USS briefing: Technical Provisions Consultation – Additional Future Projections (Appendix 2)

This briefing note provides additional stochastic analysis relating to the likelihood of required Total Contribution Rates in the future. This represents the full analysis underlying the high-level information already contained in the Technical Provisions (TP) Consultation document and the Supporting Information pack.

This additional analysis has been requested by UUK, specifically relating to the likelihood of the scheme requiring a contribution rate of at least **25.2%** in 3 and 6 years' time, having paid a total contribution rate of **20.6%** from 31 March 2023.

As per the equivalent analysis in the TP Consultation Document, the results are shown with and without retention of the 31 March 2023 TP surplus.

This is a technical document by design and has been developed for a specific purpose for UUK. The original analysis upon which this work is based can be found in Appendix 2 of the TP Consultation document (here), where a glossary of commonly used terms can also be found. The analytical methodology and assumptions are the same as per the original analysis and are outlined in detail in section 3 of the Supporting Information Pack (here).

As noted in the main TP Consultation document, the purpose of these projections is to start to explore how stability of the required contribution rate may vary in future, under different scenarios. They are based on various simplifications and should, therefore, be viewed as indicative rather than being part of the development of the proposed contribution rate at this valuation.

As in the TP Consultation document, to inform the impact of investment strategy on the projections, we show results based on the Valuation Investment Strategy (VIS) and two simple and illustrative alternative investment strategies:

Illustrative Investment Strategies[1]		**More growth, less hedging**	**Current VIS**	**Less growth, more hedging**
Asset allocation[2]	Growth assets exposure	70%	60%	50%
	Credit assets exposure	25%	25%	25%
	Liability hedge ratios (self-sufficiency basis)	30%	40%	50%

Notes
1 See Supporting Information for the return metrics associated with these portfolios.
2 These percentage allocations do not add up to 100% as we show liability matching assets in terms of their hedge ratio.

Our investment adviser originally modelled the following (as contained in the TP Consultation Document and Supporting Information):

• The probability that the required total contribution rate exceeds 20.6% or 26% at a 2026 and 2029 valuation, assuming each respective total contribution rate is paid from 31 March 2023

This analysis is supplemented in this document with the following:

• The probability that the required total contribution rate exceeds 25.2% at a 2026 and 2029 valuation, assuming a 20.6% total contribution rate is paid from 31 March 2023

The two surplus cases under investigation (that is, 'Retains surplus' and 'Does not retain surplus') refer to the provisional Technical Provisions surplus at the 31 March 2023 valuation date.
As noted in the TP Consultation document, the modelling applies an asymmetrical approach to the treatment of prevailing surpluses built up from the 2023 valuation date.

Specifically, any scenarios in which a surplus is revealed at the 2026 or 2029 valuation, the surplus is assumed to be retained within the scheme (that is, not used to manage contribution rates, for example). However, the required contribution rate in scenarios in which a deficit emerges will include an element of deficit recovery contributions.

This means that the prevailing **full** required future service rate is recorded in **all** scenarios (irrespective of whether it could potentially be mitigated by any surplus). In addition, a deficit recovery contribution is **also** recorded in any scenario in which a deficit emerges.

More generally, these projections involve assumptions about the future and do not account for potential actions which may be taken depending on the scenario.

Notwithstanding the simplifications highlighted here and in the main document, the modelling output provides an indication as to the relative outcomes under different courses of action. The JNC stability working group is actively considering a range of future economic scenarios in exploring solutions that target greater stability for benefits and contributions.

The results of the modelling are given in the tables below.

At Year 3 (2026):

Investment Strategy	Probability of exceeding a required contribution rate of 20.6% in 2026, having paid 20.6% from 31/03/23[1]		Probability of exceeding a required contribution rate of 25.2% in 2026, having paid 20.6% from 31/03/23[1]		Probability of exceeding a required contribution rate of 26% in 2026, having paid 26% from 31/03/23[1]	
	Retains surplus	Does not retain surplus	Retains surplus	Does not retain surplus	Retains surplus	Does not retain surplus
More growth, less hedging	58%	65%	27%	40%	23%	33%
Current VIS	57%	65%	26%	39%	21%	33%
Less growth, more hedging	57%	65%	24%	38%	18%	31%

Notes
1 For simplicity of modelling, it is assumed that the contribution rate in each of these scenarios comes into force from the valuation date.

At Year 6 (2029):

Investment Strategy	**Probability of exceeding a required contribution rate of 20.6% in 2029, having paid 20.6% from 31/03/23[1]**		**Probability of exceeding a required contribution rate of 25.2% in 2029, having paid 20.6% from 31/03/23[1]**		**Probability of exceeding a required contribution rate of 26% in 2029, having paid 26% from 31/03/23[1]**	
	Retains surplus	Does not retain surplus	Retains surplus	Does not retain surplus	Retains surplus	Does not retain surplus
More growth, less hedging	53%	59%	33%	42%	27%	36%
Current VIS	53%	60%	32%	42%	26%	35%
Less growth, more hedging	52%	61%	30%	42%	24%	34%

Notes
1 For simplicity of modelling, it is assumed that the contribution rate in each of these scenarios comes into force from the valuation date.