BARNETT WADDINGHAM
beyond the expected

Survey of universities' disclosures

Accounting for pension costs

We are pleased to present the results of our eleventh survey of the assumptions adopted by UK universities for determining the value of their pension liabilities for accounting purposes.

The results of this survey show that the size of pension deficits reduced slightly over the year to 31 July 2021, which may reflect a partial recovery in financial markets from the initial shock of the coronavirus pandemic in 2020.

However, the pandemic continued to have a significant impact throughout society during 2021, including within the higher education sector. While financial markets had improved considerably by 31 July 2021, compared to the position a year before, the position was not as favourable as it had been earlier in 2021, due to the second wave of the pandemic peaking around the financial year end.

Looking at the main pension schemes to which the sector is exposed, the outcome of the 2020 Universities Superannuation Scheme (USS) valuation and its impact on benefits and costs have been the key focus for many institutions. However, the subject of this survey remains 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 at 31 July 2021.

This survey is based on data in the published accounts of universities with financial years that ended on 31 July 2021. 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 2020 to compare with the 2021 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

GET IN TOUCH WITH PAUL

Tim Williams

Associate and Senior Consulting Actuary

GET IN TOUCH WITH TIM

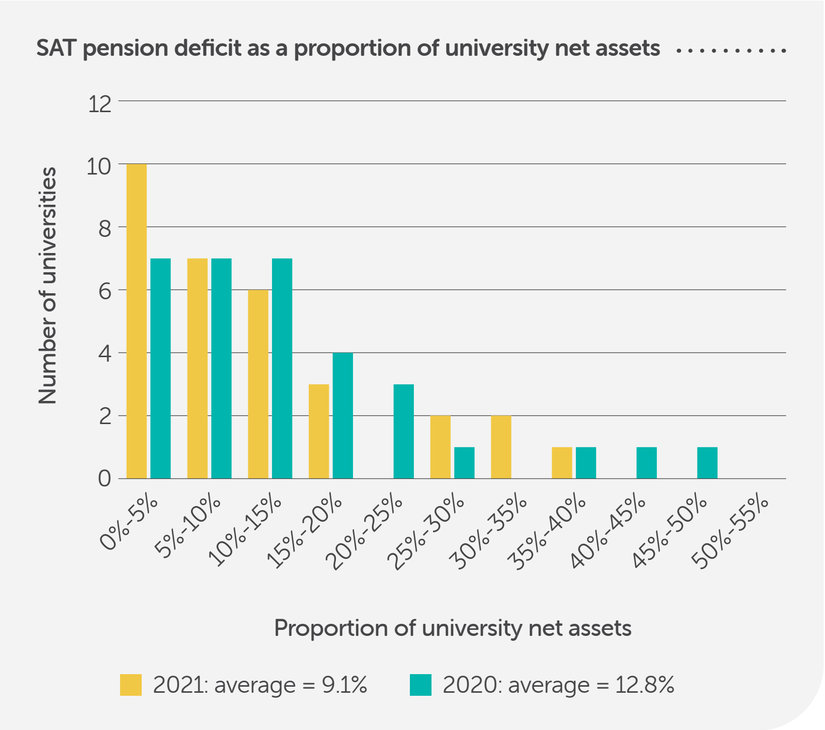
How much of a burden are these schemes?

For the universities in our survey, the pension deficit represents an average of 9.1% of the net assets of the university (excluding the SAT pension deficit). This is a reduction from than the average seen last year (12.8%) and the year before (9.8%) and reflects the fact that there was a partial recovery in markets following the first wave of the coronavirus pandemic over the year to 31 July 2021. Yields had also increased slightly by 31 July 2021.

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

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 has fallen from an average of 2.9% in 2020, to an average of 2.3% in 2021.

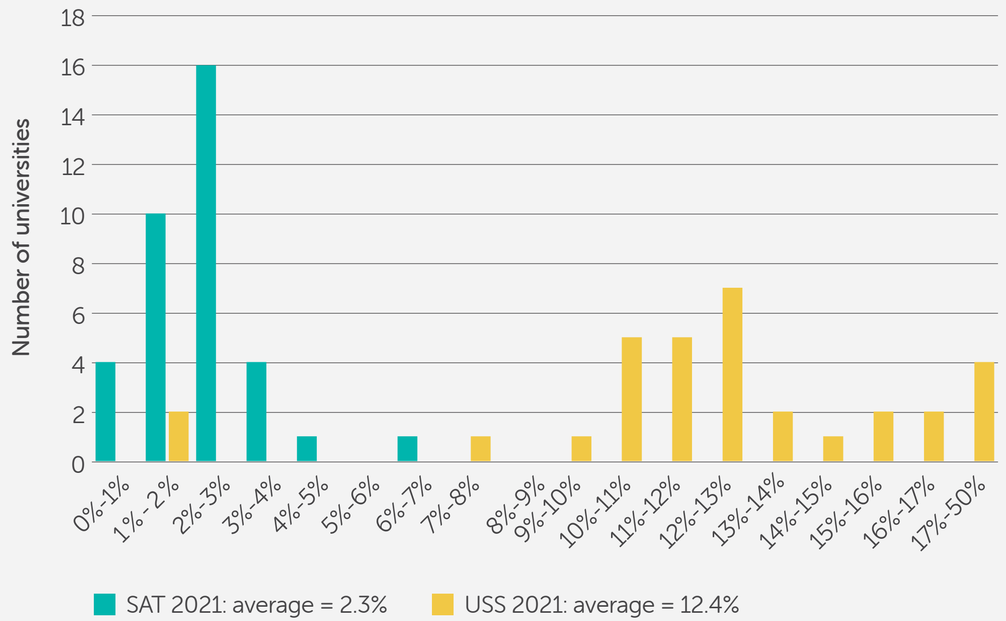
The contributions made to USS, as a proportion of total staff costs, have also reduced in 2021 to 12.4%, whereas in 2020 the average was 15.5%, reflecting the reduction in deficit arising from the 2018 USS valuation. Contributions to the USS remain substantially higher than the contributions made to SATs.



Total staff costs have typically risen in monetary terms between 2020 and 2021, perhaps reflecting the impact of the pandemic on working practices and support.

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

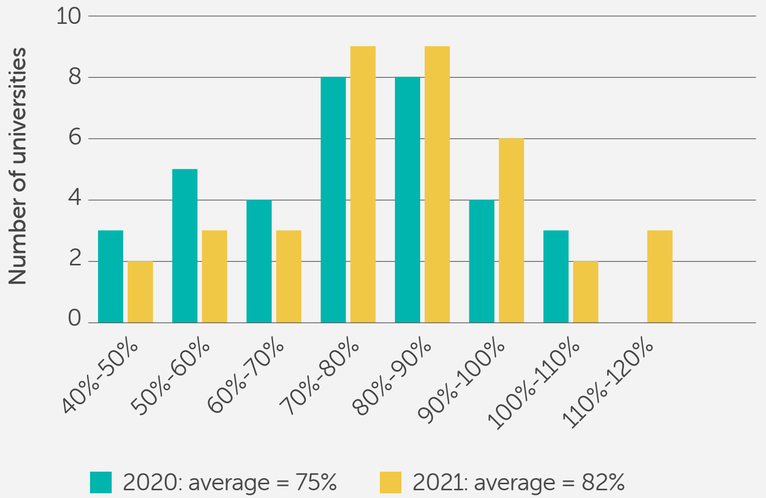
SAT and USS employer contributions as a proportion of total staff costs



Surplus / deficit

The average FRS102 funding level at 31 July 2021 for the universities in our survey was approximately 82%, which is an improvement from the average funding level of 75% at 31 July 2020. Yields have risen slightly, and equities performed well. In addition, funding levels will have improved due to deficit contributions paid by the universities.

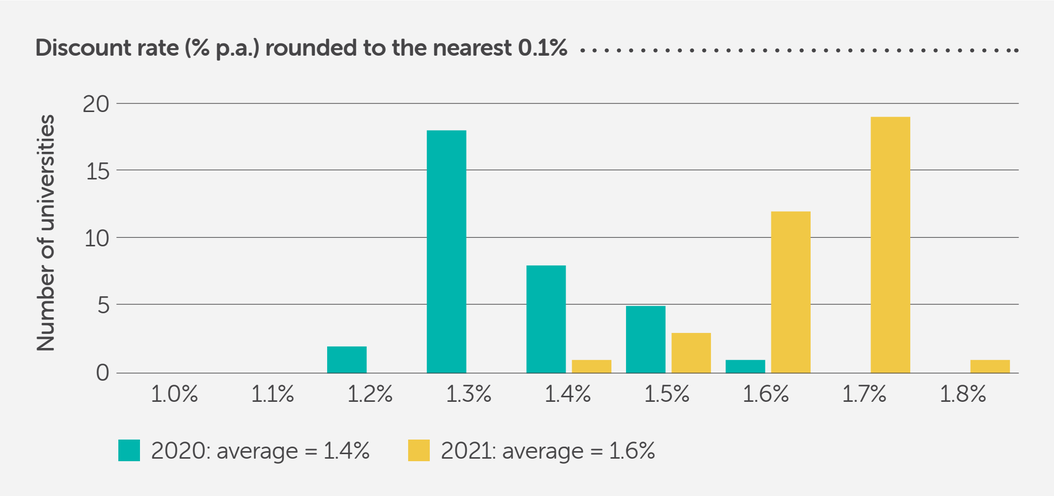
FRS102 funding level as at 31 July 2021



FRS102 assumptions

Discount rate

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



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

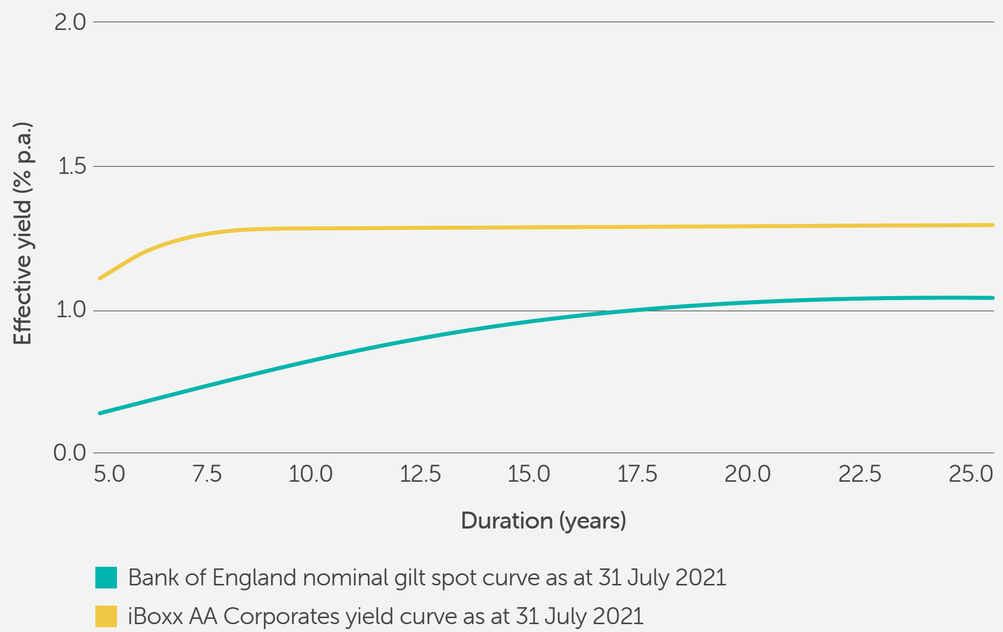
The following table compares the corporate bond yield and the average discount rate adopted at 31 July over the last five years.

Year ending	iBoxx over 15 year AA-rated corporate bond index (% p.a.)	Average discount rate (% p.a.)
31 July 2017	2.5	2.6
31 July 2018	2.7	2.7
31 July 2019	2.1	2.2
31 July 2020	1.4	1.4
31 July 2021	1.6	1.6

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 remain some 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 2021



Source: Bank of England and iBoxx

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 2021. Most universities in the survey assumed that inflation would be considerably lower, with the average at 3.2% p.a.

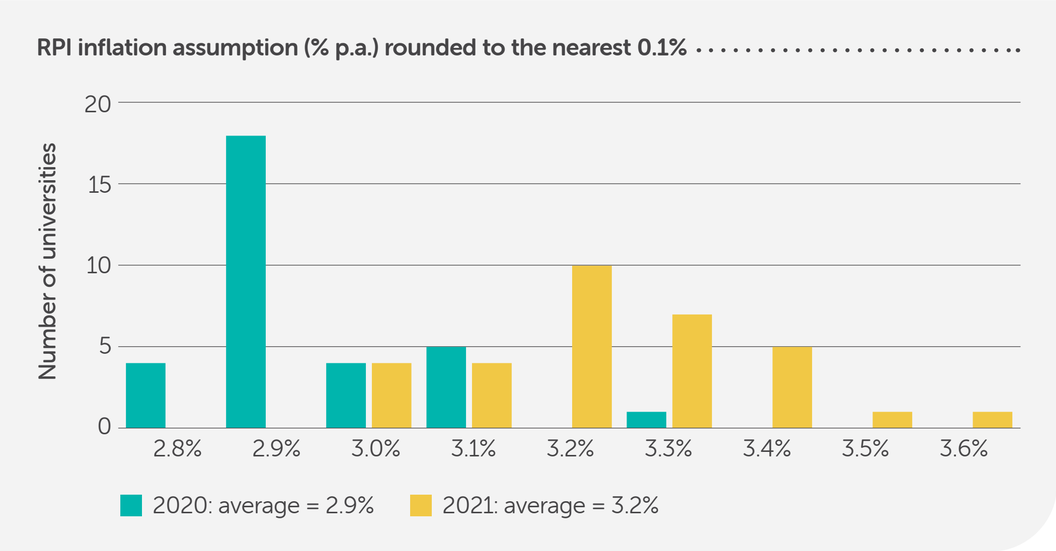
It is likely that some allowance is being made for an "inflation risk premium", which is based on a view that investors will pay more for index linked gilts because they provide inflation protection. This means that the break-even rate calculated by the Bank of England is higher than the market's best estimate assumption for future RPI inflation.

Year ending	Market implied future inflation rate* % p.a.	Average inflation assumption % p.a.
31 July 2017	3.6	3.3
31 July 2018	3.5	3.2
31 July 2019	3.6	3.3
31 July 2020	3.3	2.9
31 July 2021	3.6	3.2

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

The assumptions adopted are about 0.4% pa higher than they were last year, which reflects the rise in market-implied inflation over the year.

Market expectations for RPI are likely to have been influenced by the announcement that the way in which RPI is calculated from 2030 will change, moving instead to match the Consumer Prices Index with Housing (CPIH) formula.



32 out of 37 universities disclosed the RPI inflation rate assumptions (32 out of 35 in 2020).

We have continued to see that the 'single equivalent' approach to setting the discount rate is also being applied to the RPI inflation assumption.

Consumer Prices Index inflation

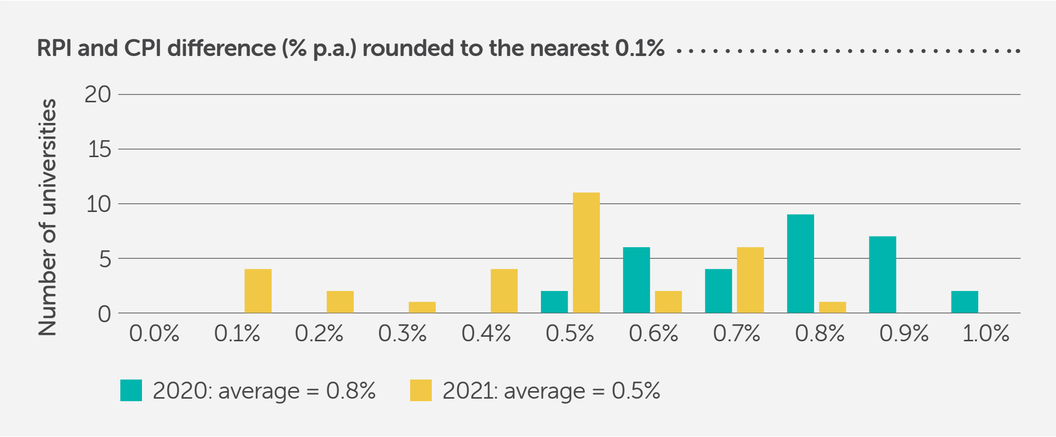
36 out of the 37 universities in our survey explicitly disclosed a Consumer Price Index (CPI) inflation rate assumption, implying that most of the universities in our survey use CPI as a measure of future inflation for at least some of the increases applied to benefits.

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 Q1 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 0.5% p.a. in 2021, which is lower than the 2020 difference (0.8%) and likely reflects the anticipated changes to RPI from 2030 being factored into assumptions as at 31 July 2021.

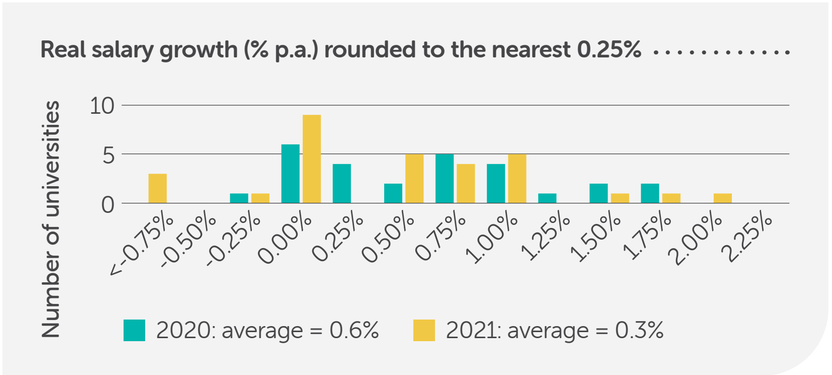


31 out of 37 universities disclosed both CPI and RPI inflation rate assumptions (30 out of 35 in 2020)

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 CPI inflation assumption; i.e., real salary growth.

The average real salary growth assumption has fallen in 2021 compared to the previous year, which could be as a result of the economic impact of the coronavirus pandemic. The chart below only considers universities which disclosed an assumption for CPI.



30 out of 37 universities disclosed both the salary growth and CPI inflation rate assumptions (27 out of 35 in 2020)

Life expectancy

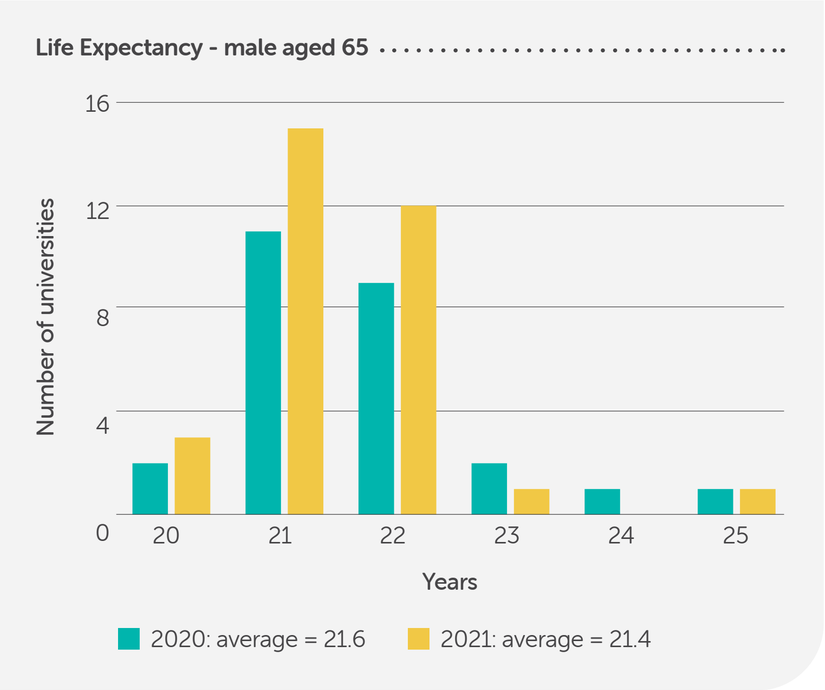
36 out of 37 universities in this year's survey disclosed information on their life expectancy assumption, either by stating the assumed life expectancy or by referring to the mortality tables used, allowing comparisons to be drawn.

We have shown opposite 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. However, 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 very similar life expectancies as at 31 July 2021, when compared to last year, although a minority of universities adopted new assumptions that resulted in a higher life expectancy. It's 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, as usual, we see a number of universities taking the opportunity to update their life expectancy outside of the usual three-yearly cycle.

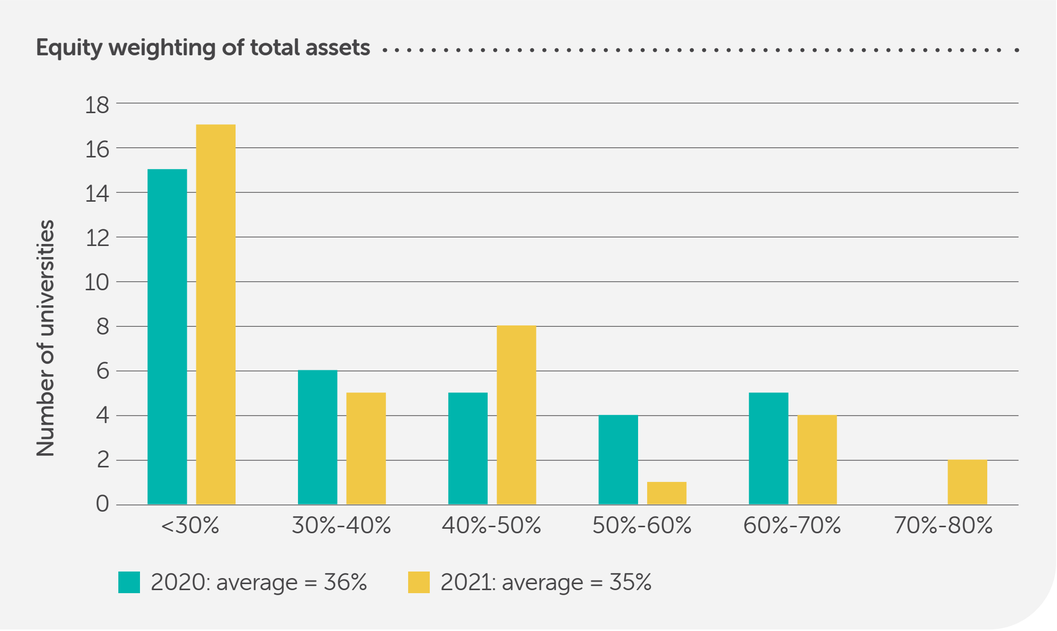


36 out of 37 universities disclosed the future mortality from age 65 (32 out of 35 in 2020)

Asset allocation

The chart below shows the percentage of SATs' assets invested in equities as at 31 July 2020 and 31 July 2021.

The average equity weighting of 35% is slightly lower than the 2020 average of 36%, reflecting both the maturing the schemes and perhaps a willingness to consider more varied asset classes such as Liability Driven Investing (LDI).



All 37 universities disclosed the equity allocation and asset amount figures

Current affairs

GMP equalisation

Accounting disclosures as at 31 July 2019 reflected the High Court decision in the case of the Lloyds Banking Group Pension Trustees Limited, with most accounts including an allowance for the expected increase in liabilities arising from it. A further court decision in November 2020 meant that further action was needed to address GMP equalisation in cash equivalent transfer values, which has led to a (generally minor) past service cost for some of the schemes surveyed this year.

GMP equalisation continues to be a live issue, with many schemes now moving from assessing the potential impacts to making the benefit changes necessary to implement equalised GMP.

RPI formula

As reported last year, the Government has 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 Consumer Prices Index with Housing (CPIH). CPIH became the UK's primary inflation measure in 2017 and essentially takes CPI and adds a measure of owner-occupied housing.

This is likely to have continued to have an impact on inflation assumptions this year and is consistent with our expectation that assumptions for RPI inflation will trend towards those for CPI in the coming years.

Sustainability

An increasing focus for the trustees and sponsors of many pension schemes is the need to consider climate change as part of their long-term investment strategies, as well as the impact it may have on employer covenant and long-term funding. The immediate effects of this on accounting disclosures are likely to be investment led – divestment vs engagement being just one of the more high-profile considerations – but the impacts are wide-ranging and this may become one of the dominant themes over the coming years.

Ukraine

At the time of writing we are witnessing the effects of the invasion of Ukraine by Russian forces. It remains to be seen how this conflict will develop but the immediate and longer-term implications may be wide-reaching. There will undoubtedly be economic, covenant and funding impacts that will influence the results of the accounting calculations as at 31 July 2022, and we would expect all schemes to be actively considering these issues.

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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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