USS
UNIVERSITIES
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SCHEME LIMITED

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Your ref
Our ref BG/JMR
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Dear Professor Hutton and Professor Jacka

Thank you for your November 2014 letter addressed to the trustee board regarding its assumptions for the actuarial valuation of the scheme. The trustee has now received the response from Universities UK to its formal consultation on the assumptions, and we assume that your comments will also have been fed into Universities UK to be taken into account. However, we felt it might also be useful to respond directly on some of the factual points you have raised in an attempt to provide further explanation, and to clarify any areas of potential misunderstanding.

Taking your comments in turn:

You comment that the estimate of future investment returns is unduly pessimistic relative to USS's historic approach. In fact for the 2005 and prior valuations the scheme's past service liabilities were valued using an assumption of gilt yields with no assumed outperformance above that level. It was only at the time of the 31 March 2008 valuation that an outperformance assumption (of 1.7% per annum) was included for calculating the deficit.

You express concern that gilt yields are currently particularly low due to quantitative easing by the Bank of England. We think it important also to note that the base gilt yield the trustee is referencing is derived from long-dated gilt yields, in line with the duration of the scheme's liabilities. Those long-dated yields already take into account any market expectation for yields to increase (for example, following a reversal of the quantitative easing policy). The trustee takes the view that it is not appropriate to try to 'second-guess' the economic markets by assuming a yield which is higher than that determined by the market (incorporating its expectations of any future increases). The trustee thinks it also important to note that since the valuation date (31 March 2014), rather than any signs of gilt yields increasing there have in fact been further reductions.

There has been much comment regarding the trustee's approach to setting the initial discount rate, which has been characterised by some as a 'gilts plus' approach. For clarity, although the discount rate is ultimately *expressed* as outperformance relative to gilts (for example, to enable comparisons to be more easily drawn for example with other schemes), the trustee's approach is based on a 'first principles' analysis, using data from different independent sources. This analysis starts with consideration of expected performance of each of the asset classes held in the fund. The expected performance of each of the various asset classes is weighted according to the trustee's overall asset strategy to get an expected rate of return on the fund as a whole. This is used to derive the discount rate by applying an appropriate margin for prudence. The level of prudence is determined by the trustee's view of an appropriate long-term level of reliance on the scheme's sponsoring employers.

Similarly to my comment above regarding future gilt yields, the RPI inflation assumption is derived relative to the implied market expectations for future inflation levels, rather than focussing on historic or current inflation levels. Again, the trustee feels it is appropriate to use an objective measure such as this as a starting point, rather than trying to otherwise predict future changes.

The trustee recognises that the market-implied inflation includes a premium to reflect the extra amount investors are willing to pay for inflation protection in times of uncertainty, and that different people have different views on the level of this premium. The trustee is proposing to reduce this inflation risk premium (IRP) initially from 0.3% to 0.2% to reflect the increased inflation hedging which is planned within the trustee's current investment strategy. Given that the hedging will necessarily match the market-implied inflation, rather than any adjusted value, it is appropriate to take less credit for any expectation that actual inflation will be lower than the market-implied level. In the extreme, if the strategy were fully inflation-hedged, then regardless of actual inflation, the investment returns would be in line with market-priced inflation and it would not be appropriate to allow for any IRP. The further reduction in IRP over the 20 year period is to reflect that, as part of the trustee's proposed changes to investment strategy, it expects the overall fund to include a greater level of inflation hedging assets

As a particular point of potential misunderstanding, we observe that in the appendix to your letter you have compared the market-derived RPI rate of 3.6% with a recent CPI rate of 1.4%, and you note that, allowing for a 0.9% difference between CPI and RPI this implies a current risk premium of 1.3%. However, we think it important to make clear that this comparison is not "like with like". The current CPI rate is based on national data based on observed price changes over the last 12 months, whereas the market-derived inflation rate measures the market's expectations of future long-term inflation, allowing for many variables, such as expectations of future economic growth and monetary policy. Therefore the gap between these two items is in no way an indication of the appropriate level of inflation risk premium.

The general salary growth assumption is an area where the trustee can, in part at least, be guided by the employers and other stakeholders (as represented by Universities UK (UUK) and the University and College Union (UCU)). As the trustee noted in its consultation document, if the most recent three years of salary growth were excluded the general pay growth over a 20 year period has been RPI + 0.7% per annum. Including the last three years reduces the average to RPI – as noted in your appendix section 1. However, following discussions with UUK and UCU, the trustee is minded to take the view that the last few years have been an exception in terms of salary growth, rather than a shift which would change expectations of the future pattern of growth in the long term. The trustee is therefore minded to decide that the assumption for future salary increases should remain unchanged, although it deliberations are not yet concluded. This issue is raised as part of the consultation response from UUK.

We would also like to clarify that member's current salaries are used at each valuation to determine accrued benefits, so to the extent that salaries progress differently from assumed this will be taken into account every three years. It is only the expectation of future increases which is being assumed. Your comment that the assumption of RPI + 1% per annum since

1990 would lead to salaries being 25% higher than they are, thus clearly leading to an overstatement of liabilities, is not correct. It can only be known whether the current assumption results in an overstatement when actual experience emerges at the next valuation.

The trustee can reassure you that it has considered a substantial amount of supporting data before proposing an increase to the future rate of longevity improvements. The proposed long term improvement rate of 1.5% per annum is consistent with the experience of improvement in UK male longevity over the past 55 to 60 years. As statisticians, we are sure you will agree that one year of slightly reduced observed life expectancy is not statistically significant compared to the long-term observed historic trend. The trustee recognises that there are many different views as to how much improvement there can or will be in the future, but notes that while there are arguments that improvements will slow down (through developments such as obesity, or diminishing rates of ceasing smoking), there are also arguments – such as improvements in cancer treatments, or developments of 'statins' to improve cholesterol – that improvements could continue at least at the same rates as have been observed.

The trustee does not believe its approach is circular. It has developed its view of an appropriate amount of reliance on covenant from an objective assessment of available additional contributions over a 15 to 20 year period (we comment further on the covenant assessment below). This target level of reliance determines how much risk the trustee is aiming to be taking in 20 years time. The current assumptions and contributions are driven by the required progression from the current position to achieving that target gradually, over a 20 year period.

The adoption of a 20 year horizon is not, as you suggest, arbitrary, but based on an independent covenant assessment carried out by the trustee's covenant advisors Ernst & Young. This assessment concluded that there was good visibility of the covenant of the participating employers for the next 20 years. It did not indicate that the covenant would necessarily decline beyond that point, only that there was less visibility at the current time. For this reason the trustee is not saying that the reliance on the scheme's participating employers should be eliminated after 20 years. In fact, the 20 year target is that reliance is limited to 15 to 20 years worth of extra contributions, so this actually indicates reliance on up to 40 years from the current time.

There are some further, general comments which we think it helpful to add.

The trustee is of course aware of the Pensions Regulator's ("tPR") guidance around prudence in actuarial valuations and it considers the overall level of prudence it is proposing is appropriate. According to a presentation prepared by the actuarial advisors to Universities UK, Aon Hewitt, the level of prudence in USS's current proposed assumptions is below the median, and in fact within the 25th percentile, where prudence is measured relative to tPR's reference liabilities.

We have not commented in this letter on your comments on benefit design, which is a matter for the employer and member representative bodies in the scheme's joint negotiating committee. As you correctly observe, the trustee has a responsibility to ensure that the promised benefits are paid to members. This involves ensuring adequate security for benefits which have already accrued, and making sure that the scheme's sponsors are aware of, and are able to meet, the costs of any future benefits which are promised.

I hope that the above responses are helpful in clarifying the trustee's position, but of course please let me know if you have any further comments, or require any further details.

Yours sincerely

B Galvin
Group Chief Executive Officer

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