UPS Memorandum			
To: Geraldine Egan, University and College Union			
From: Bryn Davies FIA, Union Pension Services Limited			
Date: 6 April 2010			
Subject: The Funding of the Universities Superannuation Scheme			

Introduction

Thank you for your email of 11 March 2010 requesting my comments on the prospects for the future funding of the Universities Superannuation Scheme (USS), in the light of the reported views of Edwin Topper FIA, the Scheme Actuary. As the basis for my comments you have provided me with copies of the email dated 6 January 2010 that was sent to the USS by Mercers on behalf of Edwin Topper; the report from Hewitt Associates dated 3 March 2010 that was prepared for the Employers Pensions Forum, Universities UK (EPF); and the report to the EPF from its actuarial advisor, Peter Thompson FIA, dated March 2010, which summarises and comments on the report from Hewitt Associates.

In addition to the documents mentioned above, I have seen a copy of the presentation that Edwin Topper delivered at the November 2009 USS Institutions' Meeting; and a copy of the joint report from Mercers and USS dated September 2009 entitled ""Pension Risks", which I understand was prepared for the Joint Review Group (JRG). I have also been able to access all the USS documentation that is available on-line, including past actuarial valuation reports, the Trustees' annual reports and the Scheme Rules. Finally, I attended at your request a meeting organised by USS that was held on 1 April 2010, with Brendan Mulkern of USS; Edwin Topper; Andy Cox and John Coulthard, who were the main authors of the report from Hewitt Associates, and Peter Thompson. I attach as an annex to this report a note of that meeting prepared by USS. I consider that the information obtained from these sources provides a sufficient basis for the advice that is set out in this report.

My report considers the advice that has been provided by Edwin Topper about the prospects for the ongoing funding of the USS from the perspective of the UCU and that of the Scheme members that the Union represents. The following section sets out the background to the concerns that have been raised by the employers and then, in subsequent sections, I consider each of the specific points of concern. At the end I set out my conclusions on what attitude the Union might take towards the advice that has been provided on the funding of the USS. I have kept the report focussed on what I consider to be the central issues, while still providing practical advice. However, I would be pleased to provide further details on any issue, if you consider that this would be helpful.

The report is addressed to you on behalf of the University and College Union (UCU) and has been prepared on the understanding the UCU has no formal role in

decisions about the funding of the USS. My report should not to be relied upon by any other party. In providing this advice I have had regard, to the extent that it is possible, to the relevant professional standard under the aegis of the Board for Actuarial Standards, which is Guidance Note 9, Funding Defined Benefits – Presentation of Actuarial Advice (GN9). I would be able to provide further information about the limitations of my advice, if you consider this would be helpful.

Background to Funding

As you are well aware, the USS is a defined benefit (DB) scheme that provides benefits based on members' final earnings by funding them in advance. To that extent it is like many other occupational pension schemes that continue to exist in the private sector and, like them all, it is governed by the scheme specific funding requirements under the Pensions Act 2004 and, hence, is subject to the funding requirements laid down by the Pensions Regulator (tPR).

In the following important respects, however, it is in an exceptional position:

- 1. It is a multi-employer scheme, where the employers are jointly and separately liable for the liabilities of the Scheme on what is sometimes described as a 'last man standing' basis;
- 2. While it is possible that individual institutions may come and go, it is reasonable to assume that the university sector as a whole will continue to exist for the foreseeable future and to remain at broadly its current scale;
- 3. While individual institutions, or at least those of any significance, might cease to exist, they are invariably merged with other institutions, rather than becoming insolvent; and
- 4. While the sector is financed from a variety of sources, the default source of funding is and will remain central government and it is reasonable to assume that the Government will continue to ensure adequate finance for the sector.

Given these exceptional circumstances that bear directly on the ongoing funding of the Scheme, it is not necessarily surprising that in certain respects its funding is out of line with the generality of private sector DB schemes. The whole point of the current funding regime is that it is scheme specific and, hence, it should take account of the particular circumstances of the individual scheme. So, to the extent that the arrangements for funding the Scheme are exceptional in that they are out of line with the generality of DB Schemes in the private sector, it is necessary to consider the extent to which this is a reasonable refection of the Scheme's exceptional characteristics.

Given the exceptional nature of the Scheme, I do not consider that it is inherently unreasonable for the Trustees of the USS to take a much longer perspective than most other DB schemes when deciding how the Scheme should be funded. In particular, it is not necessarily unreasonable to assume a longer than typical recovery period, given the exceptional covenant that is provided by the university sector taken as a whole. Nor is it inherently unreasonable to assume that to the extent that the Scheme invests in risk-bearing assets, such as equities, it can expect in the longer term to earn on average a higher return than that which would be available by investing in risk-free assets.

It is important to stress that I am not stating that this is necessarily the approach to funding the USS that the Scheme Actuary should recommend or that the Trustees of

the USS should or have to adopt. It is for the Trustees to take their own advice and to reach their own decisions. The point being made here is somewhat narrower, i.e. that it is not manifestly incorrect for the Trustees, having taken appropriate advice, to decide to fund the scheme on such a basis.

It will be noted that while the reports prepared for the employers from Hewitt Associates and Peter Thompson do raise various concerns about the current approach to funding the Scheme that merit serious consideration, they have not stated explicitly that it is wrong for the Trustees to adopt a long-term approach. They appear, instead, to be making four inter-related but distinct points:

- 1. That such a long-term approach to funding the Scheme is atypical, in that it has been adopted by few other private sector DB schemes;
- That the adoption of a longer recovery period and the assumption of a higher than typical rate of return are unlikely to be allowed by the Pensions Regulator;
- 3. There are, in any event, pressures that will lead to increases in the cost of the Scheme, including that from continued improvements in mortality; and finally
- 4. There is the risk that the Trustees' current approach to funding, coupled with the requirement to comply with the funding regime as enforced by tPR, will lead to fluctuations in the employers' contribution rate that are unaffordable for institutions that do not have ready access to additional sources of funding.

I comment on each of these points in the following sections.

Atypical Approach to Funding

As I have explained above, the USS is an unusual scheme and, hence, to repeat the point made in the preceding section, it is not necessarily surprising or a cause for concern that it has a different approach to funding to that adopted by most other schemes. The most relevant differences that flow from the exceptional nature of the Scheme are that it would not necessarily be unreasonable to adopt a higher than normal expected rate of return on the Scheme's investments and a longer than normal recovery period. I discuss these in turn.

Expected Rate of Return: It needs to be understood that the choice of what assumption should be made about the expected rate of investment return when costing a pension scheme is now a highly contentious issue, both within and outside the actuarial profession. There are those who argue that it is wrong to assume a higher return than that available on risk-free assets in advance and that credit should only be taken for higher returns from riskier assets as and when they are actually received. However, there are those who take the opposite view including, in particular, tPR in its published guidance¹. It is not necessary for the purposes of this report to resolve this dispute. What we can conclude, however, is that it is not inherently unreasonable to assume a higher return than that available on risk-free investments, providing the consequences of adopting such an approach are understood. Such consequences include, in particular, greater variability in the current market value of the Scheme's investments.

¹ See paragraph 92 of Regulatory Code of Practice No. 3 from the Pensions Regulator - http://www.thepensionsregulator.gov.uk/docs/code-03-funding.pdf

Even if the assumption of higher returns is accepted, there is, of course, plenty of scope for discussion about the extent of the additional return that might be regarded as reasonable. There is no definitive guidance from the actuarial profession or tPR on what can be regarded as an acceptable level of out-performance, although there is an overriding requirement to act reasonably. There are also the statutory requirements that apply when calculating the technical provisions (TPs) for all the assumptions to be prudent and when calculating the recovery plan for the assumptions to be, at least, best estimates.

As far is the USS is concerned, the out-performance assumption is based on the investment advice that the Trustees have received which is set out in the Scheme's State of Investment Principles (SIP). The following table, based on information drawn from the SIP that is set out in the Trustees' last annual report, sets out the agreed distribution of investments among the main asset classes and the anticipated real rate of return, i.e. net of price increases, on each class of asset. From this it is possible to calculate that the anticipated real rate of return on the Scheme's assets, taken as a whole, is 4.1%, both on the asset distribution at 31 March 2008 and on distribution that is projected following a switch to a greater proportion of "Alternative assets". It is assumed for this purpose that 50% of fixed interest investments are held as index-linked bonds.

		31-Mar-08	Projected %	
	Equities	76	60	
	Alternative assets	4	20	
	Fixed interest (including index-linked)	10	10	
	Property	10	10	
5.3	This distribution has been agreed on the recommendation of the investment committee based on its belief that, over the long-term, the real rates of return of each asset class will be of the order of:			
	Equities	4.5%		
	Alternative assets	4.5%		
	Property	3.0%		
	Fixed interest	2.5%		
	Index-linked	1.5%		

What this means is that the Trustees have agreed, following consultation with the employer, that the Scheme should be funded on the assumption that the real rate of return anticipated on the assets as a whole (i.e. 4.1%) will exceed the return on risk-free assets, as represented by Index-linked assets, (i.e. 1.5%) by 2.6%. This compares with the equivalent assumption used at the last valuation for the valuation of TPs of 2.3%, after allowing for the 0.3% inflation risk premium. In other words, the assumption made about the nominal effective single rate spread over the 15-year UK gilt yield for the purposes of calculating the TPs falls within the basis agreed by the Trustees. It also means that the effective single rate can be expected to be higher than that assumed by most other funds, as it reflects the greater proportion of the Scheme's assets being held in the form of risk-bearing assets than most other funds.

4.1%

Weighted average return

It is also important to appreciate the substantial impact there would be on the contributions required to fund the USS if the expected higher return were to be disregarded. The Scheme Actuary's presentation of last November stated that on a risk-free basis the future service contribution rate would have to be increased to something like 33%, rather than the current 22%. There would, in addition, be the need at present for substantial deficit contributions. There is little doubt, therefore, that a move to a risk-free basis would mean, to the extent that the additional costs could not be afforded by the employers, that the Scheme could not continue in its present form and would require substantial reductions in members' benefits. It is clear, therefore, that a precipitate change in approach would not be in the interests of either employers or members.

So, while it might appear from the actuarial advice given to the employers that the ability of the Scheme to earn higher returns is being called into question, it appears that this is unlikely to be an issue in practice, so long as the present approach to investing the Scheme's assets is maintained. My expectation is that the employers will only press for changes in the discount rate if and when it is agreed that the Scheme can afford a shift to less risky investments. I think that they now understand that such action, on its own, would lead to higher pension costs.

The Recovery Period: The second atypical element in the Scheme's approach to funding is the possibility, as and when a deficit arises, of using a longer than normal recovery period, i.e. the period over which the plan submitted to tPR will eliminate the deficit. The guidance from tPR stresses the importance of considering the employer's covenant when deciding upon the appropriate recovery period. However, as I have explained, it is clearly possible to argue, given the 'last man standing' nature of the employers and the expectation of the continuation of the university sector in all conceivable circumstances, that a longer than normal recovery period can be justified. It is important to understand, however, that this covenant relates only to the ability to the university sector's ability to fund the recovery plan and not to its ability to maintain the USS in its existing form.

One possibility that would reinforce the covenant in such circumstances and justify the use of a long recovery period by the USS is the provision by the relevant Government department of a letter of comfort to the Trustees. I understand that such letters have been provided for other Schemes, with the approval of the Treasury, and would simply be a statement to the effect that the Government cannot envisage circumstances in which it would not be prepared to ensure adequate funding for the university sector. In reality it would constitute no more than a statement of the obvious and most definitely would not in any sense represent a Government guarantee for the continuation of the existing USS. However, it might help the Trustees accept a long recovery period and satisfy tPR that the Trustees were acting reasonably.

Attitude of the Pensions Regulator

In principle, therefore, the funding approach that has been adopted by the Trustees of the USS, in accordance with the advice of the Scheme Actuary and following consultation with the employers, is not inherently unreasonable. This view is lent support by the fact that the basis used for calculating TPs on the occasion of the last valuation was not called into question. What we do not know, however, is what

attitude tPR will take at a forthcoming valuation, if there is a deficit on the TPs basis and, hence, there is a need to submit a recovery plan. It is also possible that tPR will seek to enforce greater prudence in the choice of assumptions used to calculate the TPs on the occasion of future valuations than it has in the past. It has already done so, for example, in relation to mortality assumptions.

The specific concern that has been expressed by the actuaries advising the EPF is that tPR will impose restrictions on the length of the recovery plan and/or the assumed rate of return on the Scheme's assets, with the result that the required deficit payments will be unaffordable. This contrasts with the view of the Scheme Actuary that there is likely to be sufficient flexibility within the scheme specific approach to avoid such an outcome.

The underlying problem is the fear that tPR may enforce a shorter term approach to funding the USS than that which is regarded as reasonable by the Trustees, despite the intention that the funding regime should be scheme specific. At this stage, however, it is not possible to say that this is bound to be the case. There is no doubt that a recovery period that is greater than (say) 20 years and an investment return that includes an assumption of out-performance on risk-bearing assets of greater than (say) 2.3% would be exceptional. But, as explained above, this is an exceptional Scheme and I am of the view that it would be possible to present a coherent case in favour of such an approach.

What we don't know is what would be the response of tPR, even though I understand that discussions do take place on a regular basis between USS and tPR. This lack of certainty is due first, to tPR's understandable reluctance to answer hypothetical questions; and secondly, to this being a developing situation in terms of both economics and regulation. What this means is that there is no way of being sure what will happen until the next valuation. However, while any proposal will doubtless be looked at closely by tPR, there seems no reason to assume a negative response in advance, particularly when this would not be in anyone's interests to do so.

Increasing Cost of the USS

Another major concern of the employers is that there are, in any event, pressures that will lead to permanent long-term increases in the cost of the Scheme. The main potential causes for such increases in that cost include continued improvements in mortality; consistently higher pay increases; and lower investment returns, as compared to those allowed for in the current approach to funding the Scheme.

I believe that there is certain to an increase in cost because of the impact of the continuing improvement in mortality, i.e. people are continuing to live even longer than was previously anticipated. The fact that people are living longer is not unexpected in itself; what has not yet been taken fully into account is the extent of that improvement. Figures from the Scheme Actuary suggest that the further adjustment in mortality rates will lead, at the very least, to an increase in the cost of the Scheme of 0.9% of pensionable pay, over the next one or two valuations. The possibility of even more improvements in mortality in the longer term, and hence an even higher cost, cannot be ruled out. The impact on the ongoing cost of the Scheme of the other potential factors is not so certain and might work either way,

e.g. pay increases might be lower than expected and hence the Scheme might be less expensive.

I understand that it is the recognition that such increases in the long-term cost of the Scheme might arise that has led to the discussion of cost-sharing and any more detailed comments on the process would be outside my terms of reference. In other words, I have assumed, for the purposes of this report, that problems with the increasing cost of accruing benefits will be dealt with in this way.

Risk of Fluctuations in Cost

The final and main concern of the employers is that the Trustees current approach to funding, coupled with the requirement to comply with the funding regime as enforced by tPR, will lead to fluctuations in the employers' contribution rate that are unaffordable for institutions that do not have ready access to additional sources of funding. They seem to suggest that this will be a problem, even if the current approach to funding is maintained by the Trustees; and that their approach is accepted by tPR; and any long-term increases in the cost of the Scheme are handled by a system of cost-sharing and capping. It is in order to avoid or, at least, reduce such a risk that the employers wish to see, in due course, a change to a less risky approach to funding the scheme.

I have no doubt that there is a real constraint on the ability of the HE sector to cope with fluctuations in its contributions in excess of a given level without an unacceptable impact on the running of individual institutions and their staff, even if some form of cost-sharing is introduced. So, given the objective of avoiding such fluctuations, there are two possibilities for the USS, as follows:

- 1. Either the Scheme's investment policy is "de-risked" by switching its investments to those which do not fluctuate so widely in value but, as a result, produce a lower rate of return; or
- 2. It is assumed that there is sufficient flexibility within the funding basis to avoid such fluctuations, through the adoption of extended recovery periods and increases in the investment risk premium within the assumed investment return.

The former strategy is that advocated, at least in principle, by and on behalf of the employers. However, it has the substantial drawback in that it is expensive and, as such, can only be implemented over a period of time, either by substantial reductions in the ongoing cost of the Scheme, by means of benefit reductions and increases in member contributions; or by waiting for the Scheme's finances to improve. As a result, it appears that the priority for the employers is for any savings or improved experience to be used for the purpose of de-risking.

From the Union's perspective it needs to make it clear that any shift by the employers to de-risk the Scheme should be a matter for negotiation and, perhaps more importantly, it would only be necessary to the extent that the problem cannot be handled within the existing approach to funding. It is in this context that the Union has an understandable interest in the extent to which it can rely on the advice provided by the Scheme Actuary and the decisions that follow from the Trustees.

The first point to make is that the Scheme Actuary is a senior member of one of the UK's leading forms of consulting actuaries, with considerable experience of DB

pension schemes and the USS in particular. In addition, he is required to have all his advice to the Trustees go through a process of peer-review. Secondly, I have little doubt that while tPR will not make any explicit statements about what might be accepted in hypothetical circumstances, I am sure that the informal discussions that I know take place between the Scheme Actuary and tPR will provide a reasonable steer as to the direction the former can take. And thirdly, tPR does appear sensitive to the wider implications of the decisions that it takes. For all these reasons I believe that if the Scheme Actuary were to advise the Trustees that he expects that adverse fluctuations in cost can be avoided, then the Union can place considerable reliance on this advice.

Conclusions

It is important to understand that it is not possible to reach absolute certainty about the future funding of the Scheme and, in any event, I am not in a position to second-guess the work of the Scheme Actuary. Nevertheless, the Union has an understandable concern about the funding of the USS and will no doubt wish to avoid circumstances in which there is an unacceptable burden on employers and, consequently, an adverse impact on the jobs and conditions of employment of its members.

Having now read the relevant documents and had the opportunity for discussions with the Scheme Actuary, as well as the actuaries advising the EPF, it is my conclusion that:

- 1. While the long-term approach to funding the Scheme is atypical, in that it has been adopted by few other private sector DB schemes, the scheme is exceptional in a number of important respects and, hence, such an approach is not inherently unsound;
- 2. There is no reason to assume in advance that the adoption of a longer recovery period and the assumption of a higher than typical rate of return are unlikely to be allowed by the Pensions Regulator, given the exceptional character of the Scheme:
- 3. The longer term pressures leading to increases in the cost of the Scheme, including that from continued improvements in mortality; will be dealt with through the cost-sharing mechanisms that are currently under discussion; and
- 4. That if the Scheme Actuary were to advise the Trustees that adverse fluctuations in cost can be avoided through the adoption of higher investment returns and a longer recovery period, then the Union can place considerable reliance on this advice.