



# Accounting for pension costs

Survey of universities' disclosures as at 31 July 2014







This survey focuses on universities which operate Self Administered Trusts (SATs) and looks at the significance of these schemes in the context of the overall finances of the university, as well as at the assumptions used in their FRS17 disclosures as at 31 July 2014.

## Introduction

I am pleased to present the results of our sixth annual survey of the assumptions adopted by UK universities for determining the value of their pension liabilities for accounting purposes.

As well as participating in the Universities Superannuation Scheme (USS) and local Government schemes many universities operate their own occupational defined benefit (DB) schemes (which we will refer to as Self Administered Trusts) for non academic staff.

This survey focuses on universities which operate Self Administered Trusts (SATs) and looks at the significance of these schemes in the context of the overall finances of the university, as well as at the assumptions used in their FRS17 disclosures as at 31 July 2014.

This survey is based on data in the published accounts of universities with financial years that ended on 31 July 2014. The figures in this survey are based on a sample of 35 universities whose accounts showed they operate SATs.

In some cases, data in the 31 July 2013 accounts has been restated since last year's survey. We have allowed for the updated data as at 31 July 2013 in this year's survey and therefore figures shown for 2013 may differ from those in last year's survey.

We hope that this analysis will be helpful to universities formulating their own assumptions under FRS17.



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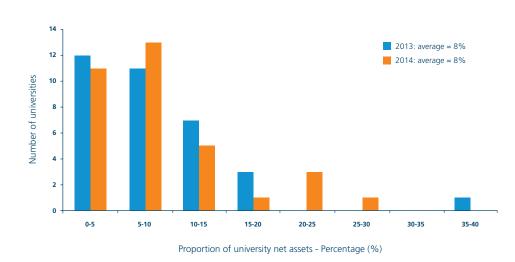




The contributions in 2014 represent an average of 3.6% of total staff costs, whereas in 2013 the average was 3.3% of total staff costs.

## How much of a burden are these schemes?

For the universities in our survey the pension deficit represents an average of 8% of the net assets of the university (excluding the SAT pension deficit). This is the same as the average seen last year and shows that deficits have been rising at a similar pace as net assets. However, the chart below shows how this proportion can vary significantly between individual universities.



#### SAT pension deficit as a proportion of university net assets

Source: financial statements as at 31 July 2014

For the universities in our survey that contribute to both SATs and the USS, we found that the total contributions made by the universities to SATs slightly increased as a proportion of total staff costs from 2013. The contributions in 2014 represent an average of 3.6% of total staff costs, whereas in 2013 the average was 3.3% of total staff costs.

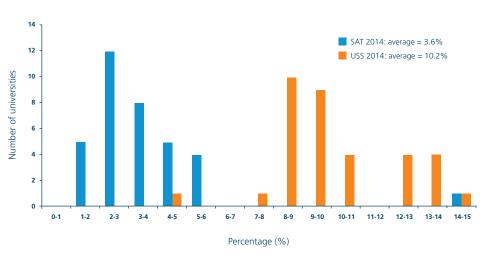
The contributions made to the USS, as a proportion of total staff costs, have increased slightly in 2014 at 10.2%, whereas in 2013 the average was 10.0%.





The chart below illustrates how the contributions to SATs compare with contributions made to the USS for these universities.

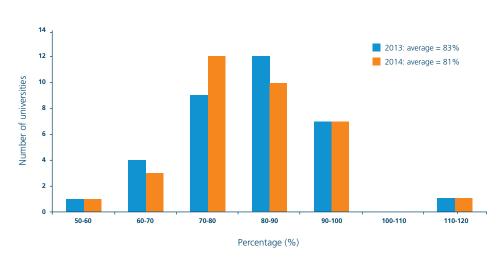




Source: financial statements as at 31 July 2014

#### Surplus/deficit

The average FRS17 funding level at 31 July 2014 for the universities in our survey was approximately 81%, slightly down from an average funding level of 83% at 31 July 2013. The principal reason for the decrease in funding levels over this period was the reduction in bond yields over the year, leading to lower discount rates being used to value the liabilities. The effect of this was offset to an extent by strong asset performance and deficit contributions paid by the universities.



#### FRS17 funding level as at 31 July 2014

Source: financial statements as at 31 July 2014

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The average FRS17 funding level at 31 July 2014 for the universities in our survey was approximately 81%.



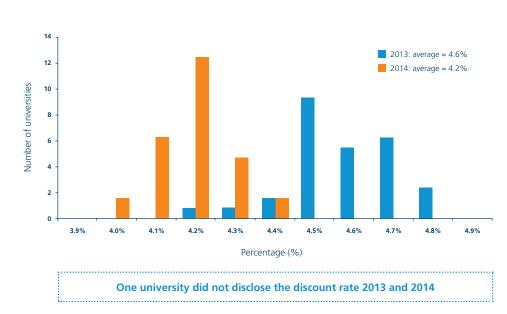
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It should be noted that the average discount rates used in both 2012 and 2013 were materially higher than the iBoxx index yield.

## FRS17 assumptions

#### **Discount rate**

The discount rates used by the universities in our survey for their SATs are illustrated below.



#### Discount rate (% p.a.) rounded to the nearest 0.1%

The following table compares the corporate bond yield and the average discount rate adopted at 31 July over the last five years.

Year ending	iBoxx over 15 year AA-rated corporate bond index (% p.a.)	Average discount rate (% p.a.)
31 July 2010*	5.4	5.4
31 July 2011	5.3	5.3
31 July 2012	3.9	4.3
31 July 2013	4.3	4.6
31 July 2014	4.1	4.2

\* the 2010 average is based on 25 universities surveyed

Source: financial statements as at 31 July 2014

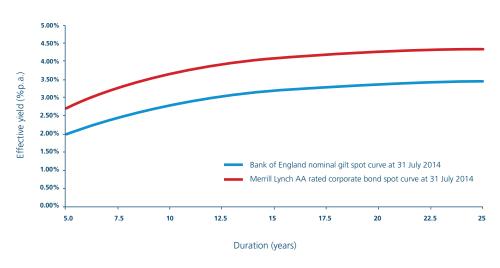




As a result pension schemes (which will generally have liabilities with an average duration longer than the iBoxx index) may have been able to justify using a higher discount rate than the index yield. At 31 July 2014, the yield on the iBoxx over 15 year AA-rated corporate bond index was approximately 4.1% p.a. (2013: 4.3% p.a.).

It should be noted that the average discount rates used in both 2012 and 2013 were materially higher than the iBoxx index yield. This is most likely due to the fact that the yields on AA corporate bonds at the end of July 2012 and 2013 were higher at longer durations. As a result pension schemes (which will generally have liabilities with an average duration longer than the iBoxx index) may have been able to justify using a higher discount rate than the index yield. The discount rates used in 2014 are much closer to the index, most likely due to the corporate bond yield curve no longer being as steep at longer durations. The graph below shows gilt and corporate bond yield curves at 31 July 2014.

Corporate bond and gilt yield curves as at 31 July 2014



Source: Merrill Lynch and Bank of England



## 6699

The market's expectation of the Retail Prices Index (RPI) inflation rate calculated by the Bank of England at 20 years, was 3.5% p.a. as at 31 July 2014. Most universities in the survey assumed that inflation would be slightly lower, with the average at 3.3% p.a. As can be seen, the difference between yields at around 14 years (the approximate duration of the iBoxx index at 31 July 2014) and 20 years (an illustrative duration for a pension scheme's liabilities) was around 0.2% p.a. Last year this was around 0.4% p.a.

Discount rates in this year's survey were less varied than in the previous year. The range in 2014 was from 4.0% p.a. to 4.4% p.a., compared with the range in 2013 from 4.2% p.a. to 4.8% p.a.

#### **Inflation rate**

Market indices are generally used to set the future inflation assumption. The market's expectation of the Retail Prices Index (RPI) inflation rate calculated by the Bank of England at 20 years (based on the difference between fixed interest gilt yields and index linked gilt yields) was 3.5% p.a. as at 31 July 2014. Most universities in the survey assumed that inflation would be slightly lower, with the average at 3.3% p.a. It is likely that some allowance is being made for an 'inflation risk premium', which is based on a view that investors will pay more for index linked gilts because they provide inflation protection. This means that the break even rate calculated by the Bank of England is higher than the market's best estimate assumption for future RPI inflation.

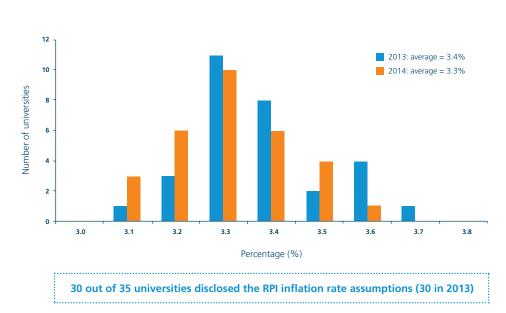
Year ending	Market implied future inflation rate* % p.a.	Average inflation assumption% p.a.
31 July 2010	3.5	3.2
31 July 2011	3.8	3.5
31 July 2012	2.9	2.7
31 July 2013	3.5	3.4
31 July 2014	3.5	3.3

\* Bank of England implied 'inflation rate' at 20 years.





The 'formula effect' since 2010 has been observed to be between 0.8% p.a. and 1.0% p.a. The assumptions adopted are slightly lower than they were last year. The average deduction made from the 20 year break even inflation rate increased from 0.1% p.a. to 0.2% p.a.



RPI inflation assumption (% p.a.) rounded to be nearest 0.1%

Some 26 out of the 35 universities in our survey explicitly disclosed a Consumer Price Index (CPI) inflation rate assumption, implying that three quarters of the universities in our survey use CPI as, a measure of future inflation for at least some of the increases applied to benefits.

Over the 20 years to 2010, CPI has been on average around 0.7% p.a. lower than RPI. Of this, 0.5% p.a. could be attributed to the 'formula effect' resulting from technical differences in the way the two indices are calculated, and the remaining 0.2% p.a. could be attributed to differences between the compositions of the two indices. In 2010 a change was made to the way the indices were calculated and at the time this was expected to increase the difference between CPI and RPI going forward. The 'formula effect' since 2010 has been observed to be between 0.8% p.a. and 1.0% p.a.

Source: financial statements as at 31 July 2014

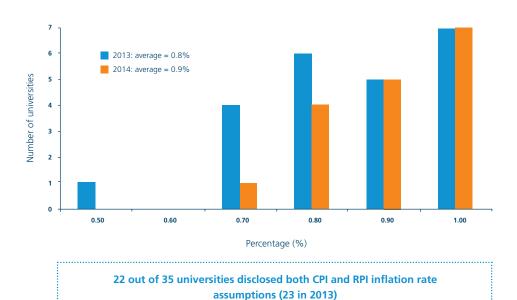




Towards the end of 2011, the Office for Budget Responsibility (OBR) published a paper on the gap between RPI and CPI which suggested that the other factors mean the gap could be between 1.3% p.a. and 1.5% p.a. Towards the end of 2011, the Office for Budget Responsibility (OBR) published a paper on the gap between RPI and CPI which suggested that the other factors mean the gap could be between 1.3% p.a. and 1.5% p.a. However, this assumes that the constituent effect will continue unchanged, and there is no guarantee that this will be the case over the long-term. The current Government CPI inflation target is 2.0% p.a.

The following graph shows the gap implied by the assumptions chosen by the 22 universities who disclosed assumptions for both CPI and RPI. The average deduction from RPI was 0.9% p.a. in 2014 which is slightly higher than in 2013. The single university with a deduction of 0.5% p.a. in 2013 adjusted its deduction upwards in 2014 to better reflect the expected increase due to the formula effect.

#### RPI and CPI difference (% p.a.) rounded to the nearest 0.1%





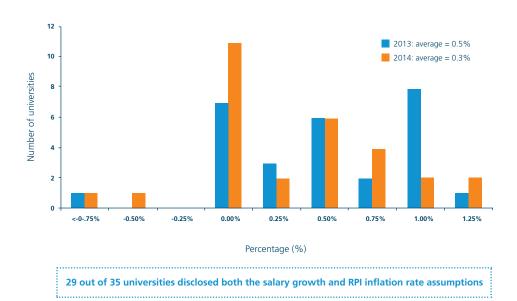


The average real salary growth assumption fell by 0.2% p.a. in 2014 compared to the previous year.

#### **Salary increases**

Some universities may use a scale for promotional salary increases in addition to a general salary growth assumption and therefore a comparison of the disclosed salary increase rate assumptions may not be like-for-like in all cases. We have nevertheless shown below the disclosed salary increase assumptions used relative to the RPI inflation assumption i.e. real salary growth.

The average real salary growth assumption fell by 0.2% p.a. in 2014 compared to the previous year. The chart below only considers universities which disclosed an assumption for RPI.



#### Real salary growth (% p.a.) rounded to the nearest 0.25%



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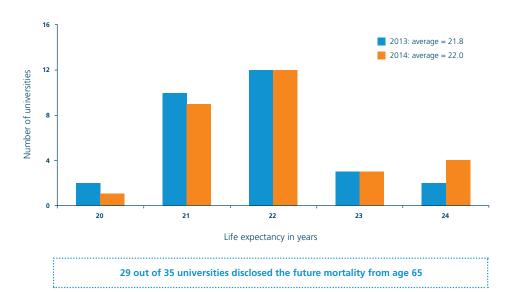
The profile of SATs members would be expected to be fairly similar from university to university. The wide range highlighted is perhaps surprising, but may reflect that some universities carried out a more detailed scheme specific mortality investigation.

#### Life expectancy

29 out of 35 universities in this year's survey disclosed information on their life expectancy assumption, either by stating the assumed life expectancy or by referring to the mortality tables used allowing comparisons to be drawn.

We have shown below the life expectancy assumptions for a man currently aged 65 at the year end and also indicated the life expectancies implied by some of the mortality tables that were used.

The wide range of life expectancy assumptions adopted by pension schemes generally can be explained by differences in the underlying scheme membership, for example different average income levels or occupations. As the profile of SATs members would be expected to be fairly similar from university to university the wide range highlighted below is perhaps surprising, but may reflect that some universities carried out a more detailed scheme specific mortality investigation.



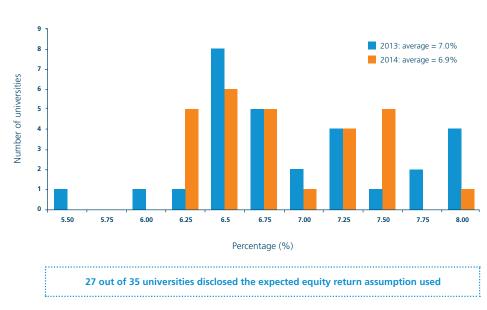
#### Life expectancy for a male aged 65





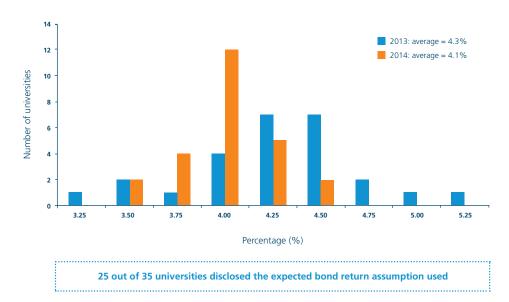
#### **Expected investment returns**

The expected returns on equities and bonds disclosed at 31 July 2014 are set out below.



#### Expected return on equities (% p.a.) rounded to the nearest 0.25%

Source: financial statements as at 31 July 2014



#### Expected return on bonds (% p.a.) rounded to the nearest 0.25%

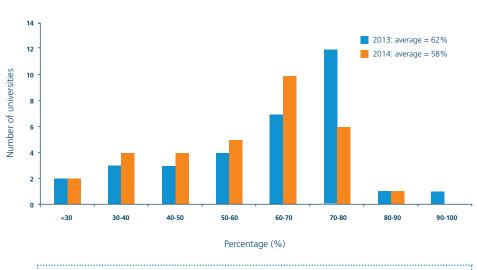


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The average equity allocation of the SATs in our survey remains substantially above the average equity allocation within private sector occupational DB schemes. The average expected equity return was 6.9% p.a., compared with the average yield on long-dated gilts of 3.3% p.a., thereby implying an average 'Equity Risk Premium' of 3.6% p.a. which is the same as in 2013. The average expected bond return was 4.1% p.a., which is more reflective of the yield on long-dated corporate bonds rather than long-dated gilts at the year end.

#### **Asset allocation**

The chart below shows the percentage of assets invested in equities for SATs in the 2014 survey, as at 31 July 2014 and 31 July 2013.



#### Equity weighting of total assets

31 out of 35 universities disclosed the equity allocation and asset amount figures

Source: financial statements as at 31 July 2014

The average equity weighting of 58% is slightly lower than the 2013 average of 62%. However, the average equity allocation of the SATs in our survey remains substantially above the average equity allocation within private sector occupational DB schemes in 2014 of 35%, as reported by The Pensions Regulator. This suggests that universities are prepared to take a longer term view on investment returns and the SATs trustees believe a stronger covenant is being provided than that from many private sector scheme sponsors.

We hope that this analysis is helpful to universities in formulating assumptions for future disclosures under FRS17 for their respective SATs.





FRS102 will be compulsory for accounting periods beginning on or after 1 January 2015, and early adoption is permitted for periods ending on or after 31 December 2012.

## FRC issues FRS102

On 5 March 2013, the Financial Reporting Council (FRC) Board formally approved the new UK accounting standard, FRS102. With regard to accounting for university SATs, this will replace the current FRS17 and will have implications for pensions accounting disclosures by bringing them broadly in line with the revised IAS19 standard for EU-listed entities, albeit with fewer disclosure requirements.

FRS102 will be compulsory for accounting periods beginning on or after 1 January 2015, and early adoption is permitted for periods ending on or after 31 December 2012.

The main change is that the 'expected return on assets' will cease to be used, and the finance cost will be replaced by a 'net interest' entry, calculated using the discount rate applying at the start of the period.

It is likely that universities will need to make disclosures as to the impact of the changes during the transition.

Currently, under FRS17, organisations with USS liabilities that are unable to identify their share of a pension scheme's assets and liabilities are able to account for their liabilities on a defined contribution (DC) basis. This means that these organisations may be recording a pension expense equal to the contributions which they are required to make to their schemes in their company accounts. As a result the pension scheme asset or liability does not appear on the organisation's balance sheet.

However, the introduction of FRS102 will impact these organisations, and could require recognition of additional liabilities even if a DC accounting basis is used. Specifically, where a commitment has been made to a deficit recovery plan for a pension arrangement, a liability equal to the present value of those future deficit payments will need to be recognised on the balance sheet and any changes in this recovery plan following a valuation would need to be recognised as an additional pension expense (or credit).





Employers should start thinking now about the effect of the end of contracting-out on their schemes and how to avoid an increase in costs. Our research indicates that almost 90% of SATs are still open to future accrual in some form and would be affected by these changes.

## Contracting-out to end in 2016

The reform of the State Pension system is planned to take place in April 2016 when the current structure will be replaced by a single flat-rate pension of around £144 per week (in today's prices) for everyone with a 35-year National Insurance Contributions (NICs) record.

As a consequence of this change, the ability to contract-out of the State Second Pension (S2P) via a salary-related scheme will cease. Rebates of NICs enjoyed by employers (3.4% of relevant earnings) and employees (1.4% of relevant earnings) by virtue of being contracted-out will be abolished – although increase in employers' National Insurance bills will be partially offset by a £2,000 'Employment Allowance' from April 2014.

Employers should start thinking now about the effect of the end of contracting-out on their schemes and how to avoid an increase in costs. Our research indicates that almost 90% of SATs are still open to future accrual in some form and would be affected by these changes. The much talked about changes to the USS will be consulted upon during spring 2015, commencing mid March, and are expected to come into effect from April 2016, which coincides with the abolition of contracting-out. While most private sector funds such as the USS can be amended to deal with the changes, the Government controlled funds in which universities also participate (e.g. LGPS funds and the Teachers' schemes) would require the Government to make changes if an increase in costs is to be avoided.

We have experience in helping universities review benefit design and their options for future pensions provision. We have already seen changes in benefits following the move by USS to a CARE scheme in 2011. Will there be further benefit changes as a consequence of the end of contracting-out?



### **Contact information**

If you would like to discuss any of the matters raised in this survey then please contact Nick Griggs FIA, who is a corporate actuary based in our Cheltenham office, on:

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