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Mr Bill Galvin  
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USS

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Dear Bill

Thank you for your letter of 30th March with attached Question and Answer document which was sent in response to our letter dated 21 February. In this letter we outlined our principal concerns with your plans for the future Investment Strategy. These concerns fell into three categories:-

1. Undue focus on the gap to self-sufficiency risk metric
2. The level and type of leverage proposed would import significant risks into the scheme
3. The timing of any increase in inflation linked bond purchases is poor and out of step with the work to review aspects of the USS Scheme

We understand that you make the following key points in your letter/Q&A document, as follows:

1. No credible alternative risk metric to self-sufficiency has been proposed
2. There is serious doubt over whether equities (or other growth assets) provide inflation protection over the long term
3. Managing the volatility in the gap to self-sufficiency metric is paramount and it is worth the reduction in expected overall return and the reduction in collateral headroom
4. No alternative methods of managing risk are viable
5. Action needs to be taken now

We have carefully considered your response and also discussed the position with KCL, LSE and UCL who share the concerns. We address each of these points below.

*No credible alternative risk metric to self-sufficiency has been proposed*

In the penultimate paragraph on page 5 of the Q&A document, you make the point that it is important to provide an early warning system in relation to the risk that the investment returns and the covenant will be insufficient to meet **all** future benefit payments. We agree. However self-sufficiency is a poor metric to rely on to monitor this risk. The test assumes

that the scheme moves instantaneously to a self-sufficiency portfolio, where this portfolio is estimated (through stochastic modelling) to both have a greater than 95% probability of meeting all liabilities while maintaining a high funding ratio. However, the Scheme could not in practice move to such a portfolio instantaneously and the requirement to maintain a high funding ratio at all times is unnecessary so long as there is a high degree of certainty of making the payments. The HE sector is different to the private sector in the speed at which the underlying business and employer/employee contributions would reduce in the event of a significant upheaval. Higher Education faces a range of threats but none short of widespread economic catastrophe would lead to its disappearance. The risk assessment of the scheme needs to take more account of this. A move to self-sufficiency would also make the scheme significantly more vulnerable to other risks such as asset concentration, collateral requirements and a longevity shock.

While the self-sufficiency measure should not be discarded, in terms of Trustee decision making, several better alternatives are available and have been suggested. These include:

1. Stochastic modelling to determine what additional contribution would be required to achieve (for example) a 95% probability **of being able to pay pensions as they fall due** (and considering if this additional contribution would be within the Affordable Risk Capacity). This allows testing of various portfolios to see what provides the best expected returns within a given risk envelope. It also reflects much better how USS would actually manage the risk in practice.
2. Stress testing, using worst case historical returns to determine what additional contributions would be required to make pension payments in these circumstances (and checking that this contribution was within the Affordable Risk Capacity).

Both stochastic modelling and stress testing based on worst case historic returns are relied on by USS in its own risk methodologies elsewhere already and therefore should be acceptable.

*There is serious doubt over whether equities (or other growth assets) provide inflation protection over the long term*

You imply on page 4 of your letter that there is real doubt that equities provide inflation protection over the longer term, saying: “studies have shown that, in *some* regimes, equities can provide *some* inflation protection over the medium to long term” (emphasis added). We agree with your view that equities do not provide inflation protection over the short to medium term. However, we firmly believe that they do over the longer (15-20 year) term. A portfolio of global equities has never decreased in value in real terms over a 20 year period over the last 100 years<sup>1</sup>. If there are well researched studies that challenge this view then it would be very good to have sight of them.

Of course, one should only rely on a large proportion of equities or other growth assets in the portfolio to the extent that the portfolio can cope with all reasonably expected volatility in the value of these assets. In practice this means that the scheme is unlikely to have a high proportion of growth assets if it is closed to new accrual, has a material (e.g. 4%+) proportion of the fund paid out each year and doesn't have the support of a strong covenant

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<sup>1</sup> Source Dimson Marsh Staunton Dataset

– none of which applies to USS. The methodologies identified above will allow USS to optimise its portfolio.

*Managing the volatility in the gap to self-sufficiency metric is paramount and it is worth the reduction in expected overall return and the reduction in collateral headroom*

In the presentation for the VIS technical webinar held on 28<sup>th</sup> February (document linked [here](#)), you proposed moving to candidate portfolio 2 (the proposed VIS) from candidate 1 (the current portfolio). On page 27, you point out that this would cut the risk of the self-sufficiency deficit breaching 150% of the Affordable Risk Capacity from 3.8% to 3% in 3 years, at the cost of several billion pounds of lost expected value to employers and members and a significant reduction in the collateral headroom.

It is difficult to see that this risk trade-off is appropriate – especially given the unreliability of the self-sufficiency metric as outlined above.

We are particularly concerned about the reduction in collateral headroom. We note that you have tested against the worst annual market movements in the last 70 years. However, a stress test that applies the worst real returns over the last 120 years to the USS portfolio shows that even under these circumstances, there would be sufficient funds in the USS to meet all future repayments without requiring any further support from employers. You have said that you do not consider this adequate evidence for the robustness of the USS portfolio. It therefore must follow that a 70 year worst case stress test is also an inadequate gauge of risk. Furthermore, we have concerns about market liquidity drying up in periods of high market stress (as all the arrangements are short term) and would like to see some further analysis on this point.

*No alternative methods of managing risk are viable*

Your response appears to have ignored our suggestions about alternative options for managing the inflation risk without resorting to investment strategies that are likely to significantly impair value for employers and members.

We suggested that liabilities could be managed – for example by offering members who don't really value the DB benefits to transfer to DC. This could well encompass people with only a few years of accrual who are not in the UK and would prefer a transfer to their home jurisdiction or people with large DB pots who see value in swapping some for a DC pot which should in most circumstances deliver a higher return – as suggested by Professors Miles and Sefton at Imperial College Business School. Furthermore, there are work streams underway to review aspects of the USS scheme – on Governance, low-cost options and risk sharing (e.g. Conditional Indexation) which could have a material bearing on the risk. There is a strong case for reviewing these alternatives before embarking on a strategy that will likely come at a significant cost to employers and members and import risk through leverage into the scheme.

*Action needs to be taken now*

Your argument as to the reason why action needs to be taken now is summarised in Q1 of the Q&A document. This compares the self-sufficiency liability with the net assets of the HE sector and illustrates that the self-sufficiency liability has been growing faster than the net

assets of the sector since 2014. However, as discussed above, we do not consider the self-sufficiency liability a good measure of risk for an open scheme with a strong sponsor covenant.

We are not against the purchase of index linked assets and modest levels of leverage in the scheme and indeed there may be attractive purchase opportunities in the next 2-3 years in the US and UK as central banks act to reduce inflation. However, it is essential that these risks and opportunities are evaluated against metrics that consider the position **in relation to the payment of pensions as they fall due and actions that USS might actually take** (rather than those implied in the self-sufficiency test), and considered against other methods of managing the liabilities, for example the ones set out above. We believe USS already has done much of this modelling and it should not be difficult to share it with employers.

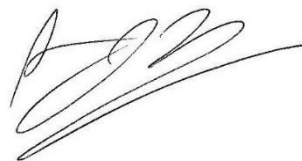
The recent JNC monitoring position paper as of the end of February 2022 showed a significant fall in the technical provision and self-sufficiency deficits as a result of recent market movements. The market movement provides more leeway in relation to the risks that you have outlined, which are driving the change in investment strategy. We believe that this reinforces our argument not to change the investment strategy now but to wait to see the results of the next valuation.

In summary, we still do not believe that the case for further purchases of inflation-linked bonds has been made and we believe the increase in leverage may introduce potentially significant risks into the scheme in a period of high market volatility. We would urge you to consider further the points outlined in this note and in particular the alternative risk metrics to self-sufficiency, the alternative methods to manage risk and the timing of any changes that are made.

Yours sincerely



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Vice-Chancellor University of Oxford



Professor Stephen Toope  
Vice-Chancellor University of Cambridge



Professor Alice P. Gast  
President Imperial College London

cc:

Dame Kate Barker, Chair of USS  
Russell Picot, Chair of the USS Investment Committee  
Simon Pilcher, Chief Executive Officer of USS Investment Management