

June 2009

University of Reading
Employees' Pension Fund
Actuarial valuation as at:
31 July 2008

MERCER



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Summary

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An actuarial valuation of the University of Reading Employees' Pension Fund has been carried out as at 31 July 2008.

The key conclusions from the valuation are:

- The Fund showed a shortfall of £16.9m at the valuation date based on the assumptions made for calculating its technical provisions. This measure compares the Fund's assets with the value of the past service benefits at 31 July 2008. It represents a funding level of 83% relative to the funding target.
- Based on the assumptions used to assess the technical provisions, the cost to the University of the benefits accruing for future service was 24.1% of Pensionable Salaries. This includes an allowance for Fund expenses and lump sum life assurance.
- If the Fund had been discontinued at the valuation date, there would have been insufficient fund assets to buy out all the benefits with an insurance company. The estimated wind-up funding level at the valuation date was 74%.
- In light of these results, the University and the Trustees have agreed that the University will contribute to the Fund as follows:
 - 20.6% of members' total Pensionable Salaries until 31 July 2009, then 24.1% of members' total Pensionable Salaries thereafter, plus
 - Shortfall contributions of £1m for the year ending 31 July 2009, £1.5m for the year ending 31 July 2010 and subsequently increasing each year to £3.02m for the year ending 31 July 2021.
 - Age related rebates and member contributions (including any additional voluntary contributions) are payable in addition at the rates set out in the Fund Rules.

- Contributions will generally be paid monthly in arrears with each payment due by the 19th of each month. The University will meet the cost of the PPF levy annually as required.
- If the assumptions made for assessing the recovery plan are borne out in practice, these contributions would eliminate the 31 July 2008 shortfall of £16.9m against the technical provisions by August 2017 and would improve the wind-up funding position of the Fund. However, financial experience over the six months to 31 January 2009 was poor and the Fund had an estimated shortfall at that date of £27.8m. On the assumptions adopted, the recovery plan would eliminate this shortfall by July 2021.
- The agreed contributions are set out in the schedule of contributions and recovery plan enclosed as appendices.
- The recovery plan, the schedule of contributions and a summary of the valuation will be submitted to the Pensions Regulator.

Signature**Scheme Actuary**

Chris Maggs

Date of signing

22 June 2009

Qualification

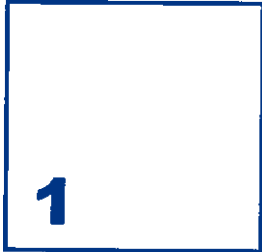
Fellow of the Institute of Actuaries

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This report is addressed to the Trustees and has been prepared in accordance with the version of the Board for Actuarial Standards' *Guidance Note 9: Funding Defined Benefits – Presentation of Actuarial Advice* current at the date this report is signed.

The calculations in the report use methods and assumptions appropriate for reviewing the financial position of the Fund and determining the appropriate contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor does Mercer accept liability to the Trustees if the advice is used for any purpose other than that stated (for example for corporate accounting or corporate mergers/acquisitions).

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Introduction

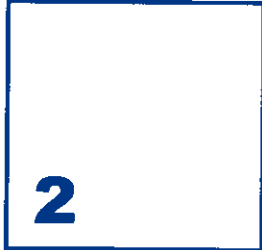
- 1.1 This report sets out the results of the actuarial valuation of the University of Reading Employees' Pension Fund ("the Fund") as at 31 July 2008.

Purpose of the valuation

- 1.2 The primary aims of the valuation are to review the financial position of the Fund and to determine appropriate University contributions to the Fund for the future. In particular, the valuation aims to:
- Assess the Fund's financial position relative to the statutory funding objective.
 - Assess whether the Fund would have sufficient resources were it to discontinue.
 - Determine the appropriate future level of University contributions, taking the above into account.
- 1.3 The Fund's Trust Deed and Rules give the University the power to set contributions with the agreement of the Trustees. In accordance with the Pensions Act 2004, the Trustees and University have agreed on the funding policy, assumptions, statement of funding principles, recovery plan and schedule of contributions.
- 1.4 The valuation has been carried out on the instruction of the Trustees, and in accordance with Rule 21.5 of the Definitive Trust Deed and Rules and Section 224 of the Pensions Act 2004.
- 1.5 The previous actuarial valuation of the Fund was carried out as at 31 July 2005 by Iain Johnson.

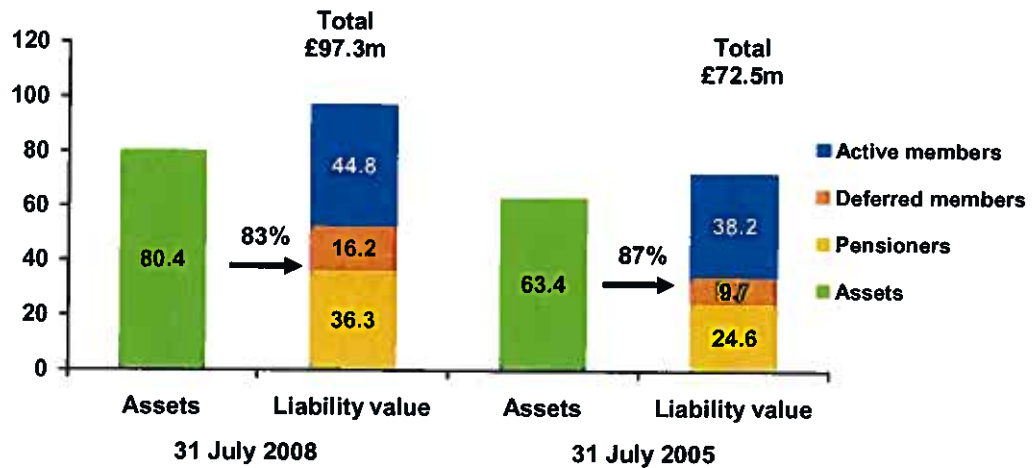
Funding objective

- 1.6 The Pensions Act 2004 and the Scheme Funding Regulations issued in 2005 require schemes to adopt the statutory funding objective – to have sufficient and appropriate assets to cover their “technical provisions”. The technical provisions are an estimate of the assets needed to make provision for benefits already accrued under a scheme.
- 1.7 The Trustees have decided on a funding objective and agreed it with the University. This is set out in the statement of funding principles, enclosed as Appendix D.
- 1.8 In summary, the agreed funding objective is to reach (within a ten year period), and then maintain, assets equal to the technical provisions, assessed on an ongoing basis allowing for future salary increases for active members.
- 1.9 The funding objective is similar to the objective as at the previous valuation, although as this is the first valuation under the new funding regime, it has not previously been documented in a statement of funding principles. The funding objective differs from that at the previous valuation in the following respects:
 - The Minimum Funding Requirement underpin on the funding objective has been removed (as the MFR has been abolished).
 - Investment returns different from those used to assess the technical provisions have been allowed for in calculating the shortfall contributions.
- 1.10 Under legislation, the assumptions underlying the technical provisions are set by the Trustees with the agreement of the University. The assumptions include margins for prudence that the Trustees consider appropriate given the University’s willingness and ability to support the Fund (the “University covenant”). I have provided advice to the Trustees on margins for prudence. This advice took account of the information on the University covenant provided separately by the University.



Funding results – technical provisions

- 2.1 The market value of the Fund's assets at the valuation date is compared with the Fund's technical provisions below. The funding position at the previous valuation is shown for comparison.



- 2.2 The shortfall against the technical provisions at the valuation date was £16.9m. This represents a funding level of 83% relative to the technical provisions.
- 2.3 The technical provisions are not the same as the cost of securing the benefits on a wind-up. The wind-up position is described in Section 5.

Analysis of change in funding position

- 2.4 The key factors influencing the change in the deficit since the previous valuation are shown below.

Analysis of movement in shortfall	£m
Shortfall at 31 July 2005	9.1
Interest on shortfall	1.9
Higher than expected investment returns	(1.4)
University contributions in excess of cost of benefit accrual	(0.6)
Miscellaneous/membership movements	(2.4)
Change in underlying assumptions	10.3
Shortfall at 31 July 2008 against technical provisions	16.9

- 2.5 The main reason for the increase in the shortfall since the 2005 valuation is the change in the underlying assumptions. In particular;
- a) the lower net interest rate used to value the liabilities due to the reduction in the yields available on index-linked gilts; and
 - b) the use of more prudent mortality assumptions.

This has been offset to a small extent by the higher than expected returns on the Fund's assets and the contributions in excess of the cost of benefit accrual.



Funding results – contribution requirements

- 3.1 The contributions payable by the University have been agreed and details are set out in the recovery plan (Appendix E) and the schedule of contributions (Appendix F).
- 3.2 These contributions are made up of the following elements:
- A contribution to cover the cost of the future service accrual (plus life assurance cover and expenses) over the year.
 - An adjustment to address the shortfall against the technical provisions.

Normal contribution

- 3.3 The table below shows the first of these elements. This cost is calculated as the value of benefits expected to accrue to the membership in respect of one year's service based on projected salaries. To this are added allowances for life assurance premiums and expenses. There is also a deduction for age related rebates. The figures are expressed as percentages of Pensionable Salaries and apply for the period to the next formal actuarial valuation.

	% of Pensionable Salaries	
	31 July 2008	31 July 2005
Pension and death benefits	28.9	27.65
Age related rebates	(2.8)	(3.4)
Life assurance	0.55	-
Administrative expenses	3.7	2.6
Total	30.35	26.85
Less members' contributions	(6.25)	(6.25)
University's normal contribution	24.1	20.6

3.4 In addition to the contributions above, the University meets the PPF levy directly.

Analysis of change in University's normal contribution

3.5 The key factors influencing the change in the University's normal contribution since the previous valuation in 2005 are shown below.

Analysis of movement in normal contribution	%
University's normal contribution at 31 July 2005	20.6
Change in underlying assumptions / basis	2.0
Change in allowance for age related rebates	0.6
Change in expense allowance	1.1
Change in membership profile	(0.2)
University's normal contribution at 31 July 2008	24.1

Contributions to address shortfall

- 3.6 The recovery plan and the schedule of contributions set out the overall contribution rates agreed, including those to meet the shortfall against the Fund's technical provisions over the recovery period. Details of the timing and frequency of contributions are given, together with the date on which the revised contributions commence.
- 3.7 The contributions agreed for the period to the next formal actuarial valuation include the following amounts towards the shortfall against the Fund's technical provisions:

- £1.0m for the year ending 31 July 2009.
- £1.5m for the year ending 31 July 2010.
- £1.75m for the year ending 31 July 2011.

Over the longer term (i.e. beyond the next formal actuarial valuation), the shortfall contributions agreed with the University are as follows:

Year	Annual contribution
2011/12	£2.00m
2012/13	£2.25m
2013/14	£2.33m
2014/15	£2.42m
2015/16	£2.51m
2016/17	£2.61m
2017/18	£2.70m
2018/19	£2.81m
2019/20	£2.91m
2020/21	£3.02m

- 3.8 The Trustees arrived at this schedule after considering both the shortfall as at the 31 July 2008 valuation date and the estimated shortfall as at 31 January 2009. Severe adverse experience between the two dates resulted in an estimated shortfall against the technical provisions of £27.8m as at 31 January 2009. The recovery plan addresses the 31 July 2008 valuation shortfall over a period of 9 years 1 month, allowing for a higher level of equity outperformance than used for the technical provisions. It also addresses the estimated 31 January 2009 shortfall over the period to July 2021, allowing for slightly higher equity returns. Details are given in paragraph 4.8.

Limitations on advice

- 3.9 I have drawn the Trustees' attention to the issues they should consider when setting the recovery plan and contribution rate under paragraphs 75, 79 and 102 of the Pensions Regulator's Code of Practice No. 3 (Funding defined benefits). Having informed the Trustees in advance, I have not provided advice on the following matters.
- The University's business plans and the likely effect any potential recovery plan would have on the future viability of the University.
 - The ability of the Trustees to pursue an employer to make good a deficiency in the event of a scheme wind-up.

- The University's expenditure commitments. For example, some "back-end loading" might be acceptable when the University's payments towards redeeming a commercial mortgage are due to end in the near future or a vital one-off investment in new equipment is being made in the next year.
- The use of any contingent securities.
- Whether there are any impending member movements which would have a potentially significant effect on funding, such as major retirements or bulk transfers (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 University.

4

Method and assumptions

Funding method

- 4.1 The funding method adopted is known as the projected unit method, under which the salary increases assumed for each member are projected until the member is assumed to leave active service. The same method was used at the previous valuation.
- 4.2 If the membership profile remains stable in terms of age and sex, and the assumptions are borne out, then the normal contribution rate (as a percentage of salaries) will remain stable. The method therefore implicitly allows for new entrants replacing leavers.

Assumptions

- 4.3 The financial and demographic assumptions used to assess the technical provisions, the normal contribution and the recovery plan are set out in the statement of funding principles (Appendix D).
- 4.4 The table below sets out a summary of the market yields at the valuation date, together with the yields at the date of the previous valuation:

	31 July 2008	31 July 2005
Long-dated fixed interest gilt yield	4.82%	4.38%
Long-dated index-linked gilt yield	1.00%	1.59%
Market expectation for inflation (long-term)	3.78%	2.75%

- 4.5 The assumptions to which the valuation results are particularly sensitive are shown below. A number of changes have been made to the assumptions used, compared with the previous valuation, and these are highlighted below.

	2008 technical provisions	2005 funding valuation
Investment return		
Pre-retirement	6.9% p.a.	6.5% p.a.
Post-retirement	5.4% p.a.	5.0% p.a.
Price inflation (RPI)	3.75% p.a.	2.75% p.a.
Salary increases	5.25% p.a.	4.25% p.a.
Pension increases in payment		
- LPI (6% maximum) on non-GMP	3.75% p.a.	2.75% p.a.
- LPI (3% maximum) on post-88 GMP	3.0% p.a.	2.75% p.a.
Demographic	2008	2005
Mortality – base table	PA92 tables using year of birth	PA92 tables using year of birth
Mortality – future improvements	Medium cohort projections with 1.0% minimum improvement per annum	Medium cohort projections
Retirement	For members who were in service at 1 April 1988 (or female entrants between 1 April and 30 October 1988 who elected a pension age of 60), it will be assumed that 50% of in-service male members, 100% of in-service female members and 100% of deferred pensioners retire at age 60 with an unreduced pension. Female deferred pensioners who left before 1 April 1988 will also be assumed to retire at age 60. The remaining in-service members and deferred pensioners will be assumed to retire at age 65.	
Commutation	No allowance	No allowance

- 4.6 As an illustration of the mortality rates assumed, the further life expectancies at 65 for males currently aged 45 and 65 are shown below:

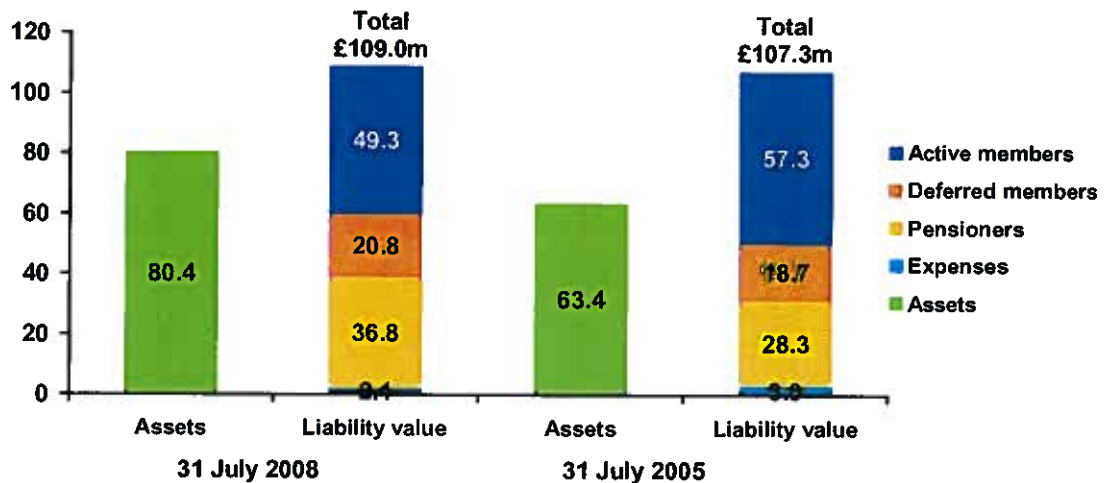
	PA92 (Year of Birth) medium cohort with a 1% p.a. floor on future improvements	PA92 (Year of Birth) medium cohort
Non-retired member (age 45 currently)	24.3 years	23.1 years
Retired member (age 65 currently)	22.4 years	22.0 years

- 4.7 The basis of valuing the assets (market value) is consistent with that of valuing the liabilities.
- 4.8 The contributions payable under the recovery plan are calculated using the same assumptions as those used to calculate the technical provisions with the exception that, during the period of the recovery plan, the investment return before retirement is assumed to be higher. Different rates are assumed for different aspects of the recovery plan:
- when considering the shortfall at the valuation date, the return is assumed to be 7.8% p.a.
 - when considering the estimated shortfall at 31 January 2009, the return from that date is assumed to be 8.3% p.a.



Wind-up funding results

- 5.1 The wind-up funding level of the Fund at the valuation date has been estimated as 74%. This has improved from 59% since the previous valuation. The main reasons for the improvement are a general relaxation in insurance company terms for securing benefits and investment returns greater than assumed since the previous valuation.



- 5.2 Had the statutory funding objective been exactly met on the valuation date (i.e. assets equal to technical provisions), the wind-up funding level would have been 89%.
- 5.3 As the Fund is less than 100% funded on the wind-up basis at 31 July 2008, not all members could have received their full benefits from the assets had the Fund wound up on that date.

- 5.4 If the Fund had been wound up on the valuation date, the priority order currently applicable would have had the following approximate impact on the different categories of benefit.

Benefit category	Coverage of benefits
Benefits up to level covered by PPF	100%
Any other benefits above those covered by PPF	0-5%

- 5.5 There is now a liability on employers on wind-up of a scheme based on the cost of meeting benefits in full. The estimated shortfall at the valuation date amounted to £28.6m.
- 5.6 The above measures look at the Fund's funding on the assumption that it had been discontinued on the valuation date and the benefits bought out with an insurance company.
- 5.7 In doing this, it is assumed that no further benefits accrue, no further contributions are paid and active members are entitled to benefits on the basis they had left service on the valuation date. There is no allowance for any discretionary benefits being paid in the future.
- 5.8 Given the Trustees' current investment policy, the wind-up position on a given date may be significantly different from the position estimated at the valuation date. Furthermore, the terms on which insurance companies will transact business have worsened since the valuation date.
- 5.9 The funding level is only an estimate as it is not based on an actual quotation. The true position could only be established by completing a buy-out.
- 5.10 The assessments above have been carried out using experience of recent buy-out quotations and understanding of the factors affecting this market. A detailed analysis of the reserves that would need to be held has not been carried out. Consideration has been given to the market terms for the financial instruments in which providers would be expected to invest, and an approximate allowance has been made for the reserves a provider would maintain to cover the risks involved and the statutory reserving requirements.
- 5.11 These results are, therefore, only a guide to the wind-up position and should not be taken as a quotation. Market changes, both in interest rates and in supply and demand for buy-out business, mean that if a buy-out ultimately proceeds, actual quotations may differ. The assumptions used are as follows:

Financial	
Pre retirement investment return	4.8% p.a.
Post retirement investment return	
Non-pensioners	5.2% p.a.
Pensioners	5.2% p.a.
Pre retirement revaluation on non-GMP pension	3.7% p.a.
Post retirement pension increases	
LPI (6% maximum) on non-GMP	3.7% p.a.
LPI (3% maximum) on post-88 GMP	2.8% p.a.
Demographic	
Retirement	Members who were in service at 1 April 1988 and female deferred pensioners who left before 1 April 1988 will be assumed to retire with an unreduced pension at age 60. Other members will be assumed to retire at age 65.
Mortality – base table	PA92 tables using year of birth
Mortality – future improvements	
Males	Medium cohort projections with 1.5% minimum improvement per annum starting from 2007
Females	Medium cohort projections with 1% minimum improvement per annum starting from 2007
Commutation	No allowance

5.12 Allowance has been made for expenses as 2% of the wind-up liabilities.

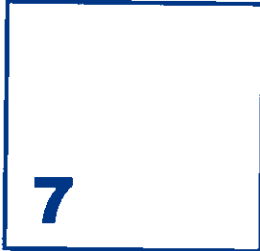
5.13 If the assumptions used for the recovery plan are borne out over the next three years, the agreed contributions are paid and there are no changes to the wind-up assumptions, the wind-up funding level at the next formal actuarial valuation (as at 31 July 2011) is estimated to be 78%. It is expected that the proportion of benefits in each priority class will have changed to the figures shown below.

Benefit category	Coverage of benefits
Benefits up to level covered by PPF	100%
Any other benefits above those covered by PPF	15-20%

6**Pension Protection Fund (PPF)**

- 6.1 If the Fund winds up when the University is insolvent, it may be eligible for the PPF. The Fund's assets and liabilities would only transfer to the PPF if the assets were insufficient to buy out the benefits provided by the PPF.
- 6.2 The benefits that the PPF could provide would be broadly 100% of pension for members over pension age and 90% of a capped amount of pension for members under pension age. Under the current PPF provisions:
- Pensions in payment will be increased annually, at the lower of 2.5% and the change in the retail prices index (RPI), in respect of service after 5 April 1997 only. Pensions accrued before April 1997 are not increased.
 - Deferred pensions will be revalued over the period to retirement in line with the increase in the RPI over the same period, or 5% per annum if less (2.5% per annum maximum for pensions accrued from April 2009).
 - Spouses' pensions will be 50% of members' PPF benefits.
 - The annual pensions of members aged less than their Fund's normal pension age when the Fund enters the PPF will be capped. The cap depends on the member's age and will increase in line with earnings. For example, in 2009/10 the cap is £31,936 at age 65 so that the maximum amount of compensation for members retiring at age 65 will be 90% of this, i.e. £28,742.
- 6.3 Based on the PPF benefits, and the financial and demographic assumptions prescribed by the PPF, the Fund is estimated to be 98% funded at the valuation date. In this case, had an insolvency event occurred (and no employer debt payment been recovered), it is likely that the PPF would have been required to assume responsibility for the Fund.

- 6.4 The calculations referred to above relate to the possible entry of the Fund into the PPF and are not necessarily the same as those on which the PPF levy is based. A separate letter has been prepared covering the position of the Fund as at 31 July 2008 on the statutory PPF basis used to determine the level of the levy (known as a Section 179 valuation).



Variability and risks

- 7.1 The University contributions set out in the recovery plan and schedule of contributions are based on the valuation results set out in sections 2 and 3 of this report. These in turn depend on the financial and demographic assumptions set out in the statement of funding principles.
- 7.2 It is likely, especially in the short term, that these assumptions will not be borne out in practice. It is therefore important to consider the potential impact on the funding position and the University contribution rate of actual experience differing from what has been assumed.

Sensitivity to key assumptions

- 7.3 Investment return, inflation, salary increase and life expectancy assumptions impact significantly on both the funding position and the cost of the benefits accruing over the year.
- 7.4 The following table illustrates the sensitivity to variations in these key assumptions over the long term. The starting points are the technical provisions of £97.3m shown in section 2.1 and the University normal contribution of 24.1% shown in section 3.3. Each row of the table considers one change in isolation, with all other assumptions being unaltered. An equivalent change in the assumption in the opposite direction would decrease the liability value by a similar amount.

Change in assumption	Increase in technical provisions at 31 July 2008 £ m	Increase in University normal contribution at 31 July 2008 % of Pensionable Salaries
Pre-retirement investment return reduced by 0.25% p.a.	+1.3	+0.8
Post-retirement investment return reduced by 0.25% p.a.	+3.0	+1.0
Real salary growth increased by 0.25% p.a.	+0.9	+0.8
Inflation and salary growth increased by 0.25% p.a.	+3.8	+1.7
Life expectancy increased (use an age rating of -1 year)	+2.8	+0.7

Risks that the statutory funding objective will not be met

- 7.5 The Trustees' policy for meeting the Fund's statutory funding objective carries a number of risks outside the Trustees' control. The following paragraphs comment on some potentially material risks.
- 7.6 If the University becomes unable to pay contributions or to make good deficits in the future, the Fund's assets will be lower than expected and the funding level will be worse than expected. If the reason for the University not paying the agreed contributions is one of financial difficulties, the Trustees' focus would switch to the results on the wind-up basis, as set out in section 5.
- 7.7 If the future investment return on assets falls short of the rates assumed in the calculation of the technical provisions and the recovery plan, the wind-up position of the Fund will be worse than expected.
- 7.8 If gilt yields change such that the liability values increase by more (or decrease by less) than the assets, the funding position against the technical provisions and on the wind-up basis will be worse than expected.

- 7.9 The table below illustrates approximately how the funding position at the valuation date would vary for given movements in gilt/bond yields and equity markets.

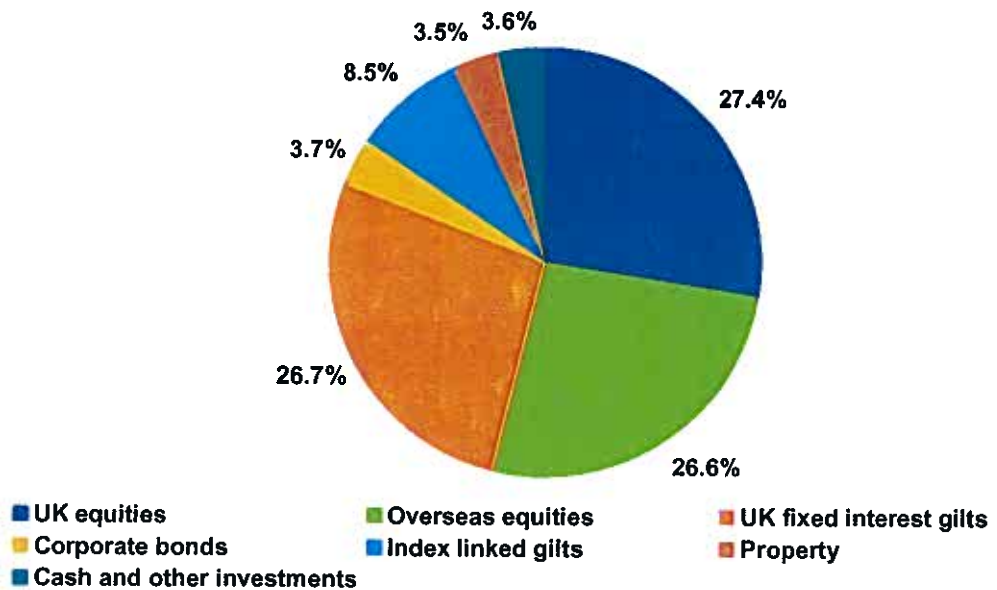
Change in equity values	Change in gilt/bond yields		
	-1% p.a. (Gilt yield = 3.8%) £m	No change (Gilt yield = 4.8%) £m	+1% p.a. (Gilt yield = 5.8%) £m
-20% (FTSE100 = 4330)	-22.2	-9.0	+4.2
No change (FTSE100 = 5412)	-13.2	-	+13.2
+20% (FTSE100 = 6494)	-4.2	+9.0	+22.2

- 7.10 If improvements in mortality are faster than assumed, the cost of benefits will increase because members are living longer than expected. This will mean the funding position against the technical provisions and on the wind-up basis will be worse than expected. A quantitative illustration of such a change was shown by the sensitivity analyses in paragraph 7.4.
- 7.11 If members make decisions around their options which increase the Fund's liabilities, the wind-up funding position and the progress towards the statutory funding objective would be worse than expected.
- 7.12 In all of the scenarios in which the funding position reduces, it is likely that an increase in future University contributions will be required (or alternatively the University may seek to reduce the value of the future benefits being built up).



Assets and financial transactions

- A.1 The market value of the Fund's assets (excluding money purchase additional voluntary contributions (AVCs) which are separately invested) was £80.4m on the valuation date.
- A.2 The distribution of the assets by asset class is shown below:



- A.3 During the inter-valuation period, the investment return on the Fund's assets has been approximately 7.7% per annum.
- A.4 The details of the assets at the valuation date and the financial transactions during the inter-valuation period have been obtained from the Fund's audited accounts.

- A.5 Following the previous valuation it was agreed that the University would pay contributions of 18.0% of members' total Pensionable Salaries to the Fund up to 31 July 2006 and 20.6% thereafter, plus £1m per annum shortfall contributions from 1 August 2007. Members' contributions, age related rebates and AVCs were payable in addition. The audited accounts confirm that contributions have been paid at these rates since 31 July 2005.
- A.6 The Trustees hold a group life insurance policy with Norwich Union which insures the lump sum benefit payable on death-in-service.
- A.7 The detailed asset information is shown below:

Market value at valuation date	£m
Bonds:	
Fixed interest gilts	21.5
Index-linked gilts	6.9
Corporate bonds	2.9
Equities:	
UK	22.1
Overseas	21.3
Property	2.8
Alternatives	1.1
Cash deposits and net current assets	1.8
Total	80.4



Appendix B

Benefits

- B.1 The benefits valued are as set out in the Trust Deed and Rules dated 1 July 2007 plus supplemental deeds. No allowance has been made for discretionary benefits.
- B.2 The benefits that will emerge from money purchase AVCs paid by members have been excluded from the valuation, as have the corresponding assets, as their values are exactly matched.
- B.3 UK and European law requires pension funds to provide equal benefits to men and women in respect of service after 17 May 1990 (the date of the "Barber" judgement). There is still no general agreement on whether this applies to inequalities caused by Guaranteed Minimum Pensions (GMPs) and, if it does, what adjustments have to be made to fund benefits to correct these inequalities. The valuation makes no allowance for removal of these inequalities. It is consequently possible that additional funding will be required for equalisation once the law has been clarified. It is recommended that the Trustees seek further professional advice if they are concerned about this issue.

Appendix C

Membership data

C.1 The membership data is summarised below, with figures at the previous valuation shown for comparison.

Active members	Valuation date	Previous valuation
Number	759	823
Total Pensionable Salaries (£000s p.a.)	15,206*	14,668*
Average Pensionable Salary (£ p.a.)	20,034*	17,822*
Average age	50	50
Average past service	9.3	8.6

* Full-time equivalent Pensionable Salaries are shown for part-timers

Deferred pensioners	Valuation date	Previous valuation
Number	766	655
Total deferred pensions (£000s p.a. revalued to valuation date)	1,047	772
Average deferred pension (£ p.a.)	1,366	1,179
Average age	47	47

Pensioners	Valuation date	Previous valuation
Number	720	603
Total pensions payable (£000s p.a.)	2,091	1,547
Average pension (£ p.a.)	2,905	2,565

Pensioners	Valuation date	Previous valuation
Average age	72	72

- C.2 The average Pensionable Salary increase for the Fund members who were in service for the whole of the inter-valuation period was 4.4% per annum.
- C.3 Pensions in payment in excess of Guaranteed Minimum Pensions (GMPs) were increased as guaranteed under the Fund as follows:
- | | |
|--------------|------|
| 1 April 2006 | 2.7% |
| 1 April 2007 | 3.6% |
| 1 April 2008 | 3.9% |
- C.4 Data in relation to members of the Fund was provided by the Fund's administrator and its accuracy has been relied on. The number of members valued does not agree with the membership figures in the Trustees' Report & Accounts. However, the differences are not material in the context of the valuation as a whole. Whilst reasonableness checks on the data have been carried out, they do not guarantee the completeness or the accuracy of the data. Consequently Mercer does not accept any liability in respect of its advice where it has relied on data which is incomplete or inaccurate.



Appendix D

Statement of funding principles

This statement of funding principles sets out the policies of the Trustees of the University of Reading Employees' Pension Fund ("the Trustees") for securing that the statutory funding objective is met.

It has been prepared by the Trustees to satisfy the requirements of section 223 of the Pensions Act 2004, after obtaining the advice of Chris Maggs, the actuary to the scheme. It will be taken into account in the actuarial valuation as at the effective date of 31 July 2008 and subsequent actuarial valuations, unless it is revised before their completion.

This statement of funding principles has been agreed by the Employer, The University of Reading.

The statutory funding objective

The statutory funding objective is that the scheme has sufficient and appropriate assets to pay its benefits as they fall due (the value of which is known as the technical provisions).

Calculation of the technical provisions

The principal method and assumptions to be used in the calculation of the technical provisions are set out in the Appendix.

The general principles adopted by the Trustees are that the assumptions used, taken as a whole, will be sufficiently prudent for pensions and benefits already in payment to continue to be paid, and to reflect the commitments which will arise from members' accrued pension rights. The basis will include appropriate margins to allow for the possibility of events turning out worse than expected and will only be adopted after considering how it compares with the assumptions used to assess the scheme's solvency position.

In particular, a prudent margin will be included in the assumed investment return (discount rate) and demographic assumptions will be based on prudent principles. Other assumptions will generally be based on best estimates of future experience, within the constraint of the basis being prudent overall. However, the Trustees do not intend for the method and assumptions to remove completely the risk that the technical provisions could be insufficient to provide benefits in the future.

In determining what is 'prudent' the Trustees will take into account their assessment of the Employer's covenant.

Policy on discretionary increases and funding strategy

No allowance has been included in the assumptions for paying discretionary benefits or making increases to benefits that are not guaranteed under the scheme rules. This is in line with current practice. The Trustees will not provide discretionary benefits unless the Employer agrees to finance them or there is no shortfall against the technical provisions.

Rectifying a failure to meet the statutory funding objective

If the assets of the scheme are less than the technical provisions at the effective date of any actuarial valuation, a recovery plan will be put in place, which requires additional contributions from the Employer to meet the shortfall. The Trustees and the Employer have agreed that any such funding shortfalls should be eliminated as quickly as the Employer can reasonably afford.

Additional contributions will normally be expressed as level monetary amounts or as amounts which increase every year over the recovery period in line with an assumed inflation level. When the required increase in contribution is substantial, the Trustees may agree to a series of graduated annual increases in the first few years in order to accommodate the Employer's budgeting needs.

In determining the actual recovery period at any particular valuation, the Trustees will take into account the following factors:

- the size of the funding shortfall and the scheme's asset and liability structure;
- the business plans of the Employer;
- the Trustees' assessment of the financial covenant of the Employer;
- any contingent security offered by the Employer

and may take into account any material changes in the funding shortfall and in market conditions following the valuation date.

The Trustees normally expect the recovery period to be no longer than 10 years.

Assuming the assumptions are borne out in practice, the shortfall calculated at the 31 July 2008 valuation will be met by 31 August 2017 which is a recovery period of 9 years 1 month. However, the Trustees also considered the estimated shortfall at 31 January 2009 and the recovery period to correct that position is 13 years.

The assumptions to be used in these calculations are set out in the Appendix.

Calculating the normal cost of the scheme

Contributions required to meet the cost of benefits accruing by members after the valuation date will be calculated using the method and assumptions set out in the Appendix.

Policy on reduction of cash equivalent transfer values (CETVs)

A CETV represents the actuarial value of a member's benefits when transferring deferred pension entitlements out of the scheme or when a valuation is required on divorce. The Trustees specify the actuarial assumptions used for calculating CETVs in accordance with legislative requirements.

At each valuation, the Trustees will ask the actuary to report on the extent to which assets are sufficient to provide CETVs for all members. If the assets are insufficient to provide 100% of benefits on that basis, so that payment of full CETVs would adversely affect the security of the remaining members' benefits, and the Employer is unable or unwilling to provide additional funds, the Trustees will consider reducing CETVs as permitted under legislation.

If, at any other time, the Trustees are of the opinion that payment of CETVs at a previously agreed level could adversely affect the security of the remaining members' benefits, the Trustees will commission a report from the actuary and will use the above criteria to decide whether, and to what extent, CETVs should be reduced.

Payments to the employer

The Trust Deed and Rules do not allow payment to the Employer except on a wind-up of the scheme.

Frequency of valuations and circumstances for extra valuations

An actuarial valuation is being carried out as at 31 July 2008 and subsequent valuations will in normal circumstances be carried out every three years thereafter. An actuarial report on developments affecting the scheme's technical provisions and funding level since the previous valuation will be obtained as at 31 July each other year.

The Trustees 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.

The Trustees will consult the Employer before carrying out an early valuation. Commissioning a valuation will not be necessary if agreement can be reached with the Employer to revise the schedule of contributions and/or recovery plan in a way satisfactory to the Trustees on the advice of the actuary.

This statement of funding principles, dated 22 June 2009 has been agreed by The University of Reading and the Trustees of the University of Reading Employees' Pension Fund:

Signed on behalf of The University of Reading

Name: David Savage

Position: Director of Finance & Corporate Services

Date: 22 June 2009

Signed on behalf of the Trustees
of the University of Reading Employees' Pension Fund

Name: Christopher Fisher

Position: Chairman of Trustees

Date: 22 June 2009

This statement of funding principles has been agreed by the Trustees of the University of Reading Employees' Pension Fund after obtaining actuarial advice from the scheme actuary:

Name: Chris Maggs FIA

Position: Actuary to the University of Reading Employees' Pension Fund

Date: 22 June 2009

Appendix

Method and assumptions used in calculating the technical provisions

Summary of decisions made as to method and key assumptions used for calculating technical provisions as at 31 July 2008

The method used was the Projected Unit method.

Principal actuarial assumptions for valuation as at 31 July 2008	
Investment return pre-retirement	6.9% p.a.
Investment return post-retirement	5.4% p.a.
RPI price inflation	3.75% p.a.
Salary increases	5.25% p.a.
Pension increases in payment (RPI maximum 6%)	3.75% p.a.
Members' mortality	PA92 (year of birth) medium cohort with a 1% p.a. underpin

The derivation of these key assumptions and an explanation of the other assumptions to be used in the calculation of the technical provisions is set out below.

Method

The actuarial method to be used in the calculation of the technical provisions is the Projected Unit method, under which the salary increases assumed for each member are projected until that member is assumed to leave active service by death, retirement or withdrawal from service.

Financial assumptions

Investment return pre-retirement (discount rate)

The return will be based on the redemption yield on long-dated UK Government conventional gilt stocks, plus 2.1% p.a. For this purpose, the gross annualised redemption yield on the FTSE Actuaries Government Securities 20 year index on the effective date was used for the 2008 valuation. The addition to the yield reflects the prudent allowance the Trustees have agreed for additional investment returns in excess of gilt yields based largely on equity investments.

Investment return post-retirement (discount rate)

The return will be based on the redemption yield on long-dated UK Government conventional gilt stocks, plus 0.6% p.a. For this purpose, the gross annualised redemption yield on the FTSE Actuaries Government Securities 20 year index on the effective date was used for the 2008 valuation. The addition to the yield reflects the prudent allowance the Trustees have agreed for additional investment returns in excess of gilt yields based on a diverse range of investments.

Inflation

The inflation assumption will be taken to be the investment market's expectation for inflation as indicated by the difference between yields on conventional and index-linked UK Government bonds (gilts). For this purpose, the gross annualised redemption yield on the FTSE Actuaries Government Securities 20 year index, and the annualised real yield on the FTSE Actuaries Government Securities Index-linked Over 5 year (3% inflation) index on the effective date were used for the 2008 valuation.

Salary increases

The assumption for real salary increases (salary increases in excess of price inflation) will be determined after consulting the Employer, but as a starting point the Trustees will use an assumption of 1.5% p.a. No additional allowance has been made for promotional increases.

Pension increases

Increases to pensions in excess of the GMP will be assumed to be in line with the inflation assumption described above.

The rate noted above applies to pensions accruing in excess of the GMP where the increases are in line with price inflation subject to a maximum of 6% each year. It will be assumed that on GMPs, future increases will be in line with statutory requirements. No allowance will be made for discretionary increases.

Demographic assumptions

Mortality

The mortality assumptions will be based on up-to-date information published by the CMI and National Statistics, making allowance for future improvements in longevity and the experience of the scheme. The mortality tables used for the 2008 valuation were PA92 (year of birth) medium cohort with a 1% p.a. underpin.

Early retirement

For members who were in service at 1 April 1988 (or female entrants between 1 April and 30 October 1988 who elected a pension age of 60), it will be assumed that 50% of in-service male members, 100% of in-service female members and 100% of deferred pensioners retire at age 60 with an unreduced pension. Female deferred pensioners who left before 1 April 1988 will also be assumed to retire at age 60. The remaining in-service members and deferred pensioners will be assumed to retire at age 65.

Ill health retirement

A small proportion of the active members will be assumed to retire owing to ill health. As an example of the rates assumed, the following is an extract from the decrement table used:

	% retiring per annum	
Age	Males	Females
40	0.08	0.20
50	0.37	0.92
60	1.28	3.80

Withdrawals

This assumption relates to those members who leave the scheme with an entitlement to a deferred pension or transfer value. It will be assumed that active members will leave the scheme at the following sample rates:

	% leaving per annum	
Age	Males	Females
25	5.3	17.1
35	3.4	10.1
45	1.4	3.4

Commutation

There will be no allowance for pension to be commuted for a cash lump sum at retirement.

Proportion married and age difference

It will be assumed that a proportion of members will have an eligible spouse/civil partner/dependant at the time of retirement or earlier death, based on general population statistics. At age 65 the proportion assumed will be 90%. Wives/partners will be assumed to be three years younger, on average, than their husbands/partners.

Expenses

The Trustees meet the expenses of the scheme. With the Employer's agreement, an allowance will be included in the contributions set out in the schedule of contributions.

Investment and other expenses will be allowed for implicitly in determining the rates of investment return.

The Employer meets the cost of the levy the Trustees must pay to the Pension Protection Fund over the period of the schedule of contributions, based on a section 179 valuation carried out with the same effective date as the actuarial valuation.

Assumptions used in calculating contributions payable under the recovery plan

The contributions payable under the recovery plan will generally be calculated using the same assumptions as those used to calculate the technical provisions. However, at the request of the Employer the Trustees will consider the use of a higher investment return assumption. For the 2008 valuation the asset return assumed pre-retirement is based on the redemption yield on long-dated UK Government conventional gilt stocks, plus 3.0% p.a. When considering the estimated shortfall at 31 January 2009 for the purposes of the recovery plan, the asset return assumed (from that date) pre-retirement is based on the redemption yield on long-dated UK Government conventional gilt stocks, plus 3.5% p.a. The discount rate used for assessing liability values is unchanged.

Method and assumptions used in calculating the cost of future accrual

Method

The actuarial method to be used in the calculation of the cost of future accrual will be the Projected Unit method.

Financial assumptions

The cost of future accrual will be calculated using the same assumptions as those used to calculate the technical provisions.

Appendix E

Recovery plan

This recovery plan has been prepared by the Trustees of the University of Reading Employees' Pension Fund ("the Trustees") on 22 June 2009 to satisfy the requirements of section 226 of the Pensions Act 2004, after obtaining the advice of Chris Maggs, the actuary to the scheme. It is part of the Trustees' plan for meeting the statutory funding objective (defined in section 222 of the Pensions Act 2004), which is that the scheme must have sufficient and appropriate assets to cover its technical provisions.

After discussions between the Trustees and the Employer, this recovery plan has been agreed by the Employer, The University of Reading.

The Recovery Plan follows the actuarial valuation of the scheme as at 31 July 2008, which revealed a shortfall in the assets, when measured against the scheme's technical provisions, of £16.9m. However, the Trustees noted the significant deterioration in the scheme's funding position over the six months to 31 January 2009, at which point the shortfall was estimated to be £27.8m. The agreed Recovery Plan takes this into account and is more extensive than strictly required to meet the 31 July 2008 shortfall. It will be reviewed, and may be revised, following the Trustees' next valuation under section 224 of the Pensions Act 2004, or earlier if the Trustees and the Employer agree.

Steps to be taken to ensure that the statutory funding objective is met

To correct the shortfall, the Employer will pay contributions each month from 1 August 2008 to 31 July 2021 equal to one-twelfth of the annual amounts shown in the table below:

Year commencing 1 August	Annual Amount
2008	£1.00m
2009	£1.50m
2010	£1.75m
2011	£2.00m
2012	£2.25m

2013	£2.33m
2014	£2.42m
2015	£2.51m
2016	£2.61m
2017	£2.70m
2018	£2.81m
2019	£2.91m
2020	£3.02m

Period in which the statutory funding objective should be met

The shortfall as at 31 July 2008 is expected to be eliminated in 9 years 1 month from the valuation date, which is by 31 August 2017. The shortfall as at 31 January 2009 is expected to be eliminated in 13 years from the valuation date, which is by 31 July 2021. These expectations are based on the following assumptions:

- the technical provisions will be calculated according to the method and assumptions set out in the statement of funding principles dated 22 June 2009;
- the return on existing assets and the return on new contributions during the period will be as set out in the statement of funding principles dated 22 June 2009, in the section headed 'Assumptions used in calculating contributions payable under the recovery plan'.

Progress towards the statutory funding objective being met

It is expected that 50% of the above additional contributions will be paid in 7 years and 8 months, which is by 31 March 2016.

Signed on behalf of The University of Reading

Name: David Savage

Position: Director of Finance & Corporate Services

Date: 22 June 2009

Signed on behalf of the Trustees
of the University of Reading Employees' Pension Fund

Name: Christopher Fisher

Position: Chairman of Trustees

Date: 22 June 2009

This recovery plan, dated 22 June 2009 has been agreed by the Trustees of the University of Reading Employees' Pension Fund after obtaining actuarial advice from the scheme actuary

Name: Chris Maggs FIA

Position: Actuary to the University of Reading Employees' Pension Fund

Date: 22 June 2009



Appendix F

Schedule of contributions, incorporating actuarial certificate

Status of this document

This schedule has been prepared by the Trustees of the University of Reading Employees' Pension Fund ("the Trustees") to satisfy the requirements of section 227 of the Pensions Act 2004, after obtaining the advice of Chris Maggs, the actuary to the scheme appointed by the Trustees.

This document is the 4th schedule of contributions put in place for the scheme. It supersedes all earlier versions.

After discussions, a pattern of contributions was agreed by the Trustees and the Employer, The University of Reading, on 24 April 2009.

The Trustees and the Employer have signed this schedule on page 3 to indicate that it represents an accurate record of the agreed pattern of contributions.

The schedule is effective from 22 June 2009, the date it is certified by the Scheme Actuary on page 4.

Contributions to be paid to the Scheme from 22 June 2009 to 31 July 2021

Members' contributions

Active members shall pay contributions monthly at 6.25% of Pensionable Salary.

These contributions will be deducted from salary by The University of Reading and paid to the scheme by the 19th of the following month.

This schedule does not cover the Employer's commitment to pay across to the Trustees additional voluntary contributions made by members.

Employer's contributions in respect of future accrual of benefits

The Employer shall pay contributions no less frequently than monthly of at least 20.6% of members' total Pensionable Salaries until 31 July 2009 and at least 24.1% of members' total Pensionable Salaries thereafter.

Contributions shall fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month.

Employer's contributions in respect of the shortfall in funding as per the recovery plan of 22 June 2009

The Employer shall pay a shortfall correction additional contribution each month from 1 August 2008 to 31 July 2021 equal to one-twelfth of the annual amounts shown in the table below:

Year commencing 1 August	Annual Amount
2008	£1.00m
2009	£1.50m
2010	£1.75m
2011	£2.00m
2012	£2.25m
2013	£2.33m
2014	£2.42m
2015	£2.51m
2016	£2.61m
2017	£2.70m
2018	£2.81m
2019	£2.91m
2020	£3.02m

As above, these contributions shall fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month.

Employer's contributions in respect of benefit augmentations

In addition the Employer shall pay the cost, as determined by the scheme actuary, of any benefit augmentations requested by the Employer and approved by the Trustees.

Employer's contributions in respect of administration and other costs

The Employer shall meet the PPF levy directly or shall reimburse the Trustees for the PPF levy, if paid by the scheme, within 19 days of being requested. An allowance for administrative and other costs is included in the future accrual rate. This recognises that a proportion of the salaries of the University's Pensions Office are recharged to the scheme.

Pensionable salaries

For the purposes of this schedule, Pensionable Salaries are defined as in the Pension Fund Rules.

The monthly contributions are calculated using monthly Pensionable Salaries determined from monthly pensionable earnings.

For the purpose of calculating Employer contributions, basic salary is deemed to be paid at the rate applicable at the commencement of maternity, paternity or sick leave, during such leave, (but increased in line with any salary increases awarded to the member during such leave) irrespective of actual amounts paid to the member.

Dates of review of this schedule

This schedule of contributions will be reviewed by the Trustees and the employer no later than 15 months after the effective date of each actuarial valuation, due every three years.

Employer and Trustee agreement

This schedule of contributions has been agreed by the Employer, The University of Reading, and the Trustees of the University of Reading Employees' Pension Fund on 22 June 2009.

Signed on behalf of The University of Reading

Name: David Savage

Position: Director of Finance & Corporate Services

Date: 22 June 2009

Signed on behalf of the Trustees
of the University of Reading Employees' Pension Fund

Name: Christopher Fisher

Position: Chairman of Trustees

Date: 22 June 2009

Certification of schedule of contributions

Name of Scheme

The University of Reading Employees' Pension Fund

Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this schedule of contributions are such that the statutory funding objective can be expected to be met by the end of the period specified in the recovery plan dated 22 June 2009.

Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the Statement of Funding Principles dated 22 June 2009.

The certification of the adequacy of the rates of contributions for the purpose 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.

Scheme Actuary

Chris Maggs

Date of signing

22 June 2009

Name of Employer

Mercer Limited

Address

Four Brindleyplace
Birmingham
B1 2JQ

Qualification

Fellow of the Institute of Actuaries



Certificate of technical provisions

Name of Scheme

University of Reading Employees' Pension Fund

Calculation of technical provisions

I certify that, in my opinion, the calculation of the scheme's technical provisions as at 31 July 2008 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions agreed by the University and the trustees of the scheme and set out in the statement of funding principles dated 22 June 2009.

Signature



Name

Chris Maggs

Date of signing

22 June 2009

Address

Mercer Limited
Four Brindleyplace
Birmingham
B1 2JQ

Qualification

Fellow of the Institute of Actuaries

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