

Actuarial report at 31 March 2022

Universities Superannuation Scheme



This report was commissioned by and is addressed to the Trustee of the Universities Superannuation Scheme (“the Scheme”) and is the second actuarial report since the actuarial valuation at 31 March 2020.

Its purpose is to provide an estimate of the ongoing funding position at 31 March 2022 and an indication of the required contribution rate to fund future service benefits based on market conditions as at 31 March 2022. The contribution rate takes account of the benefit changes that came into effect on 1 April 2022.

The Trustee is required to share this report with the Scheme’s participating employers within seven days of receiving it. Some of the information in this report also needs to be included in the next summary funding statement for members.

Please note there have been very significant changes in financial markets since 31 March 2022 which will have materially affected the Scheme’s funding position. This report is provided solely to meet the statutory requirement to report on the funding position at that date and should not be used for any other purpose.

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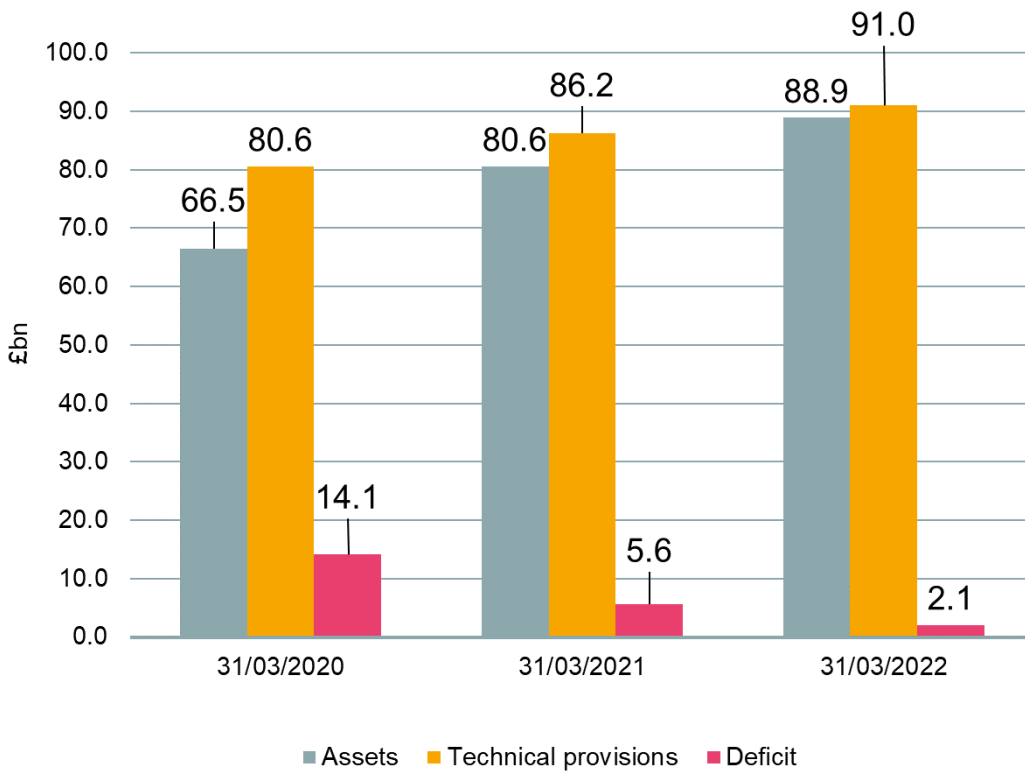
Use of our work

This work has been produced by Lane Clark & Peacock LLP and Aaron Punwani as the Scheme Actuary (“we” or “us”) under the terms of our written agreement with the Trustee of the Universities Superannuation Scheme (“Our Client”). This work is only appropriate for the purposes described and should not be used for anything else. It is subject to any stated limitations (eg regarding accuracy or completeness). Unless otherwise stated, it is confidential and is for your sole use, although we acknowledge that you are required to pass it to the employer(s) sponsoring the Scheme, and that you may make it available to Scheme members. You may not provide this work, in whole or in part, to anyone else without first obtaining our permission in writing. We accept no liability to anyone, including but not limited to Scheme members and employers, who is not Our Client. If the purpose of this work is to assist you in supplying information to someone else and you acknowledge our assistance in your communication to that person, please make it clear that we accept no liability towards them.

Professional Standards

This report is part of the work in connection with the valuation of the Scheme. The report has been produced for the information of interested readers and not with the intention that it should support any decision that they may make. Our work in preparing this document together with the accompanying cover paper complies with Technical Actuarial Standard 100: Principles for Technical Actuarial Work.

Estimate of funding position at 31 March 2022



The above chart shows the estimated position as at 31 March 2022, alongside the estimated position at 31 March 2021 and the final results of the 31 March 2020 actuarial valuation for comparison.

The estimated deficit fell by £12bn over the two years to 31 March 2022. The main reason is the positive investment returns achieved on the Scheme's assets over the period. The technical provisions have also increased (albeit by less than the asset value) and this is driven by high realised inflation and higher expected future inflation which feeds through to higher expected pension increases, offset to an extent by higher discount rates both before and after retirement. The improvement in the deficit since 31 March 2021 reflects similar factors.

The calculation of the estimated technical provisions as at 31 March 2022 is consistent with the Trustee's Statement of Funding Principles (SFP) dated 28 March 2022. The SFP states that, given the unusual market conditions as at 31 March 2020, the Trustee may adopt different discount rates relative to gilts and / or a different derivation of its CPI inflation assumption at different effective dates. The assumptions used in this report reflect my advice on assumptions to adopt as at 31 March 2022, consistent with those as at 31 March 2020. A summary of the assumptions is set out in Appendix 2.

Estimate of future service contribution rate based on financial conditions at 31 March 2022

The indicative future service contribution rate based on financial conditions as at 31 March 2022 for benefits accruing from 1 April 2022 is **24.5%** of Salary (reducing to 23.7% of salaries from 1 April 2024). This includes allowance for assumed investment outperformance during the deficit recovery period – without such outperformance the current contribution requirement would be 24.8% of Salary.

The above figures compare with a result of 25.2% of Salary (reducing to 24.9% from 1 April 2024) calculated based on financial conditions as at 31 March 2020 and reflecting the benefits being earned following the changes from April 2022.

These figures do not include any allowance for deficit-reduction contributions.

The estimated future service contribution rate for benefits accruing from 1 April 2022 has reduced due to changes in market conditions between 31 March 2020 and 31 March 2022. The main reason for the reduction is higher discount rates both before and after retirement, offset by higher expected future inflation which feeds through to higher expected pension increases (albeit to a more limited degree for benefits accruing from 1 April 2022 in light of the 2.5% cap on increases applying in future).

Scope

The calculations in this report have been prepared in accordance with the requirements of the Pensions Act 2004 and the Occupational Pension Schemes (Scheme Funding) Regulations 2005. This document does not constitute an actuarial investigation of the Scheme under Rule 76.1.

This work has been undertaken assuming that there are no specific decisions for you to take as a result of this report. Please contact me if you do intend to take some specific actions on receiving this report, as it may then be appropriate for me to provide additional advice.

The next full actuarial valuation is due as at 31 March 2023.

The headline figures in this note have been calculated by the USS Funding Strategy Team based on my instructions using PFaroe, the Trustee's third-party valuation tool. I have reviewed the figures for reasonableness in view of the statutory requirements for an annual actuarial report. I am satisfied that the results are suitable for the purposes of this report.

Method

The technical provisions as at 31 March 2022 have been estimated by calculating projected benefit payments from the Scheme based on a projection of the Scheme membership data as at 31 March 2020 and the demographic assumptions adopted for the actuarial valuation as at 31 March 2020, other than a small update to the mortality assumption to use the "CMI 2020" model (with zero weighting to 2020 experience) instead of the "CMI 2019" model. The figures also allow for an estimate of a further two years' accrual to active members based on the membership as at 31 March 2020. These cashflows have then been discounted to 31 March 2022 using the discount rates described in Appendix 2 to derive the estimate of the technical provisions.

The indicative contribution rate for future service benefits has been derived using a consistent method, allowing for the future service benefits that apply from 1 April 2022.

The actuarial assumptions used for this purpose are intended to be consistent with the Statement of Funding Principles dated 28 March 2022. They are not necessarily the assumptions I would have recommended if an actuarial valuation had been carried out as at 31 March 2022, which would have been informed by a full analysis of membership experience up to the valuation date, and would have been subject to a formal consultation process.

I have assumed that all membership experience over the period was in line with the assumptions used in calculating the technical provisions, as set out in the Scheme's Statement of Funding Principles. If the Scheme's experience was significantly different from these assumptions or if there were significant events of which I am not aware, then the technical provisions based on a full actuarial valuation could be different from the estimated figures in this report.

This report does not consider the solvency level of the Scheme, either on a buy-out basis or on a basis relative to the compensation provided by the Pension Protection Fund. The cost of buying out benefits with an insurance company is likely to be significantly higher than the technical provisions.

Consistently with the actuarial valuation at 31 March 2020, the figures in this report relate solely to the defined benefits section of the Scheme.

Developments since the valuation date

I have reflected the benefit changes for future service from 1 April 2022. The revised Statement of Funding Principles dated 28 March 2022 reflects the covenant support that the employers have provided. I understand that there were no other material changes to the Scheme during the period.

There have been very significant changes in financial markets since 31 March 2022 which will have materially affected the funding position of the Scheme; this is not reflected in this report.

Prepared on 19 January 2023

Appendix 1

Data used in our calculations

I have used the same membership data as for the full actuarial valuation of the Scheme as at 31 March 2020. A summary of and important notes in relation to the data are included in my report on the actuarial valuation dated 30 September 2021. In addition I have allowed for the general increase in CPI over the period as it applies to pension increases, namely 0.5% in April 2021 based on CPI in the year to September 2020 and 3.1% in April 2022 based on CPI in the year to September 2021.

Asset value at 31 March 2022

I have used a total asset value at 31 March 2022 for the defined benefits section of £88.9bn, as set out in the audited Scheme accounts.

Appendix 2

Actuarial assumptions

The key financial assumptions used have been set consistently with the approach set out in the Trustee's Statement of Funding Principles dated 28 March 2022, reflecting my advice in relation to financial market conditions and the outlook for future returns as at 31 March 2022. The financial assumptions at 31 March 2020 and 31 March 2021 are shown for comparison.

	31 March 2022	31 March 2021	31 March 2020
	% pa	% pa	% pa
Price inflation (CPI)	3.0	2.5	2.1
Return from gilts	1.7	1.3	0.7
Discount rates – assumed return above gilts			
Pre-retirement	2.45	2.45	2.75
Post-retirement	0.55	0.55	1.0
Allowance for investment out-performance in calculation of future service contributions	0.25	0.25	0.5

The above rates for gilt returns and CPI are illustrative single-equivalent rates. In practice, full yield curves for gilts and inflation have been used in the calculations.

Pension increases before and after retirement are assumed to be 2bps higher than the CPI curve for uncapped or “soft cap”¹ pension increases (2020: 5bps higher; 2021: 3bps higher) and 82bps lower than the CPI curve for benefits in line with CPI with a minimum each year of 0% and maximum of 2.5% (2020: 35bps lower; 2021: 55bps lower).

Compared with the Statement of Funding Principles dated 28 March 2022 the projection of mortality improvements has been updated from CMI 2019 to CMI 2020 (with zero weighting of 2020 experience) whilst all other parameters are as set out in the Statement of Funding Principles. This is the same assumption for mortality improvements as was used for the Trustee's Accelerated Year-end Review of the Scheme's financial position at 31 March 2022. If the mortality improvements allowance as stated in the Statement of Funding Principles were used instead, I estimate the deficit would be around £0.1bn higher at £2.2bn, ie a very similar position. All other non-financial assumptions are as set out in the Statement of Funding Principles dated 28 March 2022.

¹ The soft cap of 5% refers to benefit increases in line with full CPI up to 5%, plus 50% of any CPI increase between 5% and 15%.