

## Discussion document for the University of Sheffield USS Working Group

Sam Marsh, Staff Representative on the group

5 October 2018 (Revised 12 October 2018)

**Summary:** My calculations based on data provided by USS indicate that incomplete information on the Year 20 position may have given a skewed picture of the risk involved in maintaining the scheme in its current form. In particular, the application of Test 1 bypasses the natural question of “how will the scheme look in 20 years’ time before any changes are made?”, a question which has never been answered by USS. My conclusion is that the University of Sheffield should either seek urgent clarification on the figures, or press for the removal of Test 1 for this valuation (pending Phase 2 of the Joint Expert Panel), or, at the very least, call for the use of the loosest Test 1 parameters acceptable to the trustee.

**UPDATE:** As of 12 October 2018, I have been provided with figures for the Year 20 asset projections from USS. I do not have permission to release the numbers, but, due to the use of slightly different cashflow data, my asset projections overstate those calculated by USS by a small amount (less than 5%). The broad conclusions remain the same.

### 1. Year 20 projections

The figures below are based on the prudent investment forecasts used by USS in their valuations (not best-estimates) and assume the scheme stays open in its current form (in particular, with an unchanged contribution rate), using cashflow data on expected contributions and benefit payments in Years 1-20 provided by USS, with the investment portfolio remaining in its current form. All values are adjusted for CPI inflation.

|                                 | Assets   | Technical provisions liabilities | Self-sufficiency liabilities |
|---------------------------------|----------|----------------------------------|------------------------------|
| <b>Projected Year 20 values</b> | £78.2bn* | £59.2bn*                         | £81.0bn                      |

\* My calculations based on USS cashflow data; other data as stated by USS

Notes:

- Before the application of Test 1 and the de-risking it forces, the scheme is expected, on prudent assumptions, to find a Year 20 surplus of £19bn in real terms and a ‘self-sufficiency deficit’ (or ‘reliance on covenant’) of only £2.8bn.
- USS have never released the above data publicly or to employers. The University of Sheffield USS Working Group asked for this information as part of the September 2017 employer consultation but were not given it.
- As a member of the Joint Negotiating Committee, I have asked for confirmation of my calculations, but have been told that

*“the trustee’s valuation methodology does not require the projection of assets based on current contribution rates, since the assets are taken as being equal to the technical provisions at the end of the 20 year reliance horizon. We have not therefore sought to confirm these figures.”*

## 2. Reconciling the above findings with Test 1

USS's claim that "valuation methodology does not require the projection of assets based on current contribution rates" is true, as Test 1 intervenes before such projections are made. As described in my submission to the Joint Expert Panel,

1. USS first calculate the Year 20 self-sufficiency figure of £81bn, then *fix* the value of the technical provisions liabilities at £81bn less the 'reliance on covenant' amount of £10bn.
2. In other words, the Year 20 technical provisions must, to satisfy Test 1, become £81 less £10bn, namely £71bn.
3. To achieve the increase in Year 20 technical provisions liabilities from £59.2bn to £71bn, USS must ensure that their portfolio at Year 20 is generating lower returns. This is achieved by de-risking the scheme's assets.

The effect of this de-risking is shown below, with a comparison of the projected Year 20 position based on de-risking occurring in Years 10-20 (referred to as 'September de-risking') and occurring in Years 1-20 ('November de-risking'), where again contribution rates and benefits remain at the current levels.

|  | Assets   | Technical provisions liabilities | Self-sufficiency liabilities |
|--|----------|----------------------------------|------------------------------|
| <b>Projected Year 20 values (September de-risking)</b> | £74.6bn* | £71.0bn                          | £81.0bn                      |
| <b>Projected Year 20 values (November de-risking)</b>  | £71.0bn* | £71.0bn                          | £81.0bn                      |

\* My calculations based on USS cashflow data; other data as stated by USS

Notes:

- A. Not only is there a rise in the technical provisions liabilities, but also a fall in the expected level of the assets under both de-risking plans.
- B. The scheme is at worse break-even under both scenarios: the current contribution rate is sufficient under both scenarios for the scheme to be fully funded by Year 20.
- C. We have no information of how the probabilities of finding a Year 20 'self-sufficiency deficit' of any given size (£10bn, £20bn, £40bn etc) vary according the different de-risking plans.

### Effect of de-risking on future service costs

The de-risking, a result of Test 1, has a significant effect on the cost of future accrual, with increased de-risking leading to higher costs. An important point to note is that the future service costs are based on the cost of providing the benefits in Year 1. As explained in the Joint Expert Panel report, the costs are expected to fall over time, and the panel recommend smoothing the costs of accrual in Years 1-6. The analysis above shows that the total rate required smoothed over Years 1-20 would be at most 26%, even under the most extreme de-risking plan proposed.

### Conclusions

Yet again, we are left short of the information required to make an informed decision in this consultation. I propose some questions we could ask for urgent responses to in Appendix A. If we fail to get sufficient information in time to make an informed decision, I propose that this university

calls for the removal of Test 1 for this valuation, pending Phase 2 of the Joint Expert Panel. If the university falls short of that, then a similar effect can be achieved by calling for the use of the loosest parameters acceptable to the trustee in its application (namely a 'reliance on covenant' amount of £26bn). We have no evidence that this leads to any significant increase in risk to the university; my calculations suggest that the opposite is possible.

## Appendix A

Below I propose two urgent requests for information questions that would allow this group to properly advise the university on its response to the employer consultation.

1. Please confirm the real (CPI) terms projected Year 20 assets and technical provisions liabilities under the prudent assumptions a) with no de-risking present, b) according to the September de-risking plan, c) according to the November de-risking plan. (The table below shows estimates for these values based on cashflow data provided by USS.)

|  | Assets   | Technical provisions liabilities | Self-sufficiency liabilities |
|--|----------|----------------------------------|------------------------------|
| <b>Projected Year 20 values (no de-risking)</b>        | £78.2bn* | £59.2bn*                         | £81.0bn                      |
| <b>Projected Year 20 values (September de-risking)</b> | £74.6bn* | £71.0bn                          | £81.0bn                      |
| <b>Projected Year 20 values (November de-risking)</b>  | £71.0bn* | £71.0bn                          | £81.0bn                      |

\* Calculations based on USS cashflow data; other data as stated by USS

2. Please give an indication, preferably by completing the table below, of the probabilities of self-sufficiency deficits of various sizes or worse occurring at Year 20 under a) no de-risking of the present portfolio, b) according to the September de-risking plan, c) according to the November de-risking plan.

|   | £10bn | £20bn | £40bn |
|---|-------|-------|-------|
| <b>Probability of exceeding the stated self-sufficiency deficit at Year 20 (no de-risking de-risking)</b> |       |       |       |
| <b>Probability of exceeding the stated self-sufficiency deficit at Year 20 (September de-risking)</b>     |       |       |       |
| <b>Probability of exceeding the stated self-sufficiency deficit at Year 20 (November de-risking)</b>      |       |       |       |