Report for University and College Union: Three Questions on the USS 2017 valuation

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Introduction

This report has been prepared for the University and College Union, on the instructions of Matt Waddup. We have been asked to comment on the issues raised by Dr Sam Marsh which led to the response statements published by USS on 16 October 2018. UCU asked us to address the following questions:

- Dr Marsh and Professor Mike Otsuka describe the USS as having made a significant 'mistake' - have they in their own terms?

- Do Dr Marsh's numbers categorically show there is no need, even within the current regulatory regime (eg the JEP conditions), to raise contributions?

- What is lacking in USS's responses to Dr Marsh and Professor Otsuka?

Actuarial standards

The following Technical Actuarial Standards apply to this work:

- TAS 100: Principles for Technical Actuarial Work
- TAS 300: Pensions

We confirm that we have complied with their requirements.

Summary of Dr Marsh's position

Dr Marsh says that his calculations, which are 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 USS 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?"

Dr Marsh used cashflow data showing expected contributions and benefit payments in Years 1-20 provided by USS and assumed:

- the prudent investment forecasts used by USS in their valuations i.e. not best-estimate returns

- the scheme stays open in its current form, in particular, with an unchanged contribution rate

- the investment strategy remains in its current form.

On this basis he calculated that the assets in 20 years' time would be £78.2bn (in real CPI terms) and the self-sufficiency-in-bonds liabilities would be £81.0bn (in real CPI terms).

We have not sought to verify these figures ourselves, noting that the USS has described them as "not wrong".

Has USS made a mistake in their own terms?

The word mistake is often used to mean an error of computation. The intended calculation to answer a question was right in principle, but an error of computation was made and the wrong answer was obtained. This is not the kind of error being discussed. The issue, as we explain below, is whether the USS is in error in the formulation of their funding and investment plans and, in particular, whether those plans have been appropriately implemented. We begin with a short review of key parts of the USS's planning.

Test 1

The USS's Test 1 fixes the gap between technical provisions and a self-sufficiency-in-bonds value of liabilities. The discount rate for technical provisions is then manipulated to produce the Test 1 gap.

Were the Trustee to switch to a self-sufficiency-in-bonds funding target, for example after the closure of the scheme to future accrual, the premise of Test 1 is that the difference between self-sufficiency-in-bonds and technical provisions would be closed exclusively by additional employer contributions. The possibility that the gap might be closed by returns on the assets is not included in Test 1.

Pre-funding pension liabilities from assets which lose money in real terms is of questionable merit. Less would be paid out on benefits than is paid in by contributions, in real terms. Since the yield on gilts became negative in real terms in 2012, the target of test 1 (self-sufficiency-in-bonds) has had doubtful merit. Even if the USS were closed to accrual, a cash flow driven investment plan would not involve 100% investment in bonds immediately. Test 1 overstates what is needed to manage a closed USS.

Reliance on covenant

At different times the USS has defined “Reliance on Covenant” in two different ways.

One definition is **the difference between self-sufficiency-in-bonds and technical provisions**, that is, the Test 1 target. For example:

- The USS paper “A consultation on the proposed assumptions for the scheme's technical provisions and recovery plan” of October 2014 says on page 11, “The reliance on the covenant is measured by comparing the value of the liabilities on a technical provisions basis with a calculation of the liabilities on a self-sufficiency basis – which assumes a low risk investment strategy.”

- The USS paper “Methodology and inputs for the 2017 valuation” of 17 February 2017 says on page 27, “The basis for measuring the amount of reliance on the sponsoring employers will be measured as the difference between the technical provisions and the assets required for self-sufficiency”

More recently, and part way through the 2017 valuation, the USS has changed its definition of reliance to **the difference between self-sufficiency-in-bonds and the assets**. For example:

- The USS paper "A consultation with UUK on the proposed assumptions for the scheme's technical provisions and SFP" of 1 September 2017 says in the Glossary on page 58, "The trustee measures reliance as the difference between the current value of the scheme's assets and the value of assets required for self-sufficiency."

This is the definition used in several places in the 1 September 2017 paper. The September 2017 paper expresses anxiety that the reliance on covenant, under its new definition, has increased in the short term and is volatile.

Reliance, discount rate and investment strategy

One of the many flaws in the design and application of Test 1 is the presumption that the asset allocation will be changed so the expected return on the assets follows downwards the reducing discount rate driven by Test 1. It is one thing to reduce the discount rate to target having enough money to buy more bonds. It is another, separate decision to go out and buy those bonds. It does not follow that, just because the discount rate has been reduced, the asset allocation must also be changed in a way which reduces the expected return.

But USS tend to assume that reducing the discount rate must be accompanied by a change to a more cautious asset strategy. For example, the USS paper "A consultation on the proposed assumptions for the scheme's technical provisions and recovery plan" of October 2014 says on page 11, "Projections indicate that if the trustee maintained the current investment strategy and hence the same discount rate in 20 years time, there would be a significant increase over that period in the reliance on the covenant. The trustee has therefore proposed a targeted reduction in investment risk and therefore the discount rate in order to maintain the reliance on the covenant within specific parameters."

It is not the case that the actual investment strategy constrains the trustee from setting a discount rate assuming a more cautious investment strategy than the actual strategy in place. The USS is free to lower the discount rate if it wishes[1] but this says nothing about the desirable investment strategy. The investment strategy could be set without reference to the actuarial valuation at all, by study of cash flow, expected returns and uncertainty of returns.

A possible implication of this presumption is that the likelihood that the assets might grow to be more than technical provisions has not been examined by the USS in depth, if at all. It has apparently been assumed by USS that the asset allocation will be changed to lower the expected return (by buying more bonds) so reducing the likelihood of outperforming the liability discount rate.

[1] In consultation with the employers and members, with agreed consequences for contributions and benefits, and an agreed balance of risk, cost and expected reward for taking risk.

Security for members' benefits

The three main protections for members' benefits are:

- The solvency of the employers
- The Pension Protection Fund
- The quantity of assets in the scheme

The first level of protection for members' benefits is the solvency of the employers. While any of the employers are solvent, the benefits must be paid in full. Whether the benefits are paid in full from an ongoing scheme, or the employers voluntarily wind up the scheme and pay the cost to insure the benefits in full, either way, the benefits are paid in full.

Only if all the employers are insolvent, and therefore there are no employers left to act as guarantor of the benefits, can benefits be reduced. With no guarantors remaining, the benefits outcome (absent the PPF) is by definition money purchase. The benefits will be whatever the assets then in the scheme can provide for, subject to a minimum of the compensation provided by the Pension Protection Fund.

Planning the funding and security of USS

The collective covenant of the employers sponsoring the USS is very good. In the short term, the employers' covenant is very reliable. It is hard to see, therefore, what is the critical importance of short term fluctuation in the "self-sufficiency less assets" reliance on covenant metric. The first order short term security for members' benefits is the solvency of the employers, and there is no material likelihood of the insolvency of all the USS employers in the short term.

The combination of the quantity of assets and the PPF is second order security. We need not worry about short term asset fluctuation, because short term protection is provided by the employers' solvency, instead we can focus on setting a path for long term improvement in the funding level.

More money in the scheme results in more security for members, and better support for the employers' (and members') contribution rate, than less money. Achievement of a better return on assets is risk reducing. If the assets earn more, there is less dependence on the employers (and members) to pay contributions. If the USS is better funded, there is less pressure to change the contribution rate regularly, the prudent funding margin can be allowed to fluctuate instead. Irrespective of the design of the actuarial valuation, an investment strategy which is foreseeably much more likely to provide more assets in the scheme in 20 years' time is a better choice.

Since we first advised UCU on the conduct of the USS valuation in 2014, we have consistently advocated:

- Identification of the best estimate funding position; study of the scope for variation in the best estimate funding level, especially for investment performance reasons; setting the prudent funding target by adding an informed prudent funding margin to the best estimate target.

- Observing the constraints on the investment strategy and observing the scope to take risk in the investment strategy from a study of the cash flow needs of the scheme.

The USS in house team has not included these principles in the preparation of its funding and investment plans.

The USS said, in its 16 October statements:

"The trustee's fundamental belief is that risk is multifaceted, and requires a wide perspective, and broad tools to manage it appropriately."

We agree. This is why driving the funding and investment strategies by the single faceted narrow perspective of Test 1 is inappropriate even within the beliefs expressed by USS. The USS has failed to explore more facets than Test 1; it has ignored its own tests 2 and 3 and does not appear to have attempted to balance these competing objectives.

Conclusions

The 2014 valuation set a prudent path which is rather more likely than not to result in improved funding of the USS given the passage of time. An examination of the employers' covenant, and the different layers of protection for members' benefits indicate that time is available.

An important question to answer is, given a 20 year (say) time horizon for planning investments, what investment strategy is most likely to raise the value of the investments? The amount of the investments in 20 years' time does not need to be made more certain. We just need to be more certain of a higher amount of money than a lower amount of money.

If the USS has not made a projection of the assets in 20 years' time and if it has not examined variations of investment strategy likely to raise the amount of assets in 20 years' time, then it has made a mistake in its own terms. Such projections are necessary to study the reliance on covenant in accordance with the USS's more recent definition of self-sufficiency-in-bonds less assets.

Is there no need within the current regulatory regime to raise contributions?

It is important that First Actuarial's advice to UCU is reasoned and justifiable. If union members go on strike in defence of their pension scheme, for reasons at least in part relying on our advice to UCU, then it is essential that our advice to the UCU is well founded.

We fully support a cash flow approach such as the one which has been used by Dr Marsh. We also recognise that to facilitate engagement from the employers and USS, we need to approach the question from the valuation methodology which has been used by USS. We therefore also address the issue from the current Trustee approach.

The first report of the Joint Expert Panel

The first report of the Joint Expert Panel provides a reasoned examination of the 2017 valuation. It argues for an increase in contributions of 3.2% for the same defined benefits but with a removal of the DC match.

UCU's principal advisers at First Actuarial, Hilary Salt FIA and Derek Benstead FIA, also act as scheme actuaries advising the trustees of other pension schemes. In our professional opinion and based on the information we have available, we could certify as prudent a valuation of the USS which follows the recommendations of the JEP, were either of us the scheme actuary to USS.

We suggest that the actuarial adviser to UUK be asked whether they too would be prepared to certify as prudent a valuation of the USS which follows the recommendations of the JEP.

It would add to the pressure on the Trustee to agree were the combined weight of UUK and UCU and their respective advisers behind a single solution.

The current benefits for the current contributions

The current benefits and contributions were of course signed off as prudent by the Trustee in the 2014 valuation. The expectation at that time would be that the prudent plan would last for more than three years and be capable of being signed off again in 2017.

Our report "Completing the valuation of the USS" of 26 September 2017 built on our previous report "Progressing the valuation of the USS" of 15 September 2017. It provided two trial deficit recovery plans and set these plans in a wider context. We concluded in this report:

"We see no need to change the contributions or benefits at this valuation.

We have provided trial recovery plans which stay close to the USS's construction of the assumptions and utilises the same recovery period set in the 2014 valuation. By avoiding planning in future increases in the funding target and by using a modest asset outperformance assumption, a recovery plan can be set using the current contribution rate and the current benefits."

Change of approach since 2014

A major part of the problem is the USS is seeking to revise its methods for the 2017 valuation in a way that increases the contributions. This should not be done without the consultation and agreement of the employers. We give two examples.

Longer period of averaging the future service rate

We explain elsewhere in this report that allowing for the average cost of future accrual over the deficit recovery period is normal. The pattern of future service costs for the first 20 years, using the September valuation assumptions (the JEP report recommends reverting to the September basis) is as follows:

Year after the valuation date	Cost of future service during the year	Year after the valuation date	Cost of future service during the year
1	27.2%	11	21.9%
2	26.7%	12	22.1%
3	26.1%	13	22.3%
4	25.5%	14	22.5%
5	25.0%	15	22.7%
6	24.5%	16	22.8%
7	23.9%	17	22.9%
8	23.4%	18	23.0%
9	22.9%	19	23.1%
10	22.4%	20	23.2%

Source: First Actuarial. The contribution rates for years 1 to 11 were first published in our report "Progressing the valuation of the USS" of 15 Sept 2017

The average contribution rate over various periods we have selected is:

Period of averaging	Average cost of future service	Saving relative to 1st year cost
6 years	25.8%	1.4%
14 years	24.0%	3.2%
20 years	23.7%	3.5%

14 years is the balance of the deficit recovery period left from the 17 years adopted at the 2014 valuation. This is not to say that a 14 year deficit recovery period should be adopted at the 2017 valuation. It is just that this would be consistent with the signed off decisions from 2014.

Deficit recovery contributions

The recovery plan for the 2014 valuation assumed an asset outperformance during the recovery period of 50% of the difference between the prudent and best estimate discount rates.

The USS report Methodology and Inputs to the 2017 Valuation of 17 February 2017 envisaged continuing with the assumption of an asset outperformance during the recovery period of 50% of the difference between the prudent and best estimate discount rates (see page 7). But in its preparation of the valuation results, the USS dropped this assumption.

Conclusion

The increase in contributions being sought by the USS is rooted in their changes of assumptions. Given that the members' benefits are very well secured by the solvency of the employers, and the employers' covenant has not materially worsened since 2014, there does not appear to be good reason for such a radical change of funding plan from what was signed off in 2014. There is time to let the 2014 plan bear fruit.

What is lacking in USS's responses?

In this section, we summarise our conclusions about what is lacking in USS's responses. In the Appendix to this report we have provided a fuller explanation of our conclusions.

The USS is adamant that it cannot average the cost of future service over more than 1 year (as it proposes) or 6 years (as JEP proposed). Our experience is that, on the contrary, considering the cost of accrual over the length of the deficit recovery period would be normal.

The USS is adamant that following the pattern of contributions created by the structure of the 2017 valuation discount rate is important. But most valuations, including USS's prior to 2017, do not structure the discount rate to produce the problematic pattern of contributions. The pattern of contributions is a modelling issue, it is not a real world issue, the real world will not follow the model.

The USS's approach contains inherent contradictions. The valuation assumptions include a scenario for gilt yields to rise and for all markets to be down graded. The expected down grade makes the funding level worse but also makes the cost of future benefits lower. USS wants to recognise the worse funding level while ignoring the concurrent reduction in cost of future service. This increases the prudence in the 2017 valuation relative to the accepted prudence in the 2014 valuation.

In discussing the possibility that gilt yields might not rise as expected, the USS contradicted itself again, by posing a scenario in which gilt yields do not rise, but other markets are still down rated.

In our opinion, gilt yields are not all that important. They are made important by USS's model. But looking away from the model, the USS has little need to invest in gilts at negative real yields.

The USS raises the risk of short term shocks as an obstacle to taking a longer term view. But it did not define these risks or explain why they are important enough to override other considerations.

The technical paper said that the "employers stated long term risk appetite is £10bn." The first report of the JEP pointed out a number of flaws in the consultation with the employers (see pages 29-31, 45-46). We do not think it is reasonable for the USS to draw such an exact conclusion from the varied views of the employers. USS's statement is ill-founded.

The primary parties to a pension scheme are the trustees, the employers and the members. It is these three parties who should be working together to find a mutually acceptable funding, investment and benefits solution. But the USS appear to be privileging the views of the other parties it is listening to.

One of these other parties is the Pensions Regulator. The Regulator has statutory objectives which are in conflict with the objectives of pension trustees. TPR's views should be expected to be more conservative than the Trustee's views. That TPR expresses a more conservative view than the Trustee should not, on its own, be a reason for the Trustee to decline to act on the reasoned views of the employers or the members.

To conclude, the USS in house team's statements of 16 October contain inherent contradictions. They adopt positions without the advance of detailed argument in support, positions which we argue are unjustified, for reasons which we set out in the Appendix to this report. We believe the statements to be a poor quality response to justifiable and rational concerns raised by scheme members.

Appendix: What is lacking in USS's responses?

Can the contribution rate be even over time?

The cost of benefits over the whole of the recovery period is what matters

A scheme with a technical provisions deficit must set a recovery plan targeting 100% funding by the end of the recovery period. If the scheme is open to accrual, then the cost of accrual over the whole of the recovery period is factored into the calculations targeting full funding at the end of the recovery period.

Were the deficit recovery period to be 20 years long then it would be the expectation of regulation, and normal, for the 20 year cost of accrual to be included in the recovery plan.

It would be abnormal, and an additional margin of prudence relative to the 2014 valuation, to deliberately over-contribute to the cost of accrual during the recovery period, which is what would happen if the cost of accrual for 1 year or 6 years were to be used in a 20 year plan.

From year to year, the actuarial assumptions will be wrong

A prudent assumption that investment performance is, say, 1.7% a year more than CPI does not mean that returns are expected to be exactly 1.7% more than CPI: in any one year, the return on investments may be much more or much less than 1.7% over CPI. The meaning of a prudent assumption is no more than the long run return is more likely than not to average more than 1.7% above CPI, and therefore a contribution rate calculated on this assumption is more likely than not to be enough.

The USS recognised this in its statement, where it says:

We only need to look at what happened in the three years between the 2014 and 2017 valuations to see how quickly underlying funding assumptions can prove to be wrong: in this short period, severe declines in gilt yields increased the potential cost of moving to a low risk portfolio (to protect the scheme from downside risk) by £13bn (from £14bn to £27bn, updated to £22bn using our 2017 assumptions).

The point made here is that actual outcomes do not follow the valuation assumptions. Actuarial assumptions are not a prediction of the future, in the sense that inflation is expected to follow exactly the inflation assumption, or that the markets are expected to follow exactly the discount rate assumption. Markets are volatile and fluctuate greatly in the short term. That a valuation expects an investment return of CPI-0.53% in year 5, or a return of CPI+2.36% in year 15, or CPI + 1.7% after year 21, is not an opinion that markets will return precisely these returns in those years.

If we apply the same point to the cost of future service, it is clearly wrong to expect the cost of future service to follow exactly the pattern created by the USS's complex construction of the 2017 valuation discount rate. **To insist that the contribution rate must follow exactly the outcome of the valuation assumptions is an exercise in preferring to be precisely wrong rather than approximately right.**

USS's point about the divergence of real life from actuarial assumptions means that it is acceptable to take a 20 year view of the cost of future service.

As an aside, the notion that buying a low risk portfolio is useful "to protect the scheme from downside risk" is debatable. The yield on bonds is so low that buying bonds definitely gives a downside return outcome. Buying bonds chooses a downside outcome, it does not protect from a downside outcome.

Actuarial assumptions are often "flat rate"

Actuarial assumptions are often a single assumption for all time. In the case of discount rates, there might be two assumptions, one for before retirement and one for after retirement. Most valuations are done this way.

For example, the 2011 valuation of the USS used "flat rate" assumptions. The discount rate was 6.1% pa for all time. Naturally this produces a contribution rate to future benefits which does not change over time, if the demographics of the active membership does not change materially.

The total contribution can be flat rate

The total contribution rate comprises the cost of future service and an additional contribution for any deficit (or a reduction in respect of surplus).

The total contribution rate can be designed to be level over time. For example, the USS's 2011 and 2014 valuations specified a level total contribution rate (was 16%, then 18% after the 2014 valuation) with a varying split of contributions to future service benefits and deficit within the level total.

Remember to distinguish between prudent and best estimate costings

The USS appears to be concerned about the possibility that the actual contribution to benefits in year 1 would be less than the calculated contribution rate for year 1, were the contribution to future service to be averaged over a period.

Underpaying a prudent contribution rate is not on its own indicative of a problem. The issue to examine is whether the contribution rate exceeds the best estimate cost of benefits. If it does, there is prudent margin in the contribution rate, even if the margin is not as large as desired in the short term.

Summary

We disagree with USS's contention that the cost of future service cannot reasonably be averaged over a longer period than 6 years.

- If the deficit recovery period is longer than 6 years, it would be normal to factor in the cost of future service over the deficit recovery period.
- Outcomes cannot reasonably be expected to follow the exact complex pattern created by the 2017 valuation's assumptions (as indeed the USS acknowledges).

- The valuation assumptions need not have the complex pattern which creates the problem (and at previous valuations, the USS's assumptions have not been so complex).
- The total contribution for benefits and deficit can be held level (as has been done by the USS in the 2011 and 2014 valuations).

We leave the last word on this topic to USS:

In effect, Dr Marsh's approach takes the JEP's proposals to 'smooth' contributions over two valuation cycles, and extends that to 20 years. It is not surprising that when this is done, current contribution levels are (in aggregate) ultimately adequate.

Investment and risk

Investment of funded pension schemes

It does not make much sense to place the investments of a funded pension scheme into assets which are expected to lose money in real terms. To do so results in lesser benefits being paid out in real terms than the contributions paid in, making pre-funding look foolish. The investment strategy should, as a minimum, aim for a positive real return, in order that the positive real return provides an advantage to pre-funding and supports the cost of the scheme.

If we look away from the construction of the valuation, which is only a model, and look directly at the USS's situation, we see:

- The USS has net positive cash flow and is expected to retain net positive cash flow for decades. Therefore there is no cash flow need to invest in bonds to provide protection from disinvestment risk.
- Bonds have a negative real yield. It is not sensible to pre-fund a pension scheme by investment in assets guaranteed to lose money in real terms.
- Other investments have a positive expected return. There is little reason to invest in bonds on grounds of their relatively poor expected return.
- Diversification is good, but excessive diversification into bonds has a heavy opportunity cost.

Bond yields are not central to the future of the USS. A valuation method which makes bond yields a central feature is flawed.

Whether or not gilt yields rise as anticipated is not as important as USS makes out. It is important to the USS's model, but the model is flawed in several ways, as we have been pointing out since 2014.

The effect of market movements

An upward movement of the (non-gilt) markets makes the past service balance sheet look better (the assets have gone up) and increases the cost of future service (because the assets have gone up, the contributions do not buy as many assets as they did before). The two effects offset each other to some extent. The aggregate contribution rate (i.e. the sum of the contribution to accruing benefits +/- the adjustment for deficit/surplus) is more stable than the funding level on its own or the future service contribution rate on its own.

The hypothesis coded into the proposed valuation assumptions is for gilt yields to rise and all investment markets to be down rated. The comparison of assets with the value of past service liabilities is made considerably worse by use of a discount rate which anticipates the market down rating.

If the down rating does not come through, then two things happen. One, the cost of future service stays high, as USS points out. **Two, the balance sheet is much better than anticipated, because the down rating of assets has not happened. USS has not mentioned this offsetting outcome.**

The USS wishes to plan using a past service balance sheet made much worse by the anticipated market down rating, while simultaneously ignoring the beneficial effect on the cost of future service of the same down rating. This is mutually inconsistent. **It amounts to an additional layer of prudence not present in the 2014 valuation, costing several % of pay.**

Confusion about the expected future

In the Technical Response document, the USS says:

“However, there are potential scenarios that could put a significant strain on this. Specifically, as discussed in the Technical Provisions consultation, if interest rates do not rise as expected by 2020 this will increase short term reliance by c.£4bn. Additionally, a 10% downward correction in asset markets would increase short term reliance by c.£6bn. If both were to happen together the increase would amount to £10bn on top of the current level of reliance.”

The scenario coded into the valuation is for a rise in gilt yields concurrent with a down rating of the markets. The scenario in this paragraph above is for gilt yields not to change, but for there still to be a down rating of the non-gilt markets. **The USS team is contradicting itself as to the future it expects.**

The pathway into the future

We summarise one of USS’s arguments as follows, “Where we expect to get to in 20 years might be OK, but the path we take to get there is very important, and potentially overrules the 20 year plan.”

Whatever path the USS takes to its funding position in 20 years time, we can be sure it will not be the exact path anticipated, as already discussed. Earlier, the USS pointed out how rapidly events can diverge from the anticipated path. Therefore whatever “credible path” from now until 20 years’ time the USS might devise is not important, by its own argument.

Short term shocks

The USS raises the risk of “short term shocks” as a reason for not taking a longer term view.

What are these risks of short term shocks? Why are they important? Why are they more important than other considerations? Why is the cost of dealing with the risk a good use of money? Are there better uses for the same money? Is there a benefit from accepting the risk? If these risks are to be taken into account, they need to be defined. It needs to be explained why they override other considerations.

Last year, the USS proposed a framework for triggering contingent contributions based on a short term reliance metric. Perhaps the USS is alluding to this proposal in its latest statement. We commented on these proposals in our report to UCU of 3 October 2017. In this report, we wrote:

The proposal is to create a framework for triggering contingent contributions into payment (or benefit cuts, or an investment strategy change) within a shorter time frame than the outcome of the next full valuation.

The USS has made no case for this being necessary. Until it makes a convincing case, the proposal should be withdrawn. It is not good enough to introduce such a proposition without any justification as to why it is helpful or necessary.

The proposed metric for triggering short term actions was “self-sufficiency-in-bonds value of the liabilities less the value of the assets.” We concluded:

The proposed metric captures something unimportant (short term relative market movements) and leaves out something important (asset income and prospects for income growth). The proposed metric should be withdrawn, it is wholly unsuitable.

There is no justification for changing either employer contributions or asset allocation on the basis of a change in this metric, both of which deserve more careful consideration over a longer time period than a rushed formulaic alteration on the basis of adverse change in an unsuitable metric.

We note that the USS made no case for its contingent contribution framework in 2017, and it has not defined the “short term risks” it is concerned about, let alone made a case for their importance, in 2018.

The employers’ risk appetite

USS wrote:

“the reliance on the employers’ covenant measured in terms of the self-sufficiency deficit at the time of the valuation was £22bn, which is much higher than the employers’ stated long term risk appetite of £10bn.”

The first report of the JEP pointed out a number of flaws in the consultation with the employers (see pages 29-31, 45-46).

We do not think it is reasonable to draw such an exact conclusion from the varied views of the employers. USS’s statement is ill-founded.

The big picture

USS wrote:

The trustee's fundamental belief is that risk is multifaceted, and requires a wide perspective, and broad tools to manage it appropriately.

We agree. This is why driving the funding and investment strategies by the single faceted narrow perspective of Test 1 is wrong.

USS wrote:

Risk has many dimensions, and the valuation must be acceptably robust in how it manages each of them.

Indeed, risk does have many dimensions, many more than Test 1 captures.

The valuation must indeed be acceptably robust. Test 1 is not robust, so it should be removed from its position as the driving force of the valuation and the investment strategy.

The Trustee has signed off the current contributions for the current defined benefits in the 2014 valuation. At that time, the Trustee did think the level of risk in the funding arrangements was acceptable.

Summary

The USS has:

- Over-emphasised the importance of gilt yields (they are important to their flawed model, but not so important in the real world)
- Contradicted itself about the scenario it expects
- Raised the spectre of "short term risk" without defining the risk(s) at issue, without analysing the benefits of accepting the risk or the costs of dealing with the risk, and why these risk(s) are important enough to override other considerations

Who is USS listening to?

Parties to a pension scheme

The parties to a pension scheme are:

- The trustees
- The employers
- The members

The pension trust is created jointly by the trustees and the employers. The trustees and employers jointly manage the scheme using a balance of powers specified in the trust deed and legislation. The trustees hold the assets in trust for the members. The members are the beneficiaries of the trust.

The employers and employees negotiate a reward package. The trustees' role is to deliver the pension element of the package, as agreed between the employer and employee. **Fundamentally, the trustees should be listening to the wishes of the employers and the members.**

The trustees must appoint a scheme actuary to give them actuarial advice. The employers are likely to have their actuary. The members may have union representation, and the union may take its own actuarial advice. **The trustees, employers and members, and their respective advisers, should be working together constructively to provide pensions.**

Statutory roles in scheme funding decision making

The powers to set a scheme's funding strategy can be found in a scheme's trust deed and in legislation. USS's deed vests the power in the Trustee. Legislation requires the employers to be consulted in the exercise of the power.

The Pensions Regulator has the right of review of completed valuations. It has the power to set a contribution rate where a valuation cannot be agreed or if TPR can show the valuation does not satisfy the requirement for prudence in the legislation. The legislation does not give TPR a role in the funding negotiations themselves, the negotiations are reserved for the trustees and the employer.

The USS wrote:

This approach to the valuation has been carefully constructed, and robustly built based on independent advice from our scheme actuary and covenant adviser. It has been subject to independent review by a third party actuarial firm, and by TPR.

The message we hear from this statement is, "We cannot listen to Dr Marsh, because instead we have to listen to all these people."

The parties to a pension scheme are the trustees, the employers and the members. We are gravely concerned that the list of parties which the Trustee is listening to includes neither the employers nor the members nor their respective advisers. The Trustee is there to serve the employers and members. **The views of the employers and members should be primary to the Trustee.**

We are concerned that TPR's role in the valuation exceeds the role prescribed for TPR in legislation. We are concerned that TPR's views are given greater weight than the views of the employers and the members, given that TPR is not a party to the pension scheme but the employers and members are.

We doubt that TPR would welcome their input being ascribed the status of an "independent review". TPR is usually careful not to express an opinion about what should be done. TPR usually frames its commentary in terms of what it does not like about the trustees' position, rather than in terms of what TPR would prefer to see.

The task of the Trustee is to consult upon and agree a suitable solution with the employers and members whom they serve. There is no sign in this statement that the actuarial views of the' employers and members are being listened to.

The objectives of TPR

The Pensions Regulator is not a party to the pension scheme. TPR has statutory objectives which are different from the objectives of pension trustees. In particular, TPR has a statutory role of protecting the Pension Protection Fund. It is our observation that TPR expresses its objective of protecting the PPF by seeking higher contributions and more investment in bonds whenever it can.

The objectives of TPR, in particular its objective of protecting the PPF, and the objectives of the trustees are not aligned. The trustees' overall objective should be to serve the employers and members, not TPR. The consequence of the difference between TPR's objectives and the trustees' objectives is that **TPR's views should naturally be expected to be more conservative than the trustees' views.** That TPR expresses a more conservative view than the Trustee's valuation should not, on its own, be a reason for the Trustee to decline to act on the reasoned views of the employers or the members. It could be evidence of something going awry if there were not a difference between the Trustee's views and TPR's views. It is the employers and members who the Trustee serves, not TPR.

Summary

The Trustee should be working with the employers and members, and their respective advisers, to find a funding solution acceptable to all three parties.

The USS should not cite the cite the opinions of others as a reason to decline to discuss the issues with an open mind with the employers and members.

Is the Trustee in control?

In the course of the consultations on the USS 2017 valuation, First Actuarial has seen:

- No documents signed by the Trustee
- No documents issued by the scheme actuary
- No documents from the "independent third party actuarial firm" mentioned in USS's 16 October statement
- One letter from the Pensions Regulator which was not signed by an actuary

All the documents we have seen bar the one from TPR have been issued by the USS in house team.

It is the Trustee which is the decision maker. We suggest that the UCU seeks a meeting with the Trustee in order to discuss the conduct of the 2017 valuation directly with the Trustee.

Alternative facts

USS wrote:

"Firstly, it has always been clear from USS valuation discussion papers (and latterly from the Joint Expert Panel's analysis) that it is expected that the cost of pension provision in future will fall, as interest rates rise. We have been clear on that since the earliest discussions on the valuation."

First Actuarial has been engaged with work on the 2017 valuation of the USS since December 2016. We have found no reference in the documents prepared by USS to the falling expected cost of future pension provision as interest rates rise prior to our report for the UCU of 15 September 2016 which raised the issue. So far as we are aware, this statement is untrue.