USS Review Working Group
10.00am to 11.30am, Tuesday 25 September 2018
Venue Meeting Rooms 1 and 2 Wellington Square

Agenda

1. Apologies for absence and welcome
2. Conflicts of interest declarations
3. Minutes of previous meeting – 30 August 2018
4. Matters arising from the minutes
5. Joint Expert Panel (executive summary attached. Rhiannon Curtis of Aon will highlight the key findings)
6. UUK consultation on JEP report (information to follow)
7. Update on Council discussions (oral)
8. Additional modelling (paper)
9. Feedback from Open Forum (oral)
10. Employer Consultation sessions slides (attached for information)
11. Agree process for Employer consultation feedback to USS (due 7 November. 5 days after consultation close)
12. Communication update (oral)
13. Any other business.

Date of next meeting – Monday 29 October 2018, 11.30 to 13.00, Room 3, Wellington Square

Invitees:
Professor Richard Hobbs (Chair)
Mr Charles Alexander
Professor Gordon Clark
Sir Andrew Dilnot
Professor Danny Dorling
Mr Julian Duxfield
Professor Fabian Essler
Professor Cecile Fabre
Professor Sam Howison
Professor Jane Humphries
Mr Jaya John John
Mr Giles Kerr

Apologies:
In attendance:
Ms Jan Killick
Mr Stephen Rouse
Ms Rhiannon Curtis, Aon
Ms Judith Finch, Conference of Colleges
Prof Anne Trefethen, Pro-Vice-Chancellor, People and GLAM
COUNCIL
USS Review Working Group
Meeting room 6, Wellington Square, 11.00 am – 1.15 pm

Minutes of the meeting of 30 August 2018

Present: Professor Richard Hobbs (Chair), Mr Charles Alexander (by phone), Sir Andrew Dilnot, Mr Jaya John John (by phone), Professor Cecile Fabre, Professor Sam Howison, Professor Jane Humphries, Mr Giles Kerr

In attendance: Ms Jan Killick, Mr Russell Powles (Aon), Mr Stephen Rouse, Professor Anne Trefethen and (for item 10 only) Ms M Lambe (UUK), Mr B Mulkern (UUK), Ms M Duffield (USS), Mr J Rowney (USS).

Apologies: Professor Gordon Clark, Professor Danny Dorling, Mr Julian Duxfield, Professor Fabian Essler

1. Apologies for absence and welcome
Professor Gordon Clark, Professor Danny Dorling, Mr Julian Duxfield and Professor Fabian Essler had sent their apologies.

2. Conflicts of interest
Professor Humphries noted that she had taken a new non-pensionable post at another institution that participated in USS.

There were no other new conflicts of interest declared.

3. Minutes of the previous meeting
Subject to attaching the Group’s response to UUK on the USS Trustee’s proposal under Rule 76.4, the minutes were agreed.

4. Matters arising from the minutes
All matters arising from the minutes had been completed or were covered as separate agenda items, except under item 12 the discussion on remuneration comparisons required Mr Duxfield’s presence.

Action: JD

Prof Hobbs reported on agenda item 8 (Legal advice) that the Registrar and the University’s General Counsel had agreed to seek verbal advice from pension specialists at an external firm of solicitors. Mr Duxfield and Mr Mackie had had a telephone consultation that covered all the agreed options under review that might be covered by the USS exclusivity clause. As expected the view was that the USS exclusivity clause was tightly drafted and offering another pension arrangement or contributing to another pension scheme would breach the terms. Other than the use of a top-up within USS (on a defined contribution basis) or supplementing staff salaries with a view to individuals saving for their pension via a personal pension other options were not viable.
As the Group had had advice both internally and externally that came to the same conclusion on the effect of the USS exclusivity rule and that the advice reflected the Group’s interpretation of the rules it was agreed that written advice would not be sought, unless there was sufficient demand outside of the Group for it. Note JK to check minutes with Andrew Mackie prior to distribution.

Sir Andrew noted that providing individuals with cash allowed them to freedom about how to save for retirement. If individuals were to be encouraged to save via a personal pension or similar it would not be possible for the University to offer a suitable product and the University could not offer financial advice. This was a complex area where individuals would need to understand the freedoms now available with pension saving, including flexibility about taking cash, drawdown and the opportunities of tax benefits of pension saving, albeit constrained by tax rules with limits of the Annual Allowance and the Lifetime Allowance.

Professor Hobbs noted that alternative defined benefit pension that many sought could not provided because of the USS exclusivity rules and that defined benefit did not give flexibility. Professor Humphries pointed out that any offer of additional cash compensation was of less significance to those nearer retirement and this illustrated that the perceived value of cash or pension would vary by age and by individual circumstances.

5. Employer consultation on cost sharing contribution changes

The group noted that the employer consultation would run for 60 days from 3 September to 2 November. There had already been comments via the Pensions Forum on the proposed changes. USS members would be directed to give feedback on the consultation via the online consultation portal that would be available from 3 September. The responses to the consultation could be accessed both by employers and USS. Ms Killick said that at the previous employer consultation the University reviewed the consultation feedback and reported to the USS trustee.

6. Modelling examples of defined contribution type top up

Mr Powles reminded Mr Kerr that although there were no proposals to change future benefits currently on the table, the group had agreed it would be helpful to illustrate the effect of a defined contribution (DC) top up in a couple of scenarios (with lowered salary thresholds) to better understand the sensitivity of the outcome to certain variables. It was agreed that Mr Powles should prepare an example with a salary of £72,000 and also if possible one covering career progression.

Action: RP

The modelling had assumed that the DC pot and the three times lump sum at retirement would be converted into a pension amount. The figures were presented in real terms, stripping out the effect of inflation. The assumed level of investment return impacted the DC pension reflecting the value of the DC pension pot and was sensitive to the assumed investment return. Mr Powles highlighted that the top-up costs were less for the younger member example as the contribution to the DC pot above the threshold (20% in total) was of more value to a younger member.

Sir Andrew commented that both scenarios had made the critical assumptions that the individual remained at the University until retirement and that this may be valid for some employees, it was unrealistic for many.
The limitations of the modelling were noted eg the rate for converting the DC pot into pension assumed the same level of benefits including spouse’s pension and annual pension increases. With the benefits of the pension freedoms it was no longer necessary to buy annuities and those with DC pots had more choice and could benefit from selecting options at retirement. The modelling showed that an average would be difficult to agree and there would be a great dispersion of outcomes, with factors such as gender, health and employment patterns having an influence. Professor Howison noted that any top-up type arrangement would need to establish the broad principles to implementation and the frequency of any re-assessment.

7. Effect of cost sharing rule on contributions

Subject to correcting the table, the group noted the paper.

8. Legal advice

The update was covered under matters arising.

9. Communication update

Mr Rouse reported that since the last meeting two emails had been sent to members covering USS, with over 5,500 out of more than 9,000 opening the most recent email. There were over 800 hits on the webpage with the worked examples, with a dwell time of 5 minutes (typical dwell times for webpages are less than one minute).

73 people had booked a place on the open forum on 18 September and over 90 had booked on the first session covering the proposed changes. Reminders would be issued nearer the time.

Action: SR

The group noted that the online forum had provided the opportunity for some debate on USS matters.

10. Update from UUK and USS

Ms M Lambe, Mr B Mulkern, Ms M Duffield, Mr J Rowney joined the meeting.

Mr Mulkern reported that UUK had sought clarity from USS on the applicability of the covenant advice that supported the view that 24.9% in 2020 was viable, particularly for the smaller employers (bearing in mind that USS had over 350 participating employers).

Sir Andrew asked if this level of contributions was required indefinitely and Mr Rowney explained that the required contributions should fall after 6 years as the deficit contributions should cease and USS expected investment returns to improve as interest rate reversion took effect.

Ms Lambe said that she thought that the Joint Expert Panel (JEP) had an effective chair and that the panel was asking appropriate questions. Asked if the JEP findings would be binding she explained that neither UUK nor UCU had guaranteed to endorse the findings, but both parties had agreed the terms of reference and both were expected to give an immediate response to the findings, with UCU balloting its members on the outcome.

Mr Rowney commented on covenant that the Pensions Regulator’s view remained that the employers’ covenant remained “tending” to strong, rather than strong. It also considered that the scheme valuation was at the top end of the spectrum for DB valuations in terms of risk.
He confirmed that the Pensions Regulator had various powers in relation to valuations; these included imposing a schedule of contributions (but it had not to date used that power), ordering another valuation, and replacing the trustee board. He reminded the group that the deadline for the 2017 valuation had already passed and the action needed to be taken now, rather than await any responses from the relevant parties following the findings from the JEP.

Prof Fabre asked about the impact on the valuation of the most recent longevity data published by the Office for National Statistics. USS had given information to the JEP on the financial effect of its longevity assumptions. Mr Rowney explained that USS members had the highest decile life expectancy in the UK compared with the general population and life expectancy was still improving. He pointed out that other countries (notably Japan and Denmark) had better life expectancy.

Prof Howison asked about the meaning of risk in the context of the valuation. Mr Rowney said that it was how the liabilities of the scheme moved relative to the expected return on assets and the assets held should not diverge from the liabilities more that the sector could support on a self-sufficiency basis. Liabilities for self-sufficiency were calculated using returns on gilts plus 0.75%.

Mr Rowney explained how rule 76 operated. It was not possible for an institution to have a split in contributions, other than 35%:65% employee: employer as this was defined in the rules.

Ms Lambe covered the issue of mutuality and the impact it had on three cohorts of employers: those who could afford the current level of provision, those who required a solution outside the outside the deemed level of affordable contributions and smaller employers who would like to exit USS, but weren’t able due to the section 75 debt issues. Any flexibility in alternative pension provision would require rule changes and so must be agreed by the Joint Negotiating Committee.

Ms Duffield thought it most unlikely that the Government would be keen to support the scheme.

Asked about Sheffield UCU’s analysis of future costs, Mr Rowney explained that the analysis assumed the same asset allocation and expected investment returns as currently, calculated on a best estimate basis. This ignored the risk and volatility over a 20 year period that would be at an acceptable level in the sector. To manage risk there was a need to change investment strategy (asset allocation) and that would impact the expected investment returns. Ms Lambe noted that best estimate did not meet the legally permitted requirements.

Ms M Lambe, Mr B Mulkern, Ms M Duffield, Mr J Rowney left the meeting.

The group agreed that the presentations helpful and informative.

Prof Hobbs reflected that it was clear the University would need to work with other employers to find a long term solution to USS funding issues, and it could not be achieved in isolation with the governance and regulatory constraints.

11. Any other business

There was no other business.

12. Next meeting

The next monthly meeting: Tuesday 25 September 2018, 10.00 am – 11.30 am, Rooms 1 and 2, Wellington Square.

The meeting closed at 1.25pm
The Joint Expert Panel on the Universities Superannuation Scheme commissioned by the University and College Union and Universities UK.
2. EXECUTIVE SUMMARY

SCOPE OF THIS REPORT AND TERMS OF REFERENCE

- This report focuses on the first phase of the Joint Expert Panel's (JEP's) ToR, namely to review the basis for the Scheme's 2017 valuation, assumptions and associated tests. This has included:
  - a review of the 2017 valuation to date, including an assessment of the methodology, assumptions and process underpinning it; and
  - exploring the scope for possible revisions to the methodology and assumptions to allow the valuation to be completed without invoking cost-sharing through rule 76.4.8 of the Scheme Rules.

- In undertaking its work, the JEP has been asked to take into account:
  - the unique nature of the HE sector;
  - considerations of intergenerational fairness and equality;
  - the need to strike a fair balance between stability and risk; and
  - the current legal and regulatory framework.

- The JEP has not, in this phase of its work, considered valuations beyond the 2017 valuation. That would be the subject of a follow-up report. However, we have taken the opportunity in this report to suggest areas for future investigation and consideration.

JEP’S WORKING METHODS

- The JEP has held 11 day-long meetings between May and September 2018. The Panel has taken an evidence-based approach to developing its analysis of the Scheme and 2017 valuation. It has held 11 oral evidence sessions with a number of parties directly associated with the valuation – including the Trustee and its actuarial and covenant advisers – and has challenged those called to provide evidence. The Panel has also actively sought evidence from Scheme members and participating employers. Fifty-five submissions were received. These have all been reviewed and considered by the Panel.

- The JEP commissioned a joint report from UUK and UCU’s actuarial advisers – AON and First Actuarial. This report was provided by the two firms working together using their intimate knowledge and understanding of the Scheme, but importantly without the input or involvement of UUK and UCU (i.e. it was produced independently for the Panel). In addition, new analysis was requested from the Trustee.
Throughout the Panel’s work, the Trustee and its Executive has engaged actively with the JEP and has provided the Panel with a considerable volume of information, much of which has not been in the public domain.

ABOUT USS

- USS is the UK’s largest private occupational pension scheme by assets, with £63.6bn of assets under management as at 31 March 2018. The Scheme provides a mix of defined benefit (DB) and defined contribution (DC) benefits through a hybrid benefit structure introduced in 2016. Members accrue career average revalued earnings (CARE) defined benefits up to a ‘salary threshold’, which is currently £57,216.50 per annum. Above this threshold, members build up DC benefits with contributions based on their salary above the threshold. Approximately 80% of active Scheme members earn less than £55,000 meaning the vast majority are accruing DB on all their earnings.

- The Scheme has a number of unique features. Its relative immaturity means that it is cashflow positive (i.e. its current income exceeds its outgoings) and, all other things being equal, is projected to remain so for the next 50 years. Crucially, the strength and long-term nature of the higher education (HE) sector and its participating employers mean that, unlike the vast majority of occupational Scheme trustees, the USS Trustee can afford to take a very long-term view. This is particularly so given that, over the next 20 years, USS expect the size of the Scheme to fall relative to the size of the sector. This is mainly due to the changes made to Scheme benefits in 2016 which mean that final salary benefits will gradually fall away and be replaced by CARE benefits capped at CPI growth.

- The Scheme’s governance arrangements also contain a number of unique features. The determination of benefits and how costs are shared falls to the Joint Negotiating Committee (JNC), which sits outside the remit of the Trustee. The Trustee has the sole power under the Scheme Rules to set the employer contribution rate (subject to consultation). A further feature of USS is that it shares risk with Scheme members though the cost-sharing rules which are applied when the Trustee determines that there should be an increase in the aggregate amount of contributions.

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ASSESSMENT OF THE 2017 VALUATION – METHODOLOGY, ASSUMPTIONS AND TESTS

• In considering its approach to an actuarial valuation it is reasonable for any scheme to assess contribution affordability; investment return; and availability of employer assets to support the scheme in extremis. The Pensions Regulator (TPR) has encouraged trustees to adopt this approach. These considerations are reflected in the three Tests used by the Trustee: manageable distance to self-sufficiency in 20 years' time (Test 1); stability of contributions (and/or benefit design) (Test 2) and the ability of the sector to underwrite the Scheme in a disaster scenario (Test 3).

• The Panel has spent a significant amount of time understanding and assessing the three Tests, and Test 1 in particular. The Panel has concluded that the outputs of Test 1, while very specific and quantitative, are highly sensitive to the input assumptions, many of which are very subjective. Consequently, we believe that Test 1 is given too much weight in determining the valuation and its effects extend beyond its original purpose. Rather than being used as a “stop-and-check” reference point, Test 1 is being used as a constraint on benefit design and driver of investment strategy. The Panel does not consider this helpful. It would be far better if Test 1, were its use to continue, was used as a test that informed other aspects of the valuation and funding strategy rather than acting as its lynchpin. By contrast, Tests 2 and 3 appear not to play a significant role in either the valuation or the on-going monitoring. Yet Tests 2 and 3 reflect considerations which are important to stakeholders and the long-term prospects of the Scheme.

• Whilst the specificities of the Scheme and the strength and diversity of the HE sector appear to have been taken into account in some areas, this has not always been the case. In particular, the Panel believes that insufficient weight has been given to the fact that USS is a large, open, immature scheme which is cashflow positive and can adopt a very long time-horizon. By giving this strength and diversity a greater weight, the Panel believes that the Trustee and the employers may be able to agree a larger risk envelope.

• The Panel is of the view that self-sufficiency is a useful concept as an element in a test. It provides a reference point for judging whether a scheme is over-reliant on the sponsor covenant. However, the way in which the employers’ risk appetite has been applied through Test 1 has contributed to the adoption of strong risk aversion. The Panel’s view is that adopting a time horizon of 20 years (used for assessing the gap between technical provisions and self-sufficiency) and the hypothetical move to a low-
volatility, low return portfolio is only one of many paths available for a scheme with the strong, long-term, prospects and unique characteristics of USS.

- Overall, this approach dampens perceptions of the outlook for the Scheme which, in the Panel's view, is strong.

- The Panel considers that in a scheme of USS’s size and assets under management, it is appropriate for the Scheme to develop its own model for establishing economic and investment outcomes. The Panel has identified no concerns about the Fundamental Building Blocks (FBB) approach.

THE VALUATION PROCESS AND GOVERNANCE

- One of the unique features of USS is its governance structure. Amongst other things, this gives the Trustee unique powers through a unilateral right to set contributions (subject to consultation). It is beyond the scope of this report to examine whether this should change, but clearly the process does need to be managed more effectively in terms of interaction with, and gaining the support and confidence of, employers and members.

- It is reasonable in a scheme as large as USS that the Pensions Regulator (TPR) should be kept informed during the valuation process. This is consistent with TPR’s risk-based approach to regulation. However, some of those giving evidence to the Panel have suggested that the Regulator’s views have steered employers’ decisions.

- TPR appears to have taken an approach to the valuation, especially in relation to the employer covenant, that does not fully take account of the specificities of USS. In particular: the very long-term nature of the Scheme; its relative immaturity and cashflow-positive status; and the fact that it is a ‘last man standing’ scheme.

- The excessive complexity of the valuation has raised a number of issues relating to the clarity of communication with employers and Scheme members as well as the process, content and timing of consultations with employers.

- With respect to assessing employer covenant, the Panel acknowledges it is not a simple task to consult with 350 different institutions or to ascertain their risk appetite – a consultation will inevitably generate a wide range of views and possible outcomes. However, the framing and context of the questions asked of employers have, in our view, produced misleading results. These results have been distilled into a single number which feeds into Test 1, and which in turn affects contribution requirements,
future Scheme benefits, the investment strategy and the estimated deficit. These are outcomes which, on exploration, appear to be inconsistent with many employers’ wishes.

• Employers have been asked questions in consultations and questionnaires that have not fully explored the consequences or trade-offs of the issues under investigation. It is debatable whether employers have been able to give fully informed answers to important questions. In addition, timeframes for consultations have sometimes been very short, with the result that it has not always been possible for employers to consider and debate thoroughly the issues under consultation, particularly in the many universities with complex governance structures.

• There has been a large volume of information relating to the valuation placed on the USS website. This has, in part, been in response to member requests and shows a desire on the Trustee’s part to operate in an open and transparent way. However, much of this information is extremely technical and complex in both language and content. It is very unlikely, despite the high educational attainment levels of USS members, that this material has been well understood by Scheme members. Volume is not a substitute for good quality information that can be understood by all. The lack of understanding is likely to be a contributing factor to falling levels of member confidence in the Scheme.

• There is no formal mechanism for involving Scheme members in the valuation process or assessing their appetite for risk. This is of great relevance in the USS context given the existence of cost sharing when additional contributions are required. It is beyond the scope of this report to consider how member involvement could be achieved, but this is an unresolved issue for the management of the Scheme.

CONCLUDING THE 2017 VALUATION

• The 2017 valuation process commenced almost two years ago. Much has happened in the intervening period, not least a protracted period of negotiation, and an industrial dispute which led ultimately to the creation of the JEP.

• Our ToR restrict us to commenting on the 2017 valuation. The Panel has made a number of observations about the valuation assumptions and methodology which, if agreed, would mean that the outcome could be different, thereby enabling all parties to move forward quickly. In addition, there have been a number of post-valuation developments, including the availability of new data which, if applied, would influence the outcome of the valuation.
The Panel has developed five principles against which adjustments could be considered:

1. A re-evaluation of the employers’ willingness and ability to bear risk – this would mean re-assessing the reliance on sponsor covenant.
2. Adopting a greater consistency of approach between the 2014 and 2017 valuations – this would mean changing the approach to deficit recovery contributions.
3. Achieving greater fairness and equality between generations of Scheme members – this would mean smoothing future service contributions.
4. Ensuring the valuation uses the most recently available information – this would mean using latest available data and taking account of recent investment considerations and outcomes.
5. Taking the uniqueness of the Scheme and the HE sector more fully into account.

The Panel believes that making adjustments in each of these areas would have a material impact on the scale of the 2017 deficit and resulting contribution increases. We also believe this would create a space within which employer and members can find common ground so that the issues around the valuation can be reconciled. It is also our view that the adjustments proposed are consistent with the Trustee’s fiduciary duties and the objectives of the Regulator.

If agreed and implemented, these changes would avoid the need for the very steep contribution increases envisaged in the Scheme Rule 76.4-8 (cost-sharing) process. This would create the space for the stakeholders, through the JNC, to consider some of the longer-term issues facing the Scheme and establish a stable platform for a further review of the Scheme by the Panel.

LOOKING AHEAD

In the time available to it, the JEP has undertaken a thorough examination of the methodology, tests and assumptions used in the 2017 valuation. We have provided commentary on their application and the overall approach to the valuation adopted by the Trustee. We have also made recommendations as to revisions to the 2017 approach that would enable the 2017 valuation to be concluded, whilst creating some space for the Trustee and JNC to consider the necessary short and longer term reforms to the Scheme.

However, it is clear that there are a number of issues that remain to be resolved. Whilst the JEP has commented on the many elements of the valuation, we have not opined on
whether there is a different way of reaching a conclusion that could provide long-term stability to the valuation process and have the support and confidence of all parties. The Panel believes this should be a core element of the second phase of its work.

- The second phase of work should also include a wider review of the approach and involvement of UUK and UCU in future valuations so that a more collaborative approach can be adopted and industrial action, such as that witnessed earlier this year, can be avoided. This would require examining the interaction of the various bodies with a formal role in the valuation process; considering the potential for the involvement of Scheme members in the valuation process; and considering how more effective engagement with employers can be achieved.

- We have recommended that in view of the need to start to prepare for the 2020 valuation, work on Phase 2 should start as soon as possible. However, this work will require a firm foundation and cannot, therefore, be concluded until the 2017 valuation itself is concluded.
The Joint Expert Panel (JEP) is a panel of independent experts who have been examining the assumptions and methodology used for the 2017 Universities Superannuation Scheme (USS) valuation.

It is comprised of six actuarial and academic experts, nominated equally by Universities UK (UUK) and the University and College Union (UCU), with a jointly agreed chair, Joanne Segars OBE.

The findings in this report are expected to inform discussions for UCU and UUK to conclude the 2017 valuation.

For further information please visit:
www.ussjep.org.uk
University of Oxford
USS – member examples
25 September 2018
USS member examples

The following slides set out four member examples showing the potential impact of reducing the current Salary Threshold (currently £57,216.50) for members in the Universities Superannuation Scheme (the “Scheme”).

The examples highlight the potential impact on a member’s retirement pension and the potential cost to the University of offsetting any negative impact to the member.

The examples compare:

a) Projected USS pension assuming no benefit changes are implemented
b) Projected USS pension assuming a reduction to the Salary Threshold going forward (under a range of different investment returns)
Assumptions

In all of these examples it is assumed that:

- All the example members work for the University until retirement at SPA
- Price inflation is in line with CPI inflation of 2% a year
- Wage growth is in line with CPI inflation i.e. 2% a year until retirement
- Salary Threshold growth is in line with CPI inflation i.e. 2% a year
- The member pays 8% and the University pays 12% of Pensionable Salary above Salary Threshold into DC account
- The DC account purchases a guaranteed pension (i.e. annuity) at retirement, based on:
  - Pension increases of 2% a year
  - A 50% spouse’s pension payable upon a member’s death (spouse 3 years younger)
  - A 5 year guarantee period
  - An individual in good health
- The automatic 3x lump sum purchases a pension at retirement (as per the DC account)

In addition:

- The pension figures shown are all in today's money and so remove the effects of price inflation between now and the date the members retire
- Past service pension is ignored
- State benefits are excluded from all of the examples and may be payable in addition
**Example A**

- **Age 50**
- **Retirement at SPA (67)**
- **Current Scheme Pensionable Salary of £60,000 a year**

<table>
<thead>
<tr>
<th>Yearly pension they might receive at age 67 (in today’s money)</th>
<th>Current benefits (Salary Threshold = c£57k)</th>
<th>Salary Threshold reduced to £50K</th>
<th>Salary Threshold reduced to £42K</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment return 3% per annum</td>
<td>Investment return 5% per annum</td>
<td>Investment return 7% per annum</td>
</tr>
<tr>
<td>DB CARE pension</td>
<td>12,715</td>
<td>11,111</td>
<td>9,333</td>
</tr>
<tr>
<td>DB 3x lump sum pension</td>
<td>1,538</td>
<td>1,344</td>
<td>1,129</td>
</tr>
<tr>
<td>DC pension</td>
<td>411</td>
<td>488</td>
<td>583</td>
</tr>
<tr>
<td></td>
<td>1,477</td>
<td>1,754</td>
<td>2,096</td>
</tr>
<tr>
<td></td>
<td>2,658</td>
<td>3,158</td>
<td>3,772</td>
</tr>
</tbody>
</table>

| Total pension                                                 | 14,664                       | 14,741                         | 14,836                         |
|                                                               | 13,932                       | 14,209                         | 14,551                         |
|                                                               | 13,120                       | 13,620                         | 14,234                         |

| Difference to current benefits*                               | -                            | -                              | (732)                          |
|                                                              | (532)                        | (285)                          |
|                                                              | (1,544)                      | (1,121)                        | (602)                          |

| Additional University contribution**                         | -                            | -                              | 1.7%                           |
|                                                              | 1.0%                         | 0.5%                           |
|                                                              | 3.5%                         | 2.1%                           | 1.0%                           |

*compared to the relevant investment return
**estimated to be required to be paid to the DC account as a percentage of pensionable salary
Example member A – Explaining the ‘If the Scheme continued in its current form’

- Total CARE benefit is 17 years x £57,216.50 x 1/75 x 1.02^{16} = £17,804

  Future salary increases and salary threshold increases of 2% a year are assumed to be granted at the end of the year. Revaluation of CARE benefit assumed to be 2% a year.

- Putting this into today’s money terms:

  £17,804 / 1.02^{17} = £12,715

  To adjust the CARE pension payable in 17 years’ time into today’s money terms we remove 17 years’ worth of inflation (at 2% a year).

- Cash lump sum in today’s money is:

  3 x £12,715 = £38,145

- This is converted to a pension assuming £1 of pension a year costs £24.80 so the cash lump sum could purchase £38,145 / 24.80 = £1,538 a year of pension.

- Future DC contributions would be paid in relation to Pensionable Salary above the assumed Salary Threshold:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Salary net of Salary Threshold</th>
<th>Pension contributions</th>
<th>Value at retirement (low return)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£60,000 – £57,216.50 = £2,783.50</td>
<td>20% x £2,783.50 = £556.70</td>
<td>£906.64 = (£556.70 x 1.03^{16.5})</td>
</tr>
</tbody>
</table>

| Year 2 (etc) | £60,000 x 1.02 – 57,216.50 x 1.02 = £2,839.17 | 20% x £2,839.17 = £567.83 | £897.83 = (£567.83 x 1.03^{15.5}) |

- Total DC fund value (17 years of contributions with returns at 3% a year) at retirement is £14,272

- This is converted to a pension assuming £1 of pension a year costs £24.80 so the DC fund value could purchase £14,272 / 24.80 = £575 a year of pension

- Putting this into today’s money terms (i.e. removing inflation):

  £575 / 1.020^{17} = £411 a year pension
Example member A – Explaining the ‘If the Scheme continued in its current form with a £42K salary Threshold’

- Total CARE benefit is 17 years x £42,000 x 1/75 x 1.02^{16} = 13,069
  
  *Future salary increases and salary threshold increases of 2% a year are assumed to be granted at the end of the year. Revaluation of CARE benefit assumed to be 2% a year.*

- Putting this into today’s money terms:
  
  £13,069 / 1.02^{17} = £9,333 a year of pension
  
  *To adjust the CARE pension payable in 17 years’ time into today’s money terms we remove 17 years’ worth of inflation (at 2% a year).*

- Cash lump sum in today’s money is:
  
  3 x £9,333 = £27,999

- This is converted to a pension assuming £1 of pension a year costs £24.80 so the cash lump sum could purchase £27,999 / 24.80 = £1,129 a year of pension

- Future DC contributions would be paid in relation to Pensionable Salary above the assumed Salary Threshold:

<table>
<thead>
<tr>
<th>Salary net of Salary Threshold</th>
<th>Pension contributions</th>
<th>Value at retirement (low return)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 £60,000 – £42,000 = £18,000</td>
<td>20% x £18,000 = £3,600</td>
<td>£5,863 = (£3,600 x 1.03^{16.5})</td>
</tr>
<tr>
<td>Year 2 (etc) £60,000 x 1.02 – 42,000 x 1.02 = £18,360</td>
<td>20% x £18,360 = £3,672</td>
<td>£5,806 = (£3,672 x 1.03^{15.5})</td>
</tr>
</tbody>
</table>

- Total DC fund value (17 years of contributions with returns at 3% a year) at retirement is £92,292

- This is converted to a pension assuming £1 of pension a year costs £24.80 so the DC fund value could purchase £92,292 / 24.80 = £3,721 a year of pension

- Putting this into today’s money terms (i.e. removing inflation):
  
  £3,721 / 1.020^{17} = £2,658 a year pension
### Example B

- **Age 40**
- **Retirement at SPA (68)**
- **Current Scheme Pensionable Salary of £52,000 a year**

<table>
<thead>
<tr>
<th>Yearly pension they might receive at age 68 (in today's money)</th>
<th>Current benefits (Salary Threshold = £57k)</th>
<th>Salary Threshold reduced to £50K</th>
<th>Salary Threshold reduced to £42K</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment return 3% per annum</td>
<td>Investment return 5% per annum</td>
<td>Investment return 7% per annum</td>
</tr>
<tr>
<td>DB CARE pension</td>
<td>19,033</td>
<td>18,301</td>
<td>15,373</td>
</tr>
<tr>
<td>DB 3x lump sum pension</td>
<td>2,378</td>
<td>2,287</td>
<td>1,921</td>
</tr>
<tr>
<td>DC pension</td>
<td>-</td>
<td>531</td>
<td>712</td>
</tr>
<tr>
<td>Total pension</td>
<td><strong>21,411</strong></td>
<td><strong>21,119</strong></td>
<td><strong>21,300</strong></td>
</tr>
<tr>
<td>Difference to current benefits*</td>
<td>-</td>
<td>(292)</td>
<td>(111)</td>
</tr>
<tr>
<td>Additional university contribution**</td>
<td>-</td>
<td>0.4%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

*compared to the relevant investment return  
**estimated to be required to be paid to the DC account as a percentage of pensionable salary
**Example C**

- Age 50
- Retirement at SPA (67)
- Current Scheme Pensionable Salary of £72,000 a year

<table>
<thead>
<tr>
<th>Yearly pension they might receive at age 67 (in today’s money)</th>
<th>Current benefits (Salary Threshold = c£57k)</th>
<th>Salary Threshold reduced to £50K</th>
<th>Salary Threshold reduced to £42K</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment return 3% per annum</td>
<td>Investment return 5% per annum</td>
<td>Investment return 7% per annum</td>
</tr>
<tr>
<td>DB CARE pension</td>
<td>12,715</td>
<td></td>
<td>11,111</td>
</tr>
<tr>
<td>DB 3x lump sum pension</td>
<td>1,538</td>
<td></td>
<td>1,344</td>
</tr>
<tr>
<td>DC pension</td>
<td>2,183</td>
<td>2,594</td>
<td>3,098</td>
</tr>
<tr>
<td>Total pension</td>
<td>16,436</td>
<td>16,847</td>
<td>17,351</td>
</tr>
<tr>
<td>Difference to current benefits*</td>
<td>-</td>
<td></td>
<td>(732)</td>
</tr>
<tr>
<td>Additional University contribution**</td>
<td>-</td>
<td></td>
<td>1.4%</td>
</tr>
</tbody>
</table>

*compared to the relevant investment return
**estimated to be required to be paid to the DC account as a percentage of pensionable salary
### Example D

- **Age 25 (assumed whole life member)**
- **Retirement at SPA (68)**
- **Current Scheme Pensionable Salary of £35,000 a year (promotional increase to £50K at age 35, £75K at age 45 and £100K at age 55)**

<table>
<thead>
<tr>
<th>Yearly pension they might receive at age 68 (in today's money)</th>
<th>Current benefits (Salary Threshold = c£57k)</th>
<th>Salary Threshold reduced to £50K</th>
<th>Salary Threshold reduced to £42K</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment return 3% per annum</td>
<td>Investment return 5% per annum</td>
<td>Investment return 7% per annum</td>
</tr>
<tr>
<td>DB CARE pension</td>
<td>28,313</td>
<td>26,144</td>
<td>22,693</td>
</tr>
<tr>
<td>DB 3x lump sum pension</td>
<td>3,538</td>
<td>3,267</td>
<td>2,835</td>
</tr>
<tr>
<td>DC pension</td>
<td>6,640</td>
<td>8,051</td>
<td>9,866</td>
</tr>
<tr>
<td></td>
<td>8,174</td>
<td>9,997</td>
<td>12,361</td>
</tr>
<tr>
<td></td>
<td>10,743</td>
<td>13,645</td>
<td>17,670</td>
</tr>
<tr>
<td>Total pension</td>
<td>38,491</td>
<td>39,902</td>
<td>41,717</td>
</tr>
<tr>
<td>Difference to current benefits*</td>
<td>-</td>
<td>(906)</td>
<td>(494)</td>
</tr>
<tr>
<td>Additional university contribution**</td>
<td>-</td>
<td>0.6%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n/a</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

*compared to the relevant investment return

**estimated to be required to be paid to the DC account as a percentage of pensionable salary
USS EMPLOYER CONSULTATION 2018
www.ussconsultation2018.co.uk

THIS PRESENTATION COVERS:

- Current contribution rates & benefits
- The latest valuation (as at 31 March 2017)
- Proposed contribution increases
- The Joint Expert Panel
CURRENT SALARY CONTRIBUTIONS

USS

8%
members

18%
employers

CURRENT HYBRID BENEFIT STRUCTURE

USS RETIREMENT INCOME BUILDER (DB)
1/75th of annual salary up to a prescribed threshold*

USS INVESTMENT BUILDER (DC)
Applies to salary above the threshold, 'the match' and additional voluntary contributions

18/19: £57,216.50

*The threshold increases annually, broadly in line with the Consumer Price Index measure of inflation
**Death in service**
Beneficiaries receive three times your full salary as a lump sum; your spouse or civil partner receives a pension for life based on full pensionable salary.

**Death in retirement**
Spouse or partner receives half the pension you were entitled to when you retired, plus increases to reflect inflation.

**Ill-health**
If you retire in ill health you receive a pension and a tax-free cash lump sum.

See factsheets available on USS website for full details.
## Employer Contributions

<table>
<thead>
<tr>
<th>Contribution Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3% - USS Retirement Income Builder</td>
<td>+2.1% deficit recovery</td>
</tr>
<tr>
<td>2.1% - USS Investment Builder</td>
<td>+0.1% investment costs subsidy</td>
</tr>
<tr>
<td>0.4%</td>
<td>towards scheme running costs</td>
</tr>
</tbody>
</table>

**Total:** 18% of salary from employers

## Member Contributions

<table>
<thead>
<tr>
<th>Contribution Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>of salary up to the salary threshold to the USS Retirement Income Builder</td>
</tr>
<tr>
<td>8%</td>
<td>of salary above the salary threshold saved in the USS Investment Builder</td>
</tr>
</tbody>
</table>

**Total:** 8% of salary from members
Are there enough assets to pay for all the benefits built up to now?

How much will it cost for benefits earned in the future?

REASSESSED EVERY 3 YEARS

2017 VALUATION
As at 31 March 2017

STATUTORY TRIENNIAL VALUATIONS

2017 VALUATION
As at 31 March 2017

As at 31 March 2017

The majority of feedback suggested the valuation was set at close to maximum risk appetite

CONSIDERING INVESTMENT RISK

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<tr>
<th>Employers</th>
<th>UUK’s response indicated the trustee should take a more moderate approach to risk</th>
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<tr>
<td>Scheme Actuary</td>
<td>Discount rate is at the upper end of the acceptable range for a strong covenant</td>
</tr>
<tr>
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<td>The covenant is strong, but the trustee should consider reducing risk</td>
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</tr>
</tbody>
</table>
Contribution rate required = 37.4%

11.4% higher than current combined contribution = c. £900m a year
Real gilt yields are lower

USS’s asset growth has been strong

USS’s investments in 2017/18

- 44.1% Equities
- 8.1% Credit and emerging market bonds
- 13.7% Nominal government bonds
- 11.9% Inflation Linked government Bonds
- 1.0% Commodities
- 3.0% Absolute Return
- 23.7% Private Markets
80% of private defined benefit pension schemes have closed since 2006.

**2006 = c.3,500**

**2017 = c.700**

**USS FUNDING POSITION AT 31 MARCH 2017**

- **Deficit = £7.5bn**
- **Scheme = 89% funded**
Covenant
Methodology
Financial assumptions
Mortality
Other demographics
Consultations

2016 2017
Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

COST SHARING AND THE JEP

MILESTONES TO COMPLETION OF VALUATION, AND SEPARATE JEP PROCESS

<table>
<thead>
<tr>
<th>April '18</th>
<th>May '18</th>
<th>June '18</th>
<th>July '18</th>
<th>Sep '18</th>
<th>October '18</th>
<th>Nov '18</th>
<th>Dec '18</th>
<th>January '19</th>
<th>February '19</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNC</td>
<td></td>
<td></td>
<td>Trustee</td>
<td></td>
<td>Member</td>
<td>Member</td>
<td>Member</td>
<td>Trustee</td>
<td>Trustee</td>
</tr>
<tr>
<td>withdraws</td>
<td>confirms</td>
<td>in breach of</td>
<td>finalises</td>
<td>consultation</td>
<td>consultation</td>
<td>consultation</td>
<td>consults</td>
<td>finalises</td>
<td>valuation</td>
</tr>
<tr>
<td>benefit</td>
<td>cost sharing</td>
<td>the law as legal</td>
<td>cost sharing proposal</td>
<td>on cost sharing proposal</td>
<td>on cost sharing proposal</td>
<td>employers on cost sharing proposal</td>
<td>on cost sharing position</td>
<td>completed</td>
<td></td>
</tr>
<tr>
<td>reform</td>
<td>process is</td>
<td>deadline for</td>
<td>proposals</td>
<td>following JNC</td>
<td>ends; responses</td>
<td>considers</td>
<td>employs on</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>proposals</td>
<td>being applied</td>
<td>completing</td>
<td>discussions</td>
<td></td>
<td></td>
<td></td>
<td>cost sharing proposal</td>
<td>valuation</td>
<td></td>
</tr>
</tbody>
</table>

UCU / UUK establish JEP

JEP meets

JEP reports expected

JNC expected to discuss JEP report

JNC expected to discuss JEP decision*

Possible JNC decision*

Possible JNC decision*

*Depending on the complexity, it can take up to 12 months to implement scheme changes from the point of a JNC decision due to the various legal consultation requirements and technical processes involved
Contributions funding current defined benefits to increase

1% employer DC match discontinued from 1 April 2019*

Contributions on salary above the DB threshold to increase**

*If you have elected to take ‘the match’ then your 1% contribution would continue to be paid to the USS Investment Builder from 1 April 2019 onwards, even after your employer’s matching 1% ends, unless you formally issue an explicit instruction, via My USS, for it to stop.

**Increases to member contributions will also be applied to salary above the threshold: anything above the established 20% combined contribution already being paid by members and employers to the USS Investment Builder will be paid into the USS Retirement Income Builder.
**PROPOSED CHANGES TO USS FROM 1 APRIL 2019**

![Bar chart showing percentage changes](image)

- **1 APRIL 2019**
  - Members' contributions: 19.5%
  - Employers' contributions: 8.8%

- **1 OCTOBER 2019**
  - Members' contributions: 22.5%
  - Employers' contributions: 10.4%

- **1 APRIL 2020**
  - Members' contributions: 24.9%
  - Employers' contributions: 11.7%

*of salary

**USS EMPLOYER CONSULTATION 2018**

**WHAT TO DO NEXT**

Members, eligible employees and member representatives should visit [www.ussconsultation2018.co.uk](http://www.ussconsultation2018.co.uk) and review the information about the proposed changes and the consultation process.

Members, eligible employees and member representatives will be able to login to:

[www.ussconsultation2018.co.uk](http://www.ussconsultation2018.co.uk)

From 9am on 3 September.

Any USS pension benefits you have already built up are protected by law.
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