University and College Union

KEELE UCU TECHNICAL NOTE

Test 1 - 'A large and demonstrable mistake'

USS has three tests that are used to measure the soundness of the scheme's finances, but it is Test 1 that has been given special prominence and has been used to justify the controversial programme of 'de-risking' (the shift from growth assets to low risk but low return investment vehicles), which has produced the large deficit in the 2017 valuation.

Test 1 measures the 'reliance on covenant', i.e., the size of risk that universities run in underwriting the scheme. The September 2017 consultation document explains: 'Reliance is measured by the trustee as the difference between the assets held by the scheme to fund the promised benefits, and those required by a low risk investment portfolio (a funding approach known as self-sufficiency), which would provide a high level of security of all future benefit payments in respect of accrued benefits being met without further contributions from employers. The trustee establishes the maximum reliance that it is willing to place on the employers collectively.' (p.40)

Let us unpack this. Imagine the scheme closes to new contributions in 20 years' time (the year 2037), and its assets have to be transferred entirely to bonds to provide a predictable income to pay the benefits that members have earned up to the date of closure. Would the assets be sufficient, or would there be a shortfall, which universities would have to make up? There are three relevant figures:

(1) The assets the scheme will have in 2037. This is projected to be £78.2bn.

(2) The technical provisions (TP) liabilities: this is a measure of what assets would be needed in 2037 to fund the accrued benefits, assuming the current mixed investment portfolio, on prudent risk assumptions. This is projected to be £59.2bn.

(3) The self-sufficiency (SS) liabilities: this is a measure of what assets would be needed in 2037 to fund the accrued benefits, assuming they are entirely invested in bonds from 2037 onwards, on extremely pessimistic risk assumptions. This is projected to be £81.0bn.

(All figures are in today's prices and assume current contributions and benefits. They have been calculated by UCU negotiator Sam Marsh, but are within 5% of USS's own figures.)

Therefore assets minus TP liabilities equals £19bn. This is the (very large) surplus that USS is expected to have in 2037, using USS's normal valuation method and assuming no change to its investment portfolio.

Assets minus SS liabilities equals £-2.8bn. So, in USS's terminology, the 'reliance on covenant' (the extra amount the employers would have to contribute if the scheme closed in 2037) is 2.8bn. This is well within the assumed 'maximum reliance' of £10bn. Thus Test 1 is satisfied, and there is no need for de-risking.

So what's the problem? The trouble is that USS in practice calculates 'reliance on covenant' in a different way. From the above figures, TP liabilities minus SS liabilities equals £-21.8bn so USS takes 'reliance on covenant' to be £21.8bn. Since this exceeds £10bn, Test 1 is considered not to be satisfied. Instead of calculating the assets in 2037, USS uses the TP liabilities as a proxy measure for them. As Sam Marsh has been told, 'the trustee's valuation methodology does not require the projection of assets based on current contribution rates, since the assets are taken as being equal to the technical provisions at the end of the 20 year reliance horizon. We have not therefore sought to confirm these figures.'

Why assume the assets and the TP liabilities are equal, when they are not? Further correspondence between Mike Otsuka, a UCU pensions expert, and the USS's Chief Risk Officer Guy Coughlan have confirmed that it is the express policy of USS not to allow a surplus to exist, i.e., to ensure that the assets equal the TP liabilities, and to ensure that both equal the SS liabilities minus the maximum reliance figure of £10bn. For more information on this inexplicable refusal to allow a surplus, see here: https://medium.com/@mikeotsuka/the-rise-in-contributions-traces-to-an-inexplicable-refusal-to-allow-a-surplus-f23d9ccfcdb

That is to say, USS first calculates the SS liabilities figure of £81bn, then adopts a target of making assets and TP liabilities both equal to £81bn - £10bn = £71bn, then seeks to reach this target by de-risking, thereby reducing assets and increasing TP liabilities.

This is the real reason for the de-risking. Test 1 is deemed to be failed; this is then used as a justification for de-risking and for further contribution increases. The language of 'a significant increase in the reliance on the covenant' is used to create the impression that universities are being exposed to unacceptable risks, when in reality all it means is that the TP liabilities and the SS liabilities are far apart.

The Joint Expert Panel set up in 2018 to review USS's valuation methodology stated the following about the use of Test 1 by the USS Trustees:

- "The Panel has concluded that the outputs of Test 1 [...] are highly sensitive to the input assumptions, many of which are very subjective."
- "We believe Test 1 is given too much weight in determining the valuation and its effects extend beyond its original purpose. Rather than being used as a "stop-and-check"

reference point, Test 1 is being used as a constraint on benefit design and driver of investment strategy."

- "The Panel does not consider this helpful. It would be far better if Test 1, were its use to continue, was used as a test that informed other aspects of the valuation and funding strategy rather than acting as its lynchpin."
- "The Panel is of the view that self-sufficiency is a useful concept as an element in a test. It provides a reference point for judging whether a scheme is over-reliant on the sponsor covenant. However, the way in which the employers' risk appetite has been applied through Test 1 has contributed to the adoption of strong risk aversion. The Panel's view is that adopting a time horizon of 20 years [...] and the hypothetical move to a low-volatility, low return portfolio is only one of many paths available for a scheme with the strong, long-term, prospects and unique characteristics of USS."
- "Overall, this approach dampens perceptions of the outlook for the Scheme which, in the Panel's view, is strong."

Further details:
https://www.youtube.com/watch?time_continue=4&v=DlMxwIytgNc
https://medium.com/@mikeotsuka/uss-owes-scheme-members-an-answer-to-sam-marshs-addendum-to-his-jep-submission-b432cd95b360
https://medium.com/@mikeotsuka/usss-valuation-rests-on-a-large-and-demonstrable-mistake-691103c94ca6
https://medium.com/@mikeotsuka/why-uss-lacks-grounds-for-a-reliance-trigger-c502e0fbfd2b
https://medium.com/ussbriefs/a-flawed-valuation-the-laypersons-guide-to-my-findings-on-uss-s-test-1-b9e0c53f5d67

USS's response, which entirely fails to address these arguments, is at

https://www.uss.co.uk/how-uss-is-run/valuation/2017-valuation-updates/claims-of-a-large-and-demonstable-error