USS

Methodology and risk appetite for the 2020 valuation

Technical discussion document for

USS sponsoring employers

Issued 9 March 2020

Executive Summary

This document includes results of analysis of different valuation methodologies and assumptions undertaken for the Trustee Board. Any actuarial information referred to in this document was created to assist the decisions of the Board of USSL only and may not be relied upon by any other party. The information is provided only to inform UUK and USS sponsoring employers of matters considered by the Board. The data and information in this document are not intended to contribute in whole or in part to any decision made by UUK or USS sponsoring employers. If they or any other party believe actuarial advice on which it may place formal reliance is required to assist their decisions on these matters, they should obtain their own advice.

This document sets out, for discussion, our emerging thinking on the proposed methodology for the 2020 valuation and the key factors that will drive the outcome. It follows feedback from our stakeholders, lessons learnt from the previous valuation, a fundamental review of our methodology, and the Joint Expert Panel's (JEP) second report.

In order to encourage and focus discussions, we have set out our emerging approach to the methodology and investment strategy. We also set out the two key factors – the covenant and risk appetites – that will have the greatest effect on outcomes, whatever the methodology.

This document is specifically addressed to our sponsoring employers (when we refer to 'you'). Your views on the issues it covers will influence the approach we subsequently decide to take and will help us make clear, understandable and evidence-based decisions. It will, however, be available on our website for everyone to read.

We have not made any decisions at this early stage in the process. We are seeking to encourage discussion and to build understanding and evidence to inform our approach.

In support of this, a Valuation Methodology Discussion Forum (VMDF – see Appendix A) has been meeting regularly since February. This engagement has been valuable, as we know there are different perspectives and differences of opinion. While we are presenting a possible methodology, which has been informed by the JEP and which is broadly acceptable to us, we will consider alternative approaches with an open mind. We hope that setting out our perspective and emerging position on the key issues will inform and support discussions.

Note that this discussion document is separate from, and in advance of, the formal consultation we are required by law to undertake with UUK later in the year.

Methodology

In reviewing the methodology, we first established a set of high-level principles. These were shared with the JEP and at last year's Institutions' Meeting. They have guided our approach:

- *Principle 1:* **The level of risk must be 'acceptable'**
  How much reliance can we, and you as employers, place on the covenant? How can we ensure the Scheme can recover from an adverse investment scenario if required?
- *Principle 2:* **Long-term *and* short-term perspectives are important**
  Can we ensure there is a viable long-term outcome from the valuation that delivers a sustainable Scheme in the best interests of our members? Can we track things over the short-term to check that we are on course to achieve that long-term goal?
- *Principle 3:* **Intergenerational fairness should be considered**
  In terms of the contributions and benefits members will pay and receive, now and in future.

Alongside these principles we have identified a number of key considerations: the trade-off between **simplicity and complexity**; the **extent to which costly guarantees are desirable**; the **extent to which stability of outcomes is achievable,** noting that stable benefits, stable contributions and stable risks are **not** compatible**;** and **the need to ensure our statutory, regulatory, and fiduciary duties as Trustee are met.**

This document addresses three key aspects of the methodology: covenant, risk appetite and the investment strategy. It includes consideration of a dual discount rate approach (see Section 2)**,** as recommended for consideration by the JEP. The potential benefits of the approach we set out include providing:

- a more stable risk and investment profile;
- a more accurate reflection of our view of stakeholder risk appetites;
- alignment with new emerging regulatory requirements; and
- consistency with the evolving maturity of the Scheme.

A dual discount rate approach is more likely to lower the contributions needed to fund future pension promises than a single discount rate approach (all things being equal). It may also lead to greater stability of contributions over time.

Covenant, risk appetite and investment strategy

The covenant is our sponsoring employers' legal obligation and financial ability to support the Scheme now and in the future. It informs how much we can rely on them, collectively, to fund the pension promises they have made, and continue to make, to our members. It remains the foundation of the valuation: the stronger the covenant, the more risk we can consider taking in the investment strategy, which can lower the regular contributions we need.

The covenant is currently rated **'strong'**, but it is on negative watch. This is due to the risks of potentially higher debt levels in the sector and strong employers leaving the Scheme. If all the covenant measures discussed during the 2018 valuation are put in place (see Section 3), we expect it to remain 'strong'. Otherwise, we expect it to be downgraded to 'tending-to-strong'.

This would change the period over which we could rely on the covenant in setting the investment strategy and funding assumptions from **30 years** to **20 years.** This would, in turn, lower the amount of risk we could contemplate taking (i.e., less time for risks to be rewarded and/or to recover from downside events).

One of the ways we've looked at the sector's capacity to support risk suggests that it could support in the region of £65bn for a 'strong' covenant (i.e., over 30 years). This would reduce to around £54bn for a 'tending-to-strong' covenant (i.e., over 20 years). These figures are only illustrative at this stage. This **'risk *capacity*'** covers all the risks being run by employers – such as debt, business investment, competition, funding, changes to higher education and other environmental factors. Not all of it would be available to support the Scheme, so we need to understand your **'risk *appetite*'**: How much are you prepared to commit to USS specifically in an adverse scenario?

Purely to illustrate the methodology, we have assumed in this document that the employers' 'risk appetite' is around £35bn for a 'strong' covenant**.** In our illustration, this would leave £30bn to cover employers' other business risks. In reality, it may be very different and we need your feedback on this.

But what would a 'risk appetite' of £35bn mean for you? It means in a sufficiently adverse scenario we would be relying on you to pay up to 10% of payroll annually over 30 years purely to cover the deficit in relation to benefits which have already been earned. This would be in addition to the cost of whatever ongoing pension provision you continue to offer.

If the covenant were downgraded to 'tending-to-strong' we assume (again, for illustration) that the risk appetite falls to around £25bn.

In terms of **investment strategy**, we are proposing an overall investment approach which is consistent with a dual discount rate.

This is based on combining a **low-risk strategy for pensioners** and a **growth strategy** (i.e., higher risk and higher expected return) **for active and deferred members** before they reach retirement. Note, however, that this separation is only conceptual. The overall strategy will take advantage of synergies and pooling benefits and will be tested and managed relative to risk appetite.

Our primary **measure of risk** in relation to funding the Scheme is the distance from 'self-sufficiency' (see Section 4.1). We are not targeting self-sufficiency. We are trying to ensure we have the ability, in a sufficiently adverse event, to secure the benefits members have already built up.

We propose a measure for consideration that combines the self-sufficiency deficit with a 'risk buffer' for how bad the deficit might get in the time it would take to move towards a self-sufficiency strategy.

Illustrating the methodology

We have produced indicative calculations to illustrate the methodology. The results are based on the same demographic assumptions used for the 2018 valuation but the financial assumptions have been updated to 31 December 2019. (Note that, since then, global concerns over the Coronavirus have caused large falls in financial markets which, if they persist, could adversely impact the valuation.)

The defined benefits USS members build up increase each year broadly in line with CPI inflation. Given the impact on gilt yields of the government's recently announced reform of RPI, we have had to make an adjustment for future CPI inflation in our illustrations (see Section 6.1). We would otherwise be understating expected CPI inflation, and hence our liabilities and the future service cost. This issue affects all UK pension schemes that provide CPI-linked benefits.

The discount rates we have adopted to illustrate the methodology are:

- For a 'strong' covenant: The pre-retirement discount rate is Gilts + 2.5%.
- For a 'tending-to-strong' covenant: The pre-retirement discount rate is Gilts + 1.75%.
- For both covenant cases: The post-retirement discount rate is Gilts + 0.75%.

The 'strong' and 'tending to strong' positions are intended to be broadly aligned to the indicative £35bn and £25bn risk appetites referred to earlier. The actual discount rates we will use for the valuation will be confirmed after we have explored the issues in this document with you. We also need to consider, in more detail, the impact of risks materialising in relation to different categories of members.

The following table illustrates the potential outcomes as at 31 December 2019 for both a 'strong' and a 'tending-to-strong' covenant under our proposed approach for the 2020 valuation. We compare these with the approach taken for the 2018 valuation.

Table: *Indicative output for Technical Provisions (TP) and future service contribution requirements as at 31 December 2019 using the proposed methodology for the 2020 valuation.*

31 Dec 2019 **New Methodology**	TP Liability (£bn)	TP Deficit (£bn)	FSC (Future Service Cost)[1]	TP Discount Rate[2] (Gilts+)	FSC Discount Rate[2] (Gilts+)	Covenant support requirement[3] in 2040 (£bn)
2018 methodology (with RPI allowance)	78.3	5.4	32.5%	1.33%	1.48%	17
"Strong" covenant	**78.0**	**5.1**	**30.0%**	**1.35%**	**1.76%**	**32**
"Tending-to-strong" covenant	**81.9**	**9.0**	**34.0%**	**1.10%**	**1.33%**	**25**

1. Future service cost (FSC) is given as a percentage of payroll.
2. The dual discount rate is expressed as a single equivalent discount rate for the purpose of comparison.
3. Covenant support requirement is given by the projected self-sufficiency deficit plus a risk buffer.

Notes: *We have expressed the discount rates relative to gilts purely for ease of comparison. They were not calculated from a so-called 'gilts+' approach, but based on our FBB model. The final column assumes gilt yields revert in line with our expectations and that the Scheme is fully funded on a TP basis. Should gilt yields remain at levels similar to those at 31 December 2019, covenant support requirements at 2040 would be considerably higher.*

These figures in the table aim to give you an indication of how your clear commitment to the scheme can, and will, have an influence. Other outcomes are possible depending upon your 'risk appetite' and your commitment to providing additional tangible and material covenant support.

Other factors will also have an influence, including our risk appetite, demographics (our current assumptions are being reviewed) and conditions in financial markets at 31 March 2020. The Pensions Regulator is also holding a consultation that could influence future valuations. We will need to consider if and how this could (or should) inform the approach for the 2020 valuation.

What we need from you

We are asking for your feedback to be sent to UUK by **5pm on 17 April** (copied to us):

1. What are your comments on the proposed new methodology? (See Section 2)
2. Do you support the measures to ensure the covenant is "Strong" agreed as part of the 2018 valuation on: i) the permanent rule change on employers exiting the Scheme to underpin a 30-year covenant horizon; ii) debt monitoring arrangements; and iii) *pari passu* security on new secured debt? (See Section 3)
3. Do you wish to consider additional tangible covenant support measures to further strengthen the covenant and potentially support additional risk (above that outlined in the scenarios presented in the table above)? (See Section 3 and Appendix C)
4. Do you have initial views on whether you would be comfortable with an investment strategy that took a moderately larger amount of risk in the long term (See Section 5)?
5. Based on the example approach to managing risk, as set out in this document, what is your risk appetite? In other words, do you have initial views as to how much of your risk capacity you are comfortable for us to rely on in supporting the Scheme, in the knowledge that there are adverse scenarios in which this may be called? (You may wish to express this as a contribution of *x*% of salary, or a monetary amount, paid over *y* years.) (See Section 4)

The rest of this document provides more detail on the points we've covered above. Your answers to these questions will inform the assumptions we will consult UUK on in the summer.

Any actuarial work referred to in this document was created to assist the decisions of the Board of USSL only, as the only "user" for the purposes of compliance with Technical Actuarial Standards ("TAS"). Accordingly, the actuarial work and the references to it in this document have not been assessed in line with the TAS requirements as they might apply in relation to any other party. Any party other than the Board of USSL as the intended user should obtain its own actuarial advice on these matters to assist its decisions.