BARNETT WADDINGHAM
beyond the expected

Survey of universities' disclosures

Accounting for pension costs

RISK | **PENSIONS** | INVESTMENT | INSURANCE

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

This continues to be a challenging time for the sector. Significant cost increases were announced for the Teachers' Pension Scheme (and Scottish Teachers' Superannuation Scheme), effective from September 2019, and the ongoing discussions around the Universities' Superannuation Scheme valuation and costs have proved to be difficult and long-running. The England and Wales Local Government Pension Schemes had their actuarial valuations during 2019 too.

Changes to the teachers' schemes did not affect the universities' accounting balance sheet, but the increased contributions to the USS did, and this is reflected in the results we have surveyed. The results of the 2017 USS valuation were subsequently replaced by a fresh 2018 valuation, although this was completed after the date of these accounting disclosures. We would expect the USS costs to fall as a result of the updated valuation position, but this won't affect accounting disclosures until next year.

As usual, however, the main focus of this survey are the "Self-Administered Trusts" (SATs) – standalone defined benefit schemes operated by a number of universities for non-academic staff. The survey 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 FRS102 disclosures as of 31 July 2019.

The results of this survey show, that the size of pension deficits increased significantly by £500m over the year, mainly due to sharply falling bond yields that resulted in a lower average discount rate being used to value the liabilities.

This was compounded by a higher outlook for price inflation. The requirement to include provisions for future deficit contributions to the USS also had a further negative impact of £500m on the balance sheets of the universities in the survey.

This survey is based on data in the published accounts of universities with financial years that ended on 31 July 2019. The figures in this survey are based on a sample of 37 universities whose accounts showed they operate SATs. We have included the figures for 2018 to compare with the 2019 data as part of our analysis.

We hope that this analysis continues to be helpful to universities formulating their own assumptions under FRS102 for future disclosures. With yields continuing to fall and ever increased levels of uncertainty around financial markets and within the sector as a whole, the impact of pensions on university finances has never been more significant.

PAUL HAMILTON
Partner and Head of Higher Education sector services

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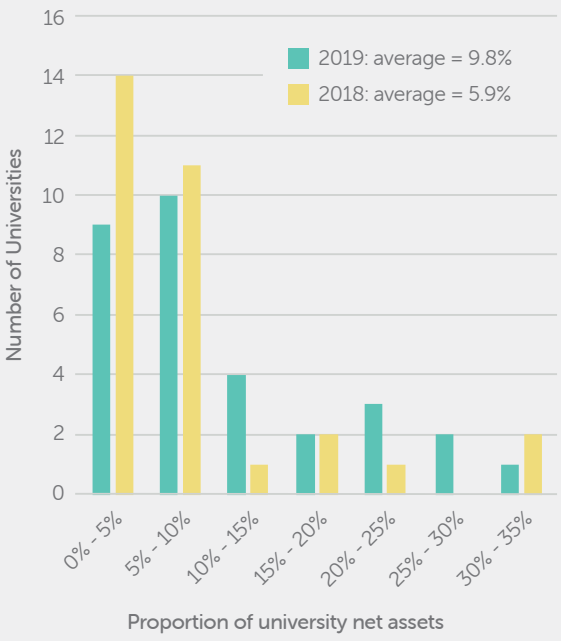
How much of a burden are these schemes?

For the universities in our survey, the pension deficit represents an average of 9.8% of the net assets of the university (excluding the SAT pension deficit). This is higher than the average seen last year (5.9%) and reflects the fact that deficits rose sharply last year as a result of the fall in yields. Yields reached a low point around the end of September, recovered slightly towards the end of the year, but have since fallen again, meaning that increased deficits may still be a factor for many universities.

The chart below shows how this proportion can vary significantly between individual universities.

SAT PENSION DEFICIT AS A PROPORTION OF UNIVERSITY NET ASSETS



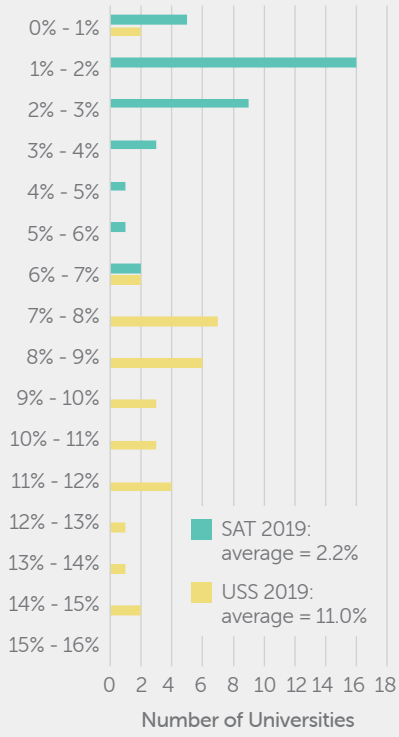
For the universities in our survey that contribute to both SATs and the USS, we found that the total contributions made by the universities to SATs as a proportion of total staff costs in 2019 has fallen once again from an average of 2.6% in 2018, to an average of 2.2% as of 2019.

The contributions made to USS, as a proportion of total staff costs, have increased slightly in 2019 at 11.0%, whereas in 2018 the average was 10.2%. Contributions to the USS remain substantially higher than the contributions made to SATs.

To an extent this represents the continued maturing of the SATs, an increasingly high proportion of which are closed to new members or to benefit accrual and so represent a decreasing proportion of University staff. Total staff costs have typically increased in monetary terms between 2018 and 2019, but where defined benefit (DB) schemes are closed, new staff will generally be joining lower-cost defined contribution (DC) schemes.

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

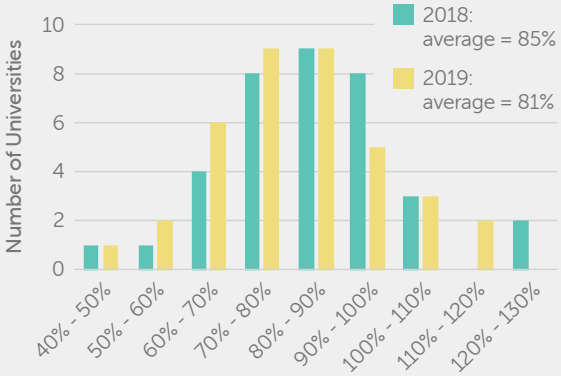
SAT AND USS EMPLOYER CONTRIBUTIONS AS A PROPORTION OF TOTAL STAFF COSTS



Surplus / deficit

The average FRS102 funding level on 31 July 2019 for the universities in our survey was approximately 81%, which is less than the average funding level of 85% at 31 July 2018. The principal reason for the fall in funding levels over this period was the significant fall in bond yields, which led to lower average discount rates being used to value liabilities, coupled with higher levels of expected future price inflation. This was counteracted to some extent by deficit contributions paid by the universities and strong returns in some asset classes.

FRS102 FUNDING LEVEL AS AT 31 JULY 2019

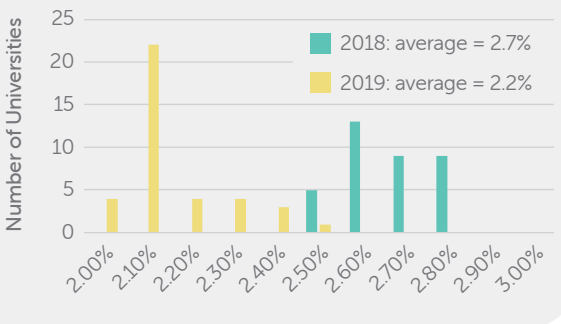


FRS102 assumptions

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%



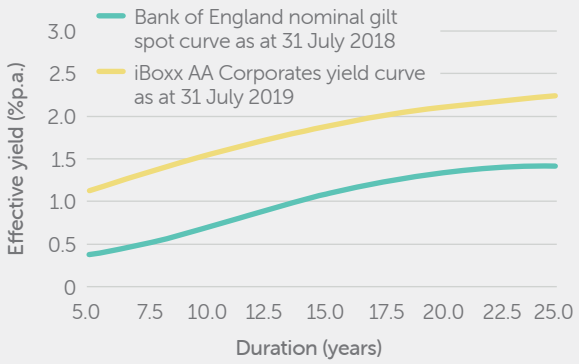
This reflects the significant fall in corporate bond yields, on which the discount rates are based, over the year.

The following table compares the corporate bond yield and the average discount rate adopted on 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 2015	3.5	3.6
31 July 2016	2.3	2.4
31 July 2017	2.5	2.6
31 July 2018	2.7	2.7
31 July 2019	2.1	2.2

The discount rates adopted have been marginally higher than the yield on the index shown over the past five years. In recent years, the derivation of discount rates has tended to place specific reference on the term of the liabilities, e.g. through adopting the yield on a corporate bond yield curve at the relevant term, rather than making an approximate adjustment to an index value. There has also been a move to derive the discount rate using a full yield curve approach, i.e. finding the single discount rate equivalent to discounting each future cashflow using the yield curve at the relevant term. While there are outliers in the data set, in general discount rates have been close to the index yield.

CORPORATE BOND AND GILT YIELD CURVES AS AT 31 JULY 2019



Discount rates in this year's survey continue the trend of being noticeably less varied than in earlier years, which may be due in part to the flatter yield curve seen in 2018 and 2019 compared to earlier periods. The range in 2019 was from 2.0% p.a. to 2.5% p.a.

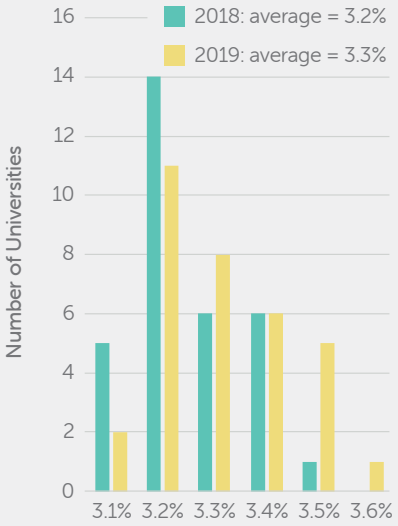
Retail Prices Index inflation

Market yields 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 3.6% p.a. as at 31 July 2019. 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 2015	3.1	2.8
31 July 2016	3.5	3.3
31 July 2017	3.6	3.3
31 July 2018	3.5	3.2
31 July 2019	3.6	3.3

The assumptions adopted are about 0.1% higher than they were last year, which broadly reflects the rise in market-implied inflation over the year.

RPI INFLATION ASSUMPTION (% P.A.) ROUNDED TO THE NEAREST 0.1%



We have continued to see that the 'single equivalent' approach to setting the discount rate is also being applied to the RPI inflation assumption. At the moment the inflation curve is downward sloping at both the short end and the long end, and this argument can be used to apply a further deduction to the inflation expectation implied by the curve at the relevant term.

Consumer Prices Index inflation

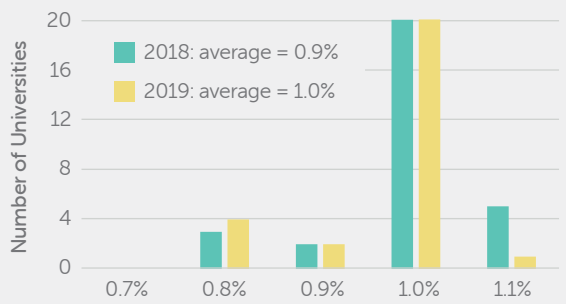
35 out of the 37 universities in our survey explicitly disclosed a Consumer Price Index ("CPI") inflation rate assumption, implying that most of the universities in our survey use CPI as a measure of future inflation for at least some of the increases applied to benefits.

Over the 20 years to 2010, CPI was 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 1.1% p.a.

In March 2015, the Office for Budget Responsibility (OBR) published a paper which included an analysis on the gap between RPI and CPI which suggested that the other factors mean the gap could be around 1.0% p.a. Additionally, the Bank of England's latest estimate, from its 2014 quarter 1 inflation report, is that the gap will be around 1.3% p.a. over the long-term. However, these estimates assume that the constituent effect will continue unchanged, and there is no guarantee that this will be the case over the long-term. Indeed, the omission of housing costs from the calculation of CPI continues to provoke debate. The current Government CPI inflation target is 2.0% p.a.

The following graph shows the gap implied by the assumptions chosen by the 31 universities who disclosed assumptions for both CPI and RPI. The average deduction from RPI was 1.0% p.a. in 2019 which is slightly higher than the 2018 difference (0.9%).

RPI AND CPI DIFFERENCE (% P.A.) ROUNDED TO THE NEAREST 0.1%



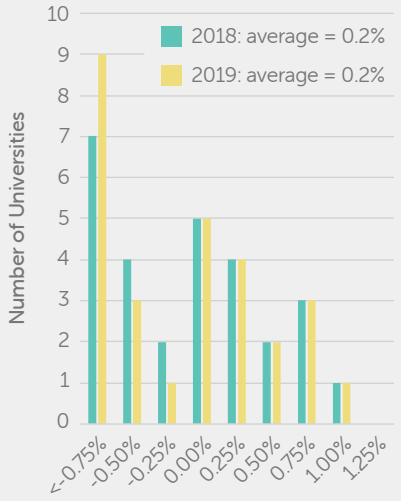
31 out of 37 universities disclosed both CPI and RPI inflation rate assumptions (30 in 2018)

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 was broadly unchanged in 2019 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 0.1%



28 out of 37 universities disclosed both the salary growth and RPI inflation rate assumptions (28 in 2018)

Life expectancy

33 out of 37 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.

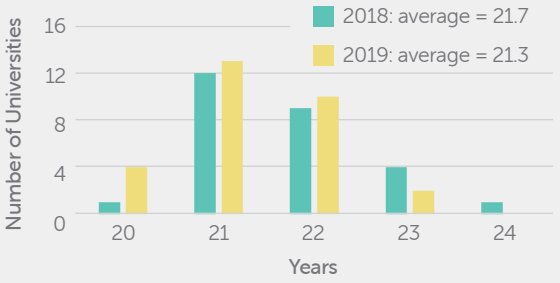
We have shown below the life expectancy assumptions for a man currently aged 65 at the year-end and also indicated the life expectancies implied by some of the mortality tables that were used.

The wide range of life expectancy assumptions adopted by pension schemes generally can often 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.

On average, the mortality assumptions chosen led to slightly shorter life expectancies as of 31 July 2019 when compared to last year, although a minority of Universities adopted new assumptions that resulted in a higher life expectancy. Its common practice to review mortality assumption at each triennial valuation, but this would typically only affect around one in three schemes in any given year, so we are continuing to see a number of universities taking the opportunity to update their life expectancy outside of the usual three-yearly cycle.

This may reflect the fact that the most recent large scale analyses of mortality experience have shown the rate of improvement in life expectancies has fallen. In other words, while life expectancies are continuing to increase, they are doing so at a slower rate. Taking account of this new analysis could lead to lower projected life expectancies, reducing the pensions costs/deficits.

LIFE EXPECTANCY - MALE AGED 65



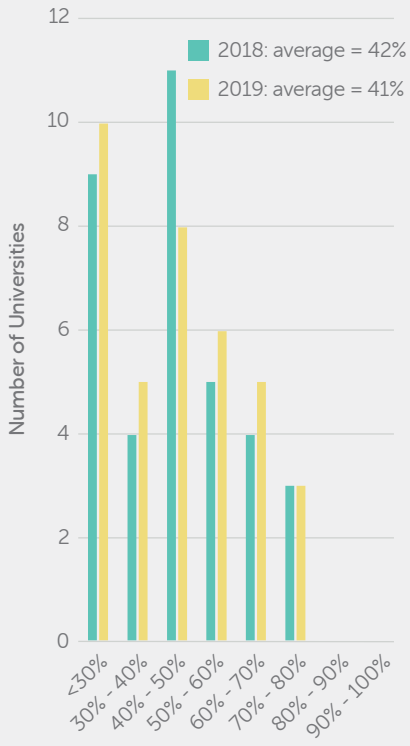
29 out of 37 universities disclosed the future mortality from age 65

Asset allocation

The chart below shows the percentage of SATs' assets invested in equities as of 31 July 2018 and 31 July 2019.

The average equity weighting of 41% is once again lower than the 2018 average of 42%.

EQUITY WEIGHTING OF TOTAL ASSETS



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

Current affairs

GMP equalisation

We noted last year that the High Court had published its judgement in the case of Lloyds Banking Group Pension Trustees Limited vs Lloyds Bank plc (and others).

Accounting disclosures as of 31 July 2019 reflected this decision, with most accounts including an allowance for the expected increase in liabilities arising from it. Because of the nature of the SATs, their benefit structures and the workforces they cater for, this generally added less than 1% to the liabilities disclosed. In future years, these increased liabilities will be translated into actual benefit adjustments, which is likely to be a complex and potentially costly exercise.

RPI consultation

Soon after the effective date of these accounting disclosures, the Government proposed changing the RPI inflation statistics to bring RPI in line with the "CPIH" index. Currently there are three main measures of consumer price inflation in the UK: the Retail Price Index ('RPI'), the Consumer Price Index ('CPI') and CPIH. CPIH became the UK's primary inflation measure in 2017 and essentially takes CPI and adds a measure of owner occupied housing. If the changes go ahead from 2030, the index-linked gilt payments will implicitly be linked to CPIH due to the change of the makeup of the RPI statistic. If RPI is aligned with CPIH, then RPI would be expected to be lower in future and, all else being equal, the value of index-linked gilts would fall and real yields would likely rise.

We would expect to see this have an impact on inflation assumptions next year.

Long term funding targets

In March this year the Pensions Regulator announced a consultation on a revised approach to regulating pension scheme funding. The detail is yet to be finalised, but this is expected to require schemes to consider a 'long term objective' for funding their benefits that targets low dependency on sponsoring employers by the time the scheme is 'significantly mature.'

How this might affect University accounting disclosures remains to be seen, but it's worth noting that schemes that are still open to accrual (or to new members), as a number of University schemes still are, may be much further from maturity than the majority of UK pension schemes.

Please contact your Barnett Waddingham consultant if you would like to discuss any of the above topics in more detail. Alternatively get in touch via the following:

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