

Response to USS Joint Expert Panel (“JEP”) second call for submissions

DEADLINE FOR SUBMISSION IS 17 JUNE 2019

Introduction

This document sets out the University’s response to the JEP’s second call for submissions in respect of the USS valuation. The JEP’s second call for submissions is in respect of the long-term sustainability of USS, including:

- Developing a clear approach to future valuations that can deliver a sustainable scheme and a shared set of principles.
- Exploring different paths to the valuation of the Technical Provisions and other parts of the valuation methodology including Test 1
- Consideration of risk sharing including a different approach to contributions. Examining the questions of mutuality, employer appetite for risk and the potential for risk sharing

This response has been reviewed by the University’s Pensions Working Group and has been approved by the University’s Council.

Executive summary

The key elements of the University’s response to the JEP call for submissions are consistent with the University’s response to the USS consultation on the assumptions and approach to be adopted for the 2018 valuation. In particular, our response asks the JEP to take into account the following objectives.

- 1) **To provide good quality pensions for staff.** USS should provide a good quality pension in terms of the size and certainty of the benefits provided. The benefit structure should also provide for intergenerational fairness.
- 2) **To provide affordable benefits.** The contribution rates payable should be affordable with a high degree of certainty for employees and employers (taking into account the need for universities to invest in order to remain globally competitive).
- 3) **For the valuation, to use an approach that takes into account the unique long-term nature of the scheme** and which provides the Regulator with analysis and evidence that the scheme is affordable over the long term under the vast majority of potential outcomes.
- 4) **To provide flexibility for members** (and potentially for employers). The benefit structure should be adapted to provide options that address the different needs of the membership without leading to a “selection risk” for the Scheme.

The main points of our response are summarised below

- The 2018 valuation (and more recent previous valuations) adopts an approach which places too much emphasis on short term conditions and does not take into account the unique nature of the scheme
- A fundamental change in approach should be considered where the funding requirements are based on long-term assumptions and a stable long-term investment strategy
- Test 1 should be replaced by a future projection modelling approach under which the scheme is required to maintain a high probability of being able to pay accrued benefits in full using existing assets

- For future pension provision and management of intergenerational issues, the JEP should consider the relative merits of the current benefit structure and an alternative Collective Defined Contribution (CDC) structure, together with alternatives requiring Government involvement.
- The JEP should also look at flexibility on benefits and contributions to respond to particular employee (and possibly employer) needs.

Future valuations – the University’s independent analysis of USS’s proposed approach to assessing risk

The risk that the Trustee needs to guard against is the risk that asset returns are insufficient to meet promised pension payments as they fall due and that employers are unable to top up the fund sufficiently to cover the gap.

Current USS approach

The current approach to this risk by USS (through Test 1) involves an estimate of the funds needed to achieve “self-sufficiency” – being the sum needed to cover pension liabilities if invested in low risk assets (expected return Gilts+75bp). USS then estimates the difference between the projected funds in the scheme and the amount needed for self-sufficiency and considers whether this difference could be provided by employers (and employees) in extremis.

This would seem a reasonable approach if the target was to deliver a self-sufficient portfolio of assets over a period of time. However, for a scheme supported by a reasonable covenant, this would be a strategy that fails to deliver the objectives set out above (and indeed could be counter-productive) because:

1. There is a sound theoretical basis for expecting that, over the period a pension fund invests, risk-seeking assets deliver higher returns. This theoretical view is supported by decades of evidence from markets all over the world (see below)
2. The size and nature of USS means that it would not in any event be practical to build a portfolio of assets to match accurately the liabilities (for example, it is not possible to hedge the scheme’s CPI linked liabilities with any precision).

Having a test that is not linked to a real target investment strategy causes significant confusion and undermines confidence in the credibility of the valuation.

Alternative approach

We have proposed an alternative, long-term approach to measuring risk and reliance on the sector which is summarised below.

Multiple future projections, which allow for uncertainty (sometimes known as asset liability modelling) should be used to assess different asset allocations and associated success probabilities. Reliance on covenant would be defined as the gap between the assets held and the minimum asset value required to provide a sufficiently high probability of paying all accrued benefits in full as they fall due.

The requirement could be that the gap as defined above should be less than the value of a pre-defined rate of contributions payable over a defined period (we suggest 20 years). This approach has a similar basis to the approach adopted under Test 1 but with the level of reliance tied to an appropriate long-term investment strategy. The acceptable level of reliance needs a better understanding of the covenant than is currently available and should take account of the unique nature of the scheme and its employers (see below).

We have provided initial information on a potential approach to these projections in Appendix 1.

Analysis of expected investment returns

We recognise that the Pensions Regulator will benchmark the valuation discount rate against market gilt yields at the valuation date and that this presents challenges for the Trustee. However, this also leads to significant volatility and makes it difficult for employers to adopt a long-term approach to funding.

Here, we would note that the majority of other defined benefit pension schemes subject to the Regulator's funding guidance are closed to new entrants (and in many cases accrual) and have been de-risking for a number of years and as a result have very different investment strategies with lower expected returns. In other words, a stable, open pension scheme with a strong employer covenant would be expected to have a very different long-term investment strategy than a closed, maturing scheme and it is reasonable to allow for this in the discount rate.

The discount rates and estimated rates of return proposed by USS are set out in the table below:-

Comparison of (prudent) valuation discount rates and best estimate rates of return

	2017 valuation		2018 valuation		Best estimate	
	Final	Sept consult.	Upper bookend*	Lower bookend*	with de-risking**	no de-risking***
Relative to CPI	CPI + 0.71%	CPI + 0.91%	CPI + 0.9%	CPI + 1.05%	CPI + 2.0%	CPI + 3.26%
Relative to Gilts	Gilts + 1.20%	Gilts + 1.41%	Gilts + 1.3%	Gilts + 1.45%	Gilts + 2.5%	Gilts + 3.76%

* Estimated based on page 15 of 2018 consultation. Upper bookend is 2018: including 1-4, lower bookend is 2018: including 1-5

** Estimated based on information on page 27 (£10bn reliance, overall best estimate return)

*** 30 year return, based on reference portfolio, page 26 of USS consultation. Return relative to gilts assumed to be 0.5% higher than return relative to CPI.

Page 27 of the consultation¹ states that the discount rate provides a 67% level of confidence that returns will be achieved.

Our concern here is the time horizon used to assess risk and confidence of success. Our view is that USS - as an open scheme with a strong employer covenant - can take a long-term view on investment and risk. The key issue is that investment risk reduces over longer time periods and de-risking is unnecessary if investments are held over the long term, which is the case – in particular while the scheme is cash-flow positive. The following graph, which is based on data from the Credit Suisse yearbook², shows the distribution of the 25 year real return (annualised) on UK equities over periods to 2017. Inflation is calculated using CPI since 1988 and RPI (and equivalent measures) prior to 1988.

¹ USS 2018 Actuarial Valuation. A consultation with Universities UK on the proposed assumptions for the scheme's Technical Provisions and Statement of Funding Principles, dated 2 January 2019

² Credit Suisse Global Investment Returns Yearbook 2017, dated February 2017.

UK equities – distribution of annualised real returns over 25 year periods (1900 – 2017)



Our analysis of long-term real returns on UK equities shows the following:-

- Over holding periods of 25 years, annualised real returns have been positive since 1900
- The lowest annualised real return over a 25 year holding period is 2.2%
- The median real return is 6.1% per annum

The following table shows the worst and best 25 year periods of return:-

Best and worst 25 year periods of real return on UK equities (1900 – 2017)

Period (from/to end Dec)	Annualised real return	Comment
Worst 3 periods		
1906 to 1931	2.2%	First World War and Great Depression
1899 to 1924	2.2%	First World War
1927 to 1952	2.5%	Great Depression and Second World War
Best 3 periods		
1974 to 1999	14.6%	Recovery from OPEC crisis plus high returns in 80s and 90s
1975 to 2000	11.3%	High returns in 80s and 90s due to de-regulation / tech
1976 to 2001	11.2%	High returns in 80s and 90s due to de-regulation / tech

We recognise that past performance is not always a guide to the future and that the global outlook for equity returns may be lower now than it has been in the past (this is reflected in USS's 30 year real return expectation of 4.04% pa on equities). However, the critical point for USS is that risk should be measured over a long period (we would suggest at least 20 years) and that doing so would provide a better assessment of risk and would provide a much more stable framework for long-term funding and benefit provision. This approach is consistent with a multiple future projection modelling approach.

We expect that the proposed discount rate of CPI + 0.91% would give a much higher confidence level if risk of underperformance is measured over longer time periods. We also expect that higher discount rates (e.g. CPI plus 1 - 1.5%) could be shown to provide a high confidence level if assessed in this way.

We also note that USS invests in a diverse portfolio of return-seeking assets. We would expect the level of risk to be lower than on an equity-only portfolio.

Analysis of the Covenant

The USS Covenant differs from a normal commercial company covenant, allowing the Trustee to take a longer term view in that:

1. A significant majority of members are not-for-profit organisations with no leakage of funds to shareholders. Surpluses are re-invested in the operations to make the institutions stronger and more attractive to future students and funders; and
2. In addition to the “last employer standing” provisions, if a USS employer becomes insolvent, and the activities are taken over by another USS employer, provided substantially the same level of staff are retained in USS, there is no damage to the covenant of the scheme (since deficit contributions are linked to salaries). USS as the likely largest creditor in an insolvency should be well placed to facilitate such a solution.

We are not arguing that the USS Trustee and Regulator should be blind to the risks in the sector but that those risks need a more sophisticated analysis than is currently undertaken.

Collective Defined Contribution

USS should consider the merits of a CDC arrangement as part of a broader approach to future pension provision. For example, this could include continuation of the existing DB structure on salary up to a level that can be supported by the covenant (and backed by a long-term return seeking investment strategy) with the balance of salary being pensioned on a CDC basis (which is very clearly better than DC). We believe this might provide more efficient sharing of risk coupled with a higher level of expected benefits for members - especially if USS is unable to obtain a regulatory acceptance of an investment strategy based on return seeking assets.

A CDC arrangement could have the same basic design as the current USS DB section but with flexibility to vary pension increases. We understand that a CDC arrangement could be funded on a best estimate basis, which would allow a higher level of expected benefit to be provided for a given contribution rate. It would also allow USS to take a much longer-term approach to funding and investment and would lead to greater inter-generational fairness. The key challenge would be communicating the risks to members.

We note from the recent consultation on delivering CDC Schemes that the Government’s priority is legislating for the Royal Mail CDC Scheme. We also note that the Government intends for legislation to be flexible enough so that other CDC models (i.e. for non-associated employers like those in the HE sector) can be accommodated.

Potential Government role

There is a strong case to be made to Government to intervene in this case, both to limit volatility in the important Higher Education sector and to level the playing field with the Government-supported Teachers’ Pension Scheme (“TPS”) available to the post-92 universities, which notwithstanding the recent increase in cost, still provides significantly better benefits per pound of contributions than USS.

Options could include:

1. The Government could accept a transfer of the USS assets and liabilities, so that the Scheme effectively becomes an unfunded arrangement (like the TPS, NHS, Civil Service etc.). This could form part of a package of measures to create a sustainable scheme in the future. The USS assets would be transferred to the Government and future outgoings would be met from general taxation. There is a recent precedent for this, in 2012 c. £25bn of assets was transferred to the Government from the Royal Mail Scheme along with obligations of c. £33bn.
2. The Government could legislate to provide an alternative form of regulation for USS. We would note that the main public sector schemes (LGPS, NHS, Teachers, Civil Service) show more similarity with USS than the private sector schemes alongside which USS is regulated. It can be argued that USS should be subject to a similar funding regime to that applied to LGPS (or to the unfunded public sector arrangements) both of which allow a long term and less volatile approach to funding. To bolster the scheme and to legitimise its different treatment from regulated private schemes, the Government could legislate that all relevant UK institutions must participate in USS.

Flexibility for Employees and Employers

Flexibility on accrual rates and contributions. The JEP review should look at the different needs of USS members and provide practical solutions to address those needs. For example, international research fellows tend to have a limited stay in the UK and DB provision with a high contribution rate is not necessarily appropriate for some in this group. Additionally, there are other members for whom a DB scheme is appropriate but where they struggle to afford contributions. We are aware that the Local Government Pension Scheme (LGPS) offers members a “50:50” option, under which members can pay half the standard contribution rate in exchange for half the rate of benefit accrual. This type of approach can be attractive for members, in particular those who may leave the Scheme for affordability reasons following an increase in contribution rates. Other options should be explored with respect to low paid employees some of whom opt out of USS. This could include consideration of a tiered contribution structure with lower rates for lower paid employees. Here we note that the contributions typically paid by members of Public Sector Pension Schemes are on a tiered basis, recognising to some extent the higher rate of tax relief on pension contributions above the threshold of £50,000. A lower contribution rate for low earners, who are on average younger members, would also help to provide increased intergenerational fairness.

Flexibility for employers – responses to recent UUK consultations have revealed that, compared to when USS was set-up, a more diverse range of employers participate in the Scheme. It is clear that there is a degree of structural tension in the scheme and employers would welcome some flexibility both for their employees and for themselves. Here, we would note that a Career Average Revalued Earnings scheme (where members build up a block of pension and cash each year equal to a defined fraction of salary in that year) provides a good platform to vary accrual and contribution rates.

Appendix 1

Future projections – overview of suggested approach (draft for discussion)

A projection model can be used to provide multiple (typically 10,000 or more) randomly generated projections of future financial outcomes. In the context of USS this would involve projecting the scheme assets over a period of up to 100 years to see whether the assets and future contributions were expected to be sufficient to pay all benefits in full. By looking at all 10,000 outcomes, we can assess a probability of success (i.e. if the assets are sufficient in 9,500 projections out of 10,000, this would imply a 95% probability of success). Whilst complex, the key advantage of a multiple future projection approach is that it helps us to understand the both the probability of success and the likely range of outcomes (i.e. the level of uncertainty) over the long term as opposed to the valuation which leads to a single deficit figure.

The key elements of such a model are set out below:-

Agree approach to model assumptions

- External ‘economic scenario generator’, or
- Assumptions generated internally by USS investment team

Agree model inputs and parameters

- Projection period – may allow for full run off of all accrued benefits (100 years)
- Affordable contributions and payment period for recovery contributions
- Required success probability
- Asset allocations (can be flexible)
- Salary (total salary roll, future growth)

Parameters can be treated as static or variable depending on the model used.

Model assumptions

- These will cover a wide range of economic factors including inflation and interest rates as well as return expectations, volatilities and correlations. Longevity assumptions and variabilities can also be allowed for.

Model limitations – it is important to identify and understand the limitations of the model both in terms of the range of scenarios that can be modelled and the extent to which the outputs can be relied upon (i.e. any model must be subject to independent sense checks).

Projections

- Assets to be projected allowing for investment returns, contribution income and benefit outgoings
- Benefit payments to be projected allowing for inflation, life expectancy and other relevant factors