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21 February 2020

Open UPP

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This is a USSbrief, published on 21 February 2020, that belongs to the OpenUPP (Open USS Pension Panel) series. The author is a member of UCU's **USS National Dispute Committee**, and is writing in a personal capacity.

A great strength of the **second report** of the Joint Expert Panel (JEP) is the articulation of how the USS Trustee has erred in allowing the valuation to determine the scheme objectives. The panel proposes to rectify this by facilitating agreement between the interested parties on a set of objectives and principles prior to seeking agreement on a valuation methodology. They also recommend an approach to the valuation based on two discount rates: a higher rate for pre-retirement liabilities, allowing for growth orientated investments, and a lower rate for post-retirement liabilities, which would be backed by low-risk, low-return investments.

The new valuation methodology is intended to be used for successive valuations, and so it is important that it promotes a sustainable scheme and conforms to the objectives of stakeholders. The dual discount rate proposal appears to have arisen late in the JEP's deliberations, as the values supplied in Figure 11 of the second report were only requested in mid-November (p. 115) [1]. As such, the proposal should be seen as a starting point for discussion rather than the optimal solution for the valuation of USS. I believe that the proposal has considerable merit, but also significant deficiencies that ought to be addressed.

1. The proposed valuation methodology [2]

The proposed methodology is encapsulated in Figure 1 (reproduced from Figure 10 of the second JEP report (p. 65)). Benefits accrued up to the valuation date for each member would be valued using two discount rates: a higher discount rate for the pre-retirement years, and a lower rate for the post-retirement years. The higher discount rate arises from the scheme investing a portion of its funds in higher-risk, return-seeking assets, while the lower discount rate arises from the rest of the funds being invested in lower-risk assets. A single effective discount rate (SEDR) is then calculated from the aggregate.

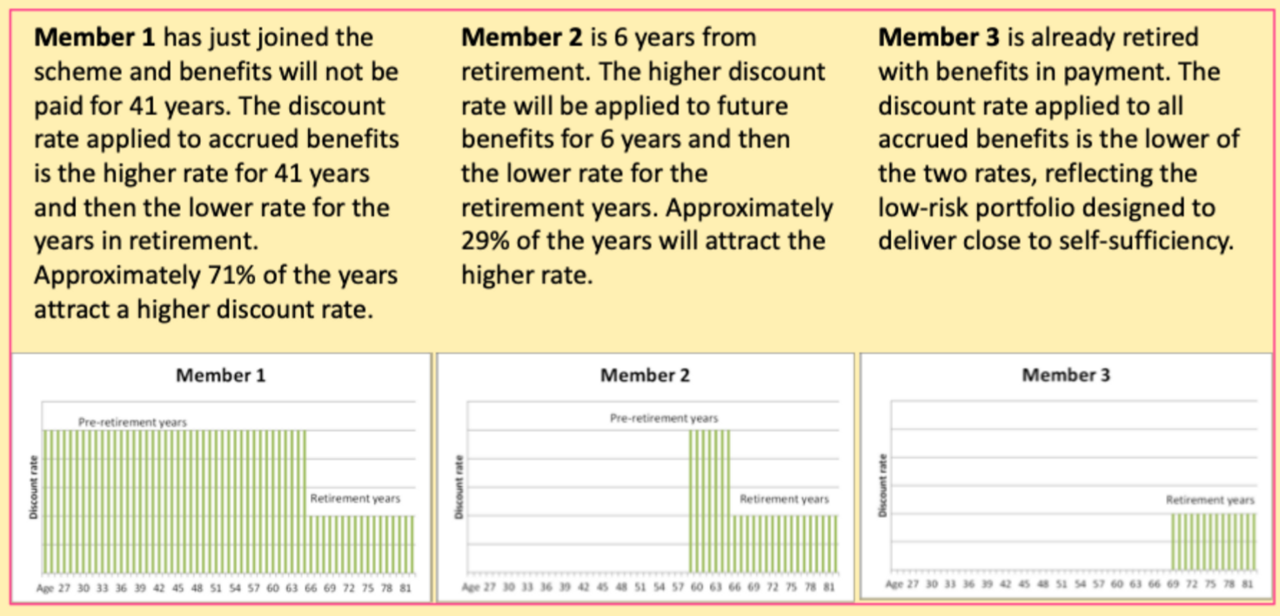

Figure 1: Examples of applying a dual discount rate to liabilities
[Figure 10 from second JEP report]

The division between pre- and post-retirement years allows the methodology to respond to changes in scheme demographics. For example, expansion of the sector could see more young members join, increasing the proportion of benefits for which the funds to cover can be invested in higher-risk assets, and to which the pre-retirement discount rate can be applied, thus increasing the SEDR. Should the scheme prove unattractive to new members, the proportion of benefits for which the funds to cover can be invested in higher-risk assets, and to which the pre-retirement discount rate can be applied, would decrease over time. This would result in a reducing SEDR and a lower-risk investment strategy.

2. Promoting stability

The most pernicious aspect of the current valuation methodology is the continuous, forced de-risking, which leads to unsustainable contribution rates. The dual discount rate methodology would apportion liabilities according to the demographic profile of the scheme and, in stark contrast to the current methodology, would relate the risk in the scheme to an agreed risk appetite. Since the demographic profile of the scheme will change slowly (if at all), future contribution rates should be more stable and predictable, which meets a key need of employers. The investment mix adopted by the scheme needs to be agreed for the 2020 valuation, but subsequently would also change slowly (if at all), thus meeting a key UCU demand to end de-risking.

The proposal is made on the assumption that the scheme remains open in the long-term, and it is essential that all parties make a commitment to USS remaining an open, mutual Defined Benefit (DB) scheme. Given past actions, this commitment needs to be part of the Long-Term Objective to be adopted by the scheme and written into the scheme rules. Assuming such a commitment is made, the benefits conferred by a dual discount rate valuation methodology have the potential to secure the long-term continuation of the DB scheme.

3. Excessive prudence

Any proposed valuation methodology needs to be tested against the purpose and objectives of the scheme. I fully agree with the view that the focus must be on the long-term sustainability of the scheme. One aspect of sustainability that needs greater attention than in the past is affordability. Affordability should not be addressed with the question, 'What will stakeholders tolerate?' Stakeholders should not be satisfied with contribution rates a little above 26% simply because this has been paid in the recent past. The question to be asked should be, 'What is the lowest contribution rate consistent with the prudent expectation that benefits can be paid over the long-term?' Simply accepting the JEP proposal cannot answer this question. The proposal defines how liabilities are to be apportioned and defines the lower discount rate, leaving only the higher discount rate uncertain. This significantly constrains the possible range of the SEDR, which in turn determines the investment strategy and contribution rates. Accepting the proposal without challenge would be making the same mistake the Trustee has made with the current valuation — allowing a predetermined methodology to define the outcome. I argue in the following sections that both definitions can and should be challenged. In the coming months of 2020, the risk appetite and investment strategy for the scheme need to be agreed, and then the dual discount rate methodology proposed by the JEP should be adjusted to give the desired outcome.

Another aspect of a sustainable scheme is its mutuality. It is pleasing that the JEP has strongly endorsed retaining the mutuality within the scheme (p. 83), both between members and over time, for it allows members to obtain the premium offered by more volatile assets. This is because the volatility in asset values is not as significant a risk to an open, DB scheme both with a very long investment horizon, and which is not forced to sell assets. Prudently maximising the benefits of mutuality should be an objective of the scheme as it will improve affordability over the long-term, but the increasing investment in low-risk assets over the last decade has worked against these objectives.

The JEP has clearly expressed the view that recent valuations have been too prudent, that some relaxation is possible, and that this needs to be agreed in order to find a sustainable solution to USS funding. For example:

> To the extent that the parties can accept this broader view of sustainability it is the Panel's view that the Trustee's current approach to risk is overly prudent given the nature of the Scheme, in particular its demographic and cash-flow profile, its mutual status and the longevity of the sector. (p. 61)

Yet in Annex 8 to the report (p. 116), USS reports that the post-retirement discount rate would contribute about 67% to the value of the liabilities. If this discount rate is set at Gilts+0.75%, as suggested by the JEP, this would result in the scheme increasing its holding of low-risk investments. More of the de-risking to which UCU has been objecting would take place, and this extensive investment in low-risk, low-return investments would be sustained long-term. I doubt this outcome conforms to the objectives of the JEP in making the proposal, nor do I think it should be acceptable to UCU. These considerations lead me to the view that the JEP proposal is excessively prudent and does not strike a desirable balance between the competing objectives of the scheme.

4. Self-sufficiency and negative yields

The proposed methodology uses the USS definition of self-sufficiency (Gilts+0.75%) for the lower discount rate (p. 67). This definition requires that there is a 95% probability that accrued benefits can be paid without requiring additional funding from employers. It also requires that the assets of the scheme are held in low-risk investments which match the liabilities of the scheme, so that they fluctuate in value in a similar fashion and have a similar maturity profile. This definition leads the scheme to hold a significant proportion of gilts, especially index-linked gilts, which currently have negative real yields.

This definition of self-sufficiency was formulated for the previous valuation methodology that assumed the scheme would be closed to new accrual. [3] When a scheme is closed and assets need to be sold to pay benefits, the utility of holding matching assets is clear, to the extent that it may be justified even if they have a negative yield. The justification for an open scheme to hold negative yielding gilts is far less obvious, and I believe that the insistence by USS on investing increasing amounts of the scheme's assets in negative yielding gilts, and the resulting increases in contribution rates, has done as much as anything to undermine member confidence. To be clear, there is never a necessity to hold gilts (or any other asset class), and the utility of any such investment needs to be justified not by appeal to dogma or conventional wisdom but by the extent to which it furthers the scheme's objectives. In the past, USS has signally failed to make such an argument.

There will undoubtedly be disputes in the coming months over the extent of USS investment in gilts. I believe the failure of the JEP to give any guidance on this issue is its greatest omission. In the absence of such guidance, I think the definition of self-sufficiency needs to be modified if it is to be used to define the lower discount rate. The objective of securing the payment of benefits without requiring additional funding from employers should remain, but this should be achieved in whatever manner best satisfies the other objectives of the scheme. The holding of matching assets should be given a much lower priority; it should certainly not be an objective. Consequently, I believe that the lower discount rate should also be defined by reference to CPI rather than gilts. This removes the implicit assumption that the corresponding funds will be invested in gilts (although they might be), and makes clear the cost of any such investments.

5. Aligning discount rates to risk

The proposed valuation methodology is similar to a Defined Contribution (DC) investment profile and follows the assumed risk-appetite of individual members. As described by the JEP:

- the post-retirement years are valued and secured against a low-risk portfolio that will have a very high probability of being able to pay out with no further call on employers while;
- the benefits of those further from retirement are backed by a valuation method that allows for returns over the longer term that a higher risk portfolio can generate. (p. 65)

Thus, Member 1 can assume some risk because benefits will not be paid for four decades. Member 2 is close to retirement and would assume little or no risk and retired Member 3 wants no risk at all.

The overriding objective of the Trustee is to ensure that benefits can be paid as they fall due. As USS lurches from crisis to crisis, members are invariably assured that their benefits are safe, and at least in the near-term this is undoubtedly true. Pensioners such as Member 3 can rest easy, knowing that their 2020 pension payments are triply secured. First, the scheme is cash-flow positive, with projected income from investments and member contributions comfortably exceeding benefit payments. Second, the scheme holds assets in excess of £60 billion compared to benefit payments of about £2 billion. Third, the strong employer covenant provides an additional (although harder to quantify) layer of security.

The same is true for 2021 and further into the future. The scheme is projected to be cash-flow positive for decades, the assets are sufficient to pay benefits for approximately 30 years at current rates, and the covenant horizon is at least 20 years. Member 3's risk appetite is satisfied: so long as the scheme remains open, mutual and supported by employers, the Trustee can be extremely confident of paying Member 3's pension irrespective of future investment performance. So why is it necessary to apply a fourth layer of security by investing in low-risk assets on behalf of Member 3? To do so is to ignore mutuality and emulate a DC scheme where every member's pension pot is separate. The current financial position and the mutuality of the scheme are sufficient to secure near-term pension payments. Instead of following the proposed methodology, the Trustee could, and arguably should, choose to value near-term pension payments using a high discount rate and invest the funds to cover those payments for long-term growth to the benefit of all members.

The above arguments also apply to Member 2, albeit with slightly less confidence. However, Member 1 is very different. Having a relationship with the scheme lasting six decades, the three layers of security that support benefit payments for Members 2 and 3 cannot be assumed to apply when Member 1's benefits fall due. Member 1 has to trust in the expertise and prudence of the Trustee and executives to reduce (but not eliminate) the uncertainty of payment; unlike Members 2 and 3, the pension of Member 1 is contingent upon the success of the future investment strategy. This greater uncertainty should therefore result in the accrued benefits of Member 1 being valued using a lower, more conservative discount rate than the accrued benefits of Members 2 and 3.

It follows from the above that the risk appetite the scheme should have is very different from the sum of the risk appetites of its members, and that there is no rational basis for apportioning higher and lower discount rates according to retirement status. It is perhaps more reasonable to apportion liabilities according to when they fall due. Near-term liabilities would be valued with a higher discount rate, and liabilities falling further into the future would be valued with a lower discount rate. In this manner the discount rates would better match the risk appetite appropriate for the scheme as a whole. Such a methodology focuses on the long-term and places an emphasis on inter-generational mutuality. In contrast, the JEP methodology ignores mutuality and, most unhelpfully, places an emphasis on the need to secure against near-term risks that do not in fact exist.

I will not advocate such a significant change to the proposed methodology. I believe the pragmatic way forward is to seek to modify the JEP's proposal. However I believe two facts need to be recognised.

1. Pension payments are secured by more than the success of the future investment strategy.

2. The proposed methodology does not align discount rates and investment strategy with the risks in the scheme.

6. Conclusion

The use of two discount rates is a sensible strategy for managing change in the demographics of the scheme, but that is all. There is no rational basis for the proposed valuation methodology, and as such it carries no special merit. Recognising this is useful, because it means there can be no reasonable objection to modifying the methodology to better achieve the objectives of the scheme. The proposal defines both how liabilities are to be apportioned and how the lower discount rate is determined. I believe both definitions should be challenged, as the proposal as it stands has the potential to promote further de-risking and make this irreversible. UCU negotiators should also seek to minimise investment in negative yielding gilts that prevent members from fully exploiting the advantages of an open scheme.

A commitment to a long-term sustainable, open and mutual DB scheme requires a change of attitude on the part of the Trustee and employers. I fear this will, at best, be made reluctantly. It is possible they will accept the JEP proposal but object to any modifications. If this is the case, UCU must challenge their commitment to the agreed purpose and long-term objectives of the scheme. Implementing the JEP proposal unmodified will place the scheme in a familiar situation — using a valuation methodology that does not strike an appropriate balance between competing objectives to determine the outcome of future valuations, to the detriment of members.

Endnotes

[1] For convenience, I will refer to the second report of the JEP by page number only in the text. The full report can be obtained **here**.

[2] For a comprehensive description of the proposed methodology, I recommend reading **#USSbriefs89**, 'JEP2's dual discount rate proposal for USS: an analysis and evaluation', by Andrew Chitty.

[3] See **#USSbriefs68**, 'Why 'Test 1' must be dropped: a critique of its design and implementation', section 5, pp. 12–14, by Andrew Chitty and Tim Wilson.

Acknowledgements

The author is grateful to Andrew Chitty and Carlo Morelli for their helpful comments.

*This is a USSbrief, published on 21 February 2020, that belongs to the OpenUPP (Open USS Pension Panel) series. This paper represents the views of the author only. The author believes all information to be reliable and accurate; if any errors are found please contact us so that we can correct them. We welcome discussion of the points raised and suggest that discussants use Twitter with the hashtags **#USSbriefs90** and **#OpenUPP2018**; the author will try to respond as appropriate.*