

Universities Superannuation Scheme (USS)

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USS Actuarial Valuation at 31 March 2018 – Initial Thoughts

Introduction

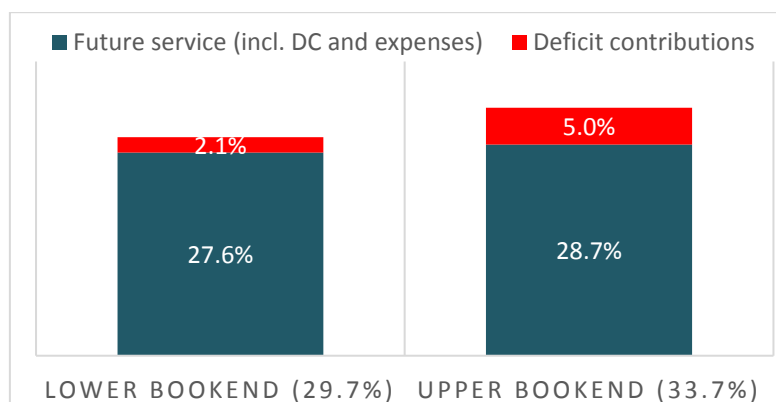
Following the Joint Expert Panel (JEP) report and after consulting employers, UUK confirmed that the vast majority of employers support the JEP recommendations, subject to a number of specific conditions and the receipt of further information on what (if any) requirements there may be from the USS Trustee.

The Trustee has called a new valuation at 31 March 2018 and has issued a consultation document in which it considers the JEP recommendations. The Pensions Regulator (TPR) has also now written to the Trustee setting out its views on what the Trustee should consider for the 2018 valuation.

Under the Rules, the USS Trustee determines the contributions subject to advice from its Scheme Actuary, and consultation with (rather than the agreement of) Universities UK (UUK). For the 2018 valuation, the USS Trustee is consulting on a range of potential contributions for existing benefits (less the 1% DC employer matching contribution):

- **“Upper Bookend”**: A total contribution of about 33.7% of pay, if employers offer no formal contingent support.
- **“Lower Bookend”**: A total contribution of “slightly below 30%” of pay (potentially 29.7% from the example provided), if satisfactory contingent support is given – such as Contingent Contributions (favoured by TPR in its 11 December Letter) that would be triggered if the funding position deteriorates. Further details are to follow.

Chart 1: Total contributions under Upper Bookend and Lower Bookend (% of pay)



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While the proposals are not fully in line with the JEP recommendations (e.g. the JEP concluded that trigger contributions are an issue to be addressed in the longer term, i.e. not as part of Phase 1), the Trustee has put forward something materially better than the proposal for the 2017 valuation. Although we can argue for the JEP recommendations to be implemented in full, contingent support is worthy of consideration with the hope of finding an approach that all stakeholders can live with given their different points of view.

A Lower Bookend (i.e. contribution rate) that coincides with the JEP recommendation is likely to be acceptable to employers, however employers will need fuller details of the contingent support required before deciding whether this can be supported. We will provide further advice (and we understand UUK will issue a further advisory note) when further clarity is available on contingent support, and bearing in mind the 28 February consultation deadline. In the meantime, we set out our high-level thoughts on the Trustee's consultation.

Upper Bookend (for contributions)

If no *additional* support is offered, the Trustee proposes an overall contribution rate of 33.7% (which would be 23% for employers, and 10.7% for members under default "cost-sharing"). Compared with the Rule 76 valuation, this is higher than the proposed contribution of 32.9% that would apply from 1 October 2019, and lower than the proposed contribution of 36.6% from 1 April 2020 onwards.

We have the following comments:

- As mentioned above, the proposed contributions are lower than the Rule 76 proposed contribution from April 2020, by 2.9% (i.e. 36.6%-33.7%=2.9%). We understand from USS that the difference comprises:

Table 1: Rule 76 vs Upper Bookend. All figures are expressed as % of pay.

	Future service (incl. DC and expenses)	Deficit contributions	Total
2017 valuation proposal (from April 2020)	30.6%	6% (for proposed deficit of £7.5Bn)	36.6%
(i) Updated mortality	(0.1%)		
(ii) Updated future investment returns	(0.9%)		
(iii) NRA for future service increased from 65 to 66 (October 2020)	(0.9%)		
(iv) Change deficit contributions (6% to 5%)		(1%)	
"Upper Bookend"	28.7%	5% (for proposed deficit of £3.6Bn)	33.7%

- We believe it is reasonable to regard (i) and (ii) in the table as being a consequence of updating the valuation to new conditions at the 2018 valuation date. Item (iii) is a refinement in the accuracy of the benefits being valued in future, which is being taken earlier than strictly required, and we welcome this proposal from the USS Trustee.

- However, the Upper Bookend is still materially higher than the JEP recommendation, by about 4.5% (i.e. 33.7% - 29.2%). Employers will question why this is the case, and whether the Upper Bookend can be brought much closer to the JEP recommendation.
 - One potential influence here is TPR. In its 11 December 2018 letter, TPR stated that the *“2017 valuation proposal on technical provisions ... is at the limit of what we regard as being compliant with the requirement for prudence under the Pensions Act 2004”*, and it is concerned with the overall approach being used. This creates some tension with the JEP recommendations. TPR views the covenant as *“Tending to Strong”* rather than *“Strong”*, and this appears to be a key source of the tension.
 - Nevertheless, we believe that it would be credible for the Trustee to decide to reduce the Upper Bookend, with the proposed deficit contributions (item (iv) in Table 1) being perhaps the simplest lever.
 - Deficit contributions of 5% of pay look excessive compared with the illustrated outcome of 2.1% in the JEP report. And, at a simplistic level, between 2017 and 2018 the proposed deficit reduced from £7.5bn to £3.6bn – so the proposed 6% deficit contribution (on which UUK is currently reviewing employer responses to – in a separate 2017 valuation consultation) should reduce to around 3%. This is even if no allowance were made for asset outperformance, and without allowing for a 15-20 year recovery period that the JEP recommended could be supported. Table 4 on page 19 of the USS Trustee’s consultation also shows that there are credible recovery plans with contributions closer to 0% than the 5% suggested, and if this table were extended to cover 15-20 year periods, then this point would be even more apparent.
 - Although the formal consultation on the 2018 Recovery Plan is scheduled for later in the process (as we understand it), the deficit contributions make up an important part of the total contributions. Both employers and also members need clarity on the position (assuming contributions are split using the default cost-sharing mechanism). Also, most of the difference between the Lower Bookend and Upper Bookend arises from the different deficit contributions requested.
 - USS raises the idea that 5% could be higher (potentially increasing the Upper Bookend), depending on market conditions at the date the Recovery Plan is put in place. We discuss the idea of contingent contributions later in the document, but we believe the starting point for the valuation should be to base the contributions on the position at the valuation date. To allow more explicitly for post valuation date changes would add a further layer of complexity to this and to future valuation discussions. TPR recognises this issue in paragraph 16 of its 11 December letter.
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Lower Bookend (for contributions)

The USS Trustee proposes a Lower Bookend of “slightly below 30%”, and gives an example that would result in an overall contribution rate of 29.7% of pay (which would be 20.4% for employers and 9.3% for members under default “cost-sharing”).

USS does not explicitly rule out the estimated figure assuming the JEP recommendations were implemented of 29.2%. Their example for Contingent Contributions (Appendix D) assumes a 4.5% gap between bookends, and we observe that 33.7%-4.5% = 29.2%. However, at this stage USS have not explicitly suggested that 29.2% may be acceptable.

We have the following comments:

- The example of 29.7% is 4% lower than the proposed Upper Bookend. The difference comprises:

Table 2: Upper Bookend vs Lower Bookend. Figures are % of pay.

	Future service (incl. DC and expenses)	Deficit contributions	Total
“Upper Bookend”	28.7%	5% (for proposed deficit of £3.6Bn)	33.7%
(i) Increase target reliance to £13Bn in 2017 terms (from £10Bn)	(1.1%)		
(ii) Change deficit contributions (5% to 2.1%)		(2.9%)	
“Lower Bookend” example	27.6%	2.1% (for proposed deficit of £2.2Bn)	29.7%

- The Trustee is not allowing for two of the JEP recommendations i.e. deferring when de-risking starts (in line with the USS Trustee’s original proposal for the 2017 valuation in September 2017), and the smoothing of contributions over two valuation cycles. Partly offsetting this, the USS Trustee does allow for improved market conditions at 2018 (which was not explicitly adopted for the JEP example of c.29.2%), and allows for the NRA to increase to 66.
- From a practical perspective, employers may prefer for the Trustee to adopt a Lower Bookend of 29.2% (or potentially whatever an “accurate” JEP figure would have been had the recommendations being incorporated for a 2017 valuation in full). If 29.7% were adopted, then UUK would need to re-consult with employers on cash contributions (having only just consulted employers on 29.2% late last year). Some employers who were willing to live with 29.2% may decide that 29.7% (20.4% for employers and 9.3% for employees under default cost-sharing) is not acceptable. We believe there is merit in avoiding this diversion given that the differences involved are small in the context of the overall funding and risk of the scheme.
- Although the JEP provide information on the 31 March 2018 position in their report, their recommendations applied to a 31 March 2017 valuation – in line with the terms of reference they worked to. If the individual changes proposed by the JEP were all applied to the 2018 valuation, then the resulting contribution rate would be lower (we understand c.26%). However, it should be recognised that we need to find an overall outcome that is acceptable to the USS Trustee and

which TPR would be content with. In our view, the Lower Bookend figure is in the spirit of the JEP report which noted that there were a number of paths the Trustee could adopt to reduce the contribution rate to below 30%. Our principal issue is that the example is north of 29.2%, which may create some issues that could be avoided.

Additional risk

In its 11 December 2018 letter, TPR asked the USS Trustee to ensure that the stakeholders understand the greater level of risks involved in accepting the JEP recommendations. The USS Trustee's consultation states that *"Employers are prepared to accept more risk...in order that the JEP adjustments can be implemented, subject to USS providing more information on the financial risks involved"*. We believe this may be a conflation. UUK asked not for more information on *risks* at this stage, but for more information on the potential USS Trustee requirements for accepting the JEP recommendations, noting that Phase 2 of the JEP would lead to a wider review.

Nevertheless, the whole topic of additional risk underpins the 2018 valuation discussions, and is referenced frequently by TPR.

At the most basic level, if employers and members pay lower contributions than the Trustee would prefer, then the *additional risk* is that those lower contributions are insufficient and that the "missing" contributions need to be recouped in some way. This could result in employers/members paying higher contributions in future than would otherwise have been the case; or benefits could change in the future, so that more of the contributions from that point on are diverted into paying off the deficit. This is a very simple way of thinking about additional risk – arguably not robust for the long term, but it is a credible way to consider additional risk in the context of finalising the 2018 valuation and before JEP Phase 2.

The consultation document sets out further information, which we comment on in the Appendix.

Contingent support

The JEP report noted that contingent assets may be an issue that merits future investigation, rather than being needed as part of a quick outcome to the 2017 valuation.

We believe the JEP position would be reasonable for the USS Trustee to accept, due to:

- The strong covenant rating for the covenant overall from the USS Trustee's specialist covenant advisers, including a 30 year horizon for covenant visibility.
- The last man standing rule (which provides a form of contingent security protecting against potential individual defaults).
- The USS Trustee's ability to set contributions following consultation (but not necessarily employer agreement) under the unilateral contribution rule in Rule 6.1, and the default cost-sharing provisions contained within Rule 76. Taken together these are a form of "contingent contributions" which the USS Trustee has shown it is willing and able to implement by its Rule 76 consultation in 2018.

As mentioned, the USS Trustee's view (we believe supported by TPR) is that the Lower Bookend is not possible absent contingent support. But if the Upper Bookend were adopted, then the proposed contribution levels will likely be unsustainable for many employers. In our view, contingent support is therefore worthy of consideration with the hope of identifying an approach that all stakeholders (employers, members, USS Trustee, TPR) can live with given their different points of view.

The USS Trustee has identified two options to explore further: negative pledges and contingent contributions. We comment on these below.

Negative pledges

A negative pledge arises when employers commit not to take certain actions in certain events. For example: employers agree not to take on new borrowing that ranks above the pension scheme, without trustee consent.

The consultation raises the concept of negative pledges though does not say anything further about them. Specifically, it does not show how negative pledges could translate into reduced contributions. It may be difficult practically to find an approach that is fair across all employers in a multi-employer scheme, and which can be implemented quickly. We will comment further as and when a more concrete proposal is brought forward.

Contingent contributions

The devil will be in the detail, but what's outlined is:

- The total contribution rate is initially set at the Lower Bookend (29.2% is implied in the example from Appendix D of the consultation).
- The USS Trustee assesses what it would have asked for without contingent support (Upper Bookend i.e. 33.7%, which is 4.5% higher in the example).
- If market conditions worsen such that a trigger threshold is reached, then total contributions would increase by $1/3 \times 4.5\% = 1.5\%$ in first year after notice given, then potentially 3% in second year, and 4.5% in third year. A future actuarial valuation takes place no later than as at 31 March 2021 (by which time JEP Phase 2 will have concluded).

One of the key pieces of further information required is when any Contingent Contributions may be triggered. We consider this further below using the language in the consultation document.

“Trigger Metric”

The consultation document (Appendix D) suggests the self-sufficiency deficit as an example of the basis that could be used to determine the triggers. Our initial reaction is that we are concerned about the inherent volatility of self-sufficiency (as shown in Figure 5 of the USS Trustee's consultation document), and the Technical Provisions target (on which cash contributions are primarily calculated for the bookends) may be preferable.

“Trigger Threshold” – how far off course?

To be able to consider the potential impact of Contingent Contributions, stakeholders should have information on the likelihood of the proposed Trigger Threshold being breached based on conditions now, along with examples of what economic scenarios would lead to this.

Our view is that the Trigger Threshold would need to be for extreme scenarios, since business as usual variations can and should be debated as part of the regular valuation cycle.

Furthermore, ordinarily if market conditions worsen then the stakeholders would have other options to consider. It may be preferable for the “action” once a trigger is hit to be for the JNC to have a time-limited period to consider the response (in terms of potential contribution and/or benefit changes), with Contingent Contributions only applying to employers and members (assuming such contributions would be split using the default cost-sharing mechanism), if the JNC does not reach a decision.

Summary

The USS Trustee has usefully developed its thinking in terms of what it may require to implement a contribution rate close to the JEP recommendations.

While our preference would have been for the USS Trustee to accept the JEP recommendations in full given the employer support, we can see merit in the approach being developed by the USS Trustee as a potential way to bridge the different perspectives of the various stakeholders including TPR.

Clearly, the devil is in the detail: Contingent Contributions will be more credible if they apply in more extreme scenarios rather than business as usual variations; and some may wish for the stakeholders to have the opportunity to consider other options through the usual JNC process with the Contingent Contributions being a default.

Further information will be needed we believe for UUK to pose meaningful questions to employers (who have already fed back that they support the JEP recommendations subject to understanding any specific requirements from the USS Trustee). The cover letter from the USS Trustee notes that further information is expected during January, and that the process may be iterative. We will provide further advice in due course, and understand that UUK will also provide an advisory note to employers.

Statement of Funding Principles

We will provide comments on the draft Statement of Funding Principles (the document setting out the updated approach for the 2018 valuation) included in the consultation document as part of our second advice note.

Compliance

The advice in this report and the work relating to it complies with ‘Technical Actuarial Standard 100: Principles for Technical Actuarial Work’ (‘TAS 100’) and ‘Technical Actuarial Standard 300: Pensions’ (‘TAS 300’).

Appendix – Risk

Risk

The USS Trustee provides further information on risk. The information comes in three sections:

- a) Comparison of the discount rate with the 2017 position relative to gilts and relative to CPI (section 6.2 in the USS Trustee’s consultation);
- b) Stress tests on a self-sufficiency basis (section 6.3);
- c) Qualitative classification of potential JEP changes into – updating experience, updating views about the future, and those that clearly increase risk (section 6.1).

We set out comments below.

a) Discount rate benchmarking

The amount of “prudence” in the discount rate (the key financial assumption) is often measured relative to gilts. In part this is because it provides a consistent approach for each scheme and relative to a low risk position. We agree that TPR often compares scheme discount rates in this way (although they regularly point out they are not a “gilts plus” regulator – e.g. in their 2017 Annual Funding Statement they said that *“We are not prescriptive about the approach trustees should take when setting the valuation discount rate, provided that the outcome is consistent with the requirements of the legislation and the DB code”*).

Of the eight potential changes listed in Table 2 of page 14, only three of them (4, 5 and 6) actually impact on the discount rate at the valuation date. So, for example “2018: including 1-4” could be simplified to “2018 including 4 (only)”.

If the “gilts plus” measure were the main concern, then it may be better to incorporate some of the other JEP recommendations (e.g. smoothing of future service contributions and allowing for investment outperformance in the recovery plan), as this could provide an easier path to c.29.2%. For example, if the USS Trustee were to incorporate 1-4, 7 and 8, then based on our estimates this would give close to 29.2%, but without worsening the “gilts plus” position compared with the 2017 Technical Provisions consultation.

Turning to the comparison against CPI, this is interesting but for proposal 4 this shows “more risk” (as does the “gilts plus” comparison). We agree with USS that proposal 4 could be viewed as not changing the risk, since it is simply a recalibration of the future investment assumptions based on the Trustee’s latest views on the future (with a 67th percentile adopted for prudence), but it is perhaps unhelpful for USS’s charts to show an increase in risk. It may be helpful to also illustrate a comparison relative to “best estimate” returns, noting the USS Trustee’s comment that proposal 4 could be considered by TPR as an increase in risk.

b) Stress tests on self-sufficiency basis

The self-sufficiency deficit can be viewed as the reliance of the USS Trustee on employers (who are ultimately underwriting the anticipated asset returns, on top of the low risk position).

The self-sufficiency deficit is volatile principally because of the mis-match between the investment strategy and the self-sufficiency measure.

It may be possible to reduce the volatility without reducing expected investment returns by hedging interest rates to a greater extent, and by taking additional risk elsewhere in the strategy. This could be considered in JEP phase 2 as part of a wider review of the investment strategy and risk. The topic does not lend itself well to phase 1, as any change would have implications that need careful consideration and engagement.

c) Additional risk by category of risk

We acknowledge the different ways of categorising risk, such as those set out in section 6.1 of the consultation document.

In the webinars to employers (October 2018), we also described the additional risk as falling into three (slightly different) buckets, as follows:

- Moving back to September 2017 consultation position.
- Updates for new information.
- Additional risk.

From our perspective, moving back to the position the USS Trustee consulted on originally in September 2017 (item 6) is in line with the level of risk that UUK supported (as per paragraph 2.3 in UUK's response in 2017). For the 2017 valuation, this corresponds to a contribution rate of 31.4% for current benefits (minus the 1% DC match), rather than the subsequent Rule 76 figure of 36.6%, with the main difference being a deficit contribution of 2.1% rather than 6%. From this vantage point, allowing for updated conditions at 2018 and the change to the normal retirement age would bring the 31.4% down very close to 29.2% – and we appear, by using that September 2017 reference point, to have achieved the JEP recommendations by taking minimal additional risk.

However, we run into a practical difficulty that TPR believes that such an approach would be beyond the limit of what is acceptable, based on its assessment of covenant as being Tending to Strong (rather than Strong). Additionally, another perspective is that the revised Rule 76 Technical Provisions (with a contribution rate of 36.6% rather than 31.4%) reflected the USS Trustee's interpretation of discussions at the time regarding the risk appetite of employers, and the USS Trustee's comment in the 2017 consultation document that it may be necessary to consider the need for a more rapid pre-agreed short-term response (e.g. increased contributions, asking the JNC to consider changes to future benefit levels, or investment portfolio changes). While this narrative could be discussed further, it is not clear to us that this path would allow the 2018 valuation to be concluded quickly or successfully (if all we are really saying to the USS Trustee is that they should adopt the JEP recommendations without the need for contingent support, with the USS Trustee arguing that contingent support is needed, and indeed even required by TPR).
