical provisions minus value of assets) of £138,821,000.
Steps to be taken to ensure that the statutory funding objective is met	To eliminate this funding shortfall, the Trustee and the Principal Employer have agreed that additional contributions will be paid to the Scheme by the Employers, payable in equal monthly instalments, of: ▪ 3.4% of Pensionable Salaries from 23 April 2010 to 31 July 2011; followed by ▪ £14,595,000 per annum from 1 August 2011 to 31 July 2025
Period in which the statutory funding objective should be met	The funding shortfall is expected to be eliminated by 31 July 2025. 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 23 April 2010; ▪ a return on existing assets and on new contributions during the period of 7.0% p.a.; ▪ allowance for the additional contributions paid since the valuation date (31 July 2009) in excess of the costs of providing ongoing pension benefit in the Scheme.

Progress towards meeting the Statutory Funding Objective	It is expected that 50% of the additional contributions detailed above will be paid by 31 July 2018.

On behalf of the University of Cambridge ("the Principal Employer")	**On behalf of CU Pension Trustee Limited ("the Trustee")**
Signed	Signed ....
Name : A M REID	Name : R K HINKLEY
Position : Director of Finance	Position : Director/Company Secretary
Date : 23.04.10	Date : 23-04-2010

This Recovery Plan has been agreed by the Trustee at its meeting on 23 April 2010 after obtaining my actuarial advice.

Signed :

Name : R J Sweet

Position : Scheme Actuary

Date : 23 April 2010

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 23 April 2010, after obtaining the advice of Robert Sweet, the Actuary to the Scheme.

Contributions to be paid towards the Scheme from 23 April 2010 to 31 July 2025

By Active Members:

Members who are Salary Sacrifice Members

- No contributions are required.

Other Members

- A contribution rate of 6% p.a. of Pensionable Salary, to be deducted from their Pensionable Salary by their Employer and paid to the Scheme on or before the 19th day of the calendar month following deduction.

By the Employers:

1. In respect of the future accrual of benefits, the expenses of administering the Scheme, death in service benefits and PPF levies, from 23 April 2010 the Employers will pay contribution rates of:

   - 26.3% p.a. of Pensionable Salaries (Salary Sacrifice Members); and
   - 20.3% p.a. of Pensionable Salaries (Other Members)

To be paid towards the Scheme on or before the 19th 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 23 April 2010 the Employers will pay:

   - an additional contribution of 3.4% p.a. of Pensionable Salaries over the period from 23 April 2010 to 31 July 2011; followed by

   - an additional contribution of £14,595,000 per annum payable in monthly instalments over the period from 1 August 2011 to 31 July 2025, the allocation of this amount between the Employers to be decided by the Principal Employer.

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

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 : 23.04.10

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

Signed ....

Name : R K HINKLEY

Position : Director/Company Secretary

Date : 23-04-2010

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 2009 to be met by the end of the period specified in the Recovery Plan dated 23 April 2010.
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 23 April 2010.
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:	23 April 2010
Name:	Robert J Sweet	Qualification:	Fellow of the Institute of Actuaries
Address:	Mill Pool House Mill Lane Godalming Surrey GU7 1EY	Name of Employer:	Cartwright Group Ltd