Monitoring of the 2020 Financial Management Plan March 2022

Background

In between actuarial valuations, the Trustee monitors how the Scheme is progressing against its Financial Management Plan. This document provides details of the monitoring for the month end of March 2022.

The purpose of the monitoring is to indicate whether or not the Scheme's financial position is progressing as expected and whether it is appropriate to continue to fund the Scheme on the basis of the 2020 valuation. It does not lead to any direct action from the Trustee other than potentially commissioning further analysis and advice.

Further, it should be noted that monitoring is not intended to answer the question: what are the contribution requirements if a valuation was undertaken at the monitoring date?

In the main body of the report, figures are calculated on the benefit changes that the Joint Negotiating Committee (JNC) decided to put forward and with the associated additional covenant support measures provided by our sponsoring employers which came in to effect from 1 April 2022.

This document is published by the Trustee for information only and is not intended to be used as the basis for any decisions.

This document is issued by Universities Superannuation Scheme Limited (the "Trustee") in its capacity as the sole corporate trustee of the Universities Superannuation Scheme. The Trustee is making this document available for information purposes only and on a non-reliance basis. Nothing in this document constitutes advice. It is important that any person accessing this document takes their own professional advice on its contents. While the information in this document – including any assumptions and parameters upon which it is based - has been prepared in good faith, no representation, warranty, assurance or undertaking (express or implied) is or will be made by the Trustee in relation to the adequacy, accuracy, completeness or reasonableness of that information. Neither the Trustee nor its third-party advisors accept any liability to third parties in relation to the information in this document.

Monitoring of the 2020 Financial Management Plan March 2022

Differences between monitoring and actuarial valuation

The monitoring approach is not as thorough and hence does not give the same outcome as would be given by an actuarial valuation at the effective date. This is for a number of reasons, including:

- While monitoring updates the main financial assumptions, these and other assumptions do not go through the same level of assessment as would be the case for an actuarial valuation; in particular they do not necessarily reflect the risk capacity and appetite of employers at that date. In practice for an actuarial valuation the Trustee's Integrated Risk Management Framework would influence the choice of assumptions.
- An actuarial valuation would require consultation with UUK in relation to the assumptions used and the contributions payable; it is not possible to pre-judge the outcome of any such process.
- The deficit recovery contributions are based on the recovery plan parameters shown. At a valuation, additional factors (including the views of the Pensions Regulator) would be considered which could result in a different recovery plan.
- The calculations do not allow for new membership data, and contain some approximations relative to an actuarial valuation.

The monitoring position is relatively volatile from month to month, and in light of this the Trustee considers the overall history and trends since the valuation date rather than just the position at the monitoring date.

FMP MONITORING REPORT - END MARCH 2022

Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Monitoring results	Valuation	Monitoring	
	31-Mar-20	31-Mar-22	Change
Assets (£bn)	66.5	88.8	+22.3
TP liabilities (£bn)	80.6	90.4	+9.8
TP deficit (£bn)	14.1	1.6	-12.5
Future service cost	25.2%	24.7%	-0.5%
Deficit recovery contribution *	6.2%	0.0% - 1.5%	-6.2%4.7%

^{*} Range based on the parameters in the Total contribution box below

Monitoring metrics

Reliance Risk Metric	Amber	Total contribution		Green	Covenant	Green
Measures potential contribution required to reach self-sufficien	ncy	Remaining recovery period 0.25% outperformance	24.4%		Measures strength of the sector	
9.5%		10 year recovery period No outperformance	26.2%		Unchanged	
Valuation date	13.2%	Valuation date		31.4%	Valuation date	Strong

Main drivers of change since 31 March 2020 valuation date

- Since the valuation date, the value of the Scheme's assets recovered to exceed pre-pandemic levels due in large part to high returns on equities.
- The Technical Provisions liability has also increased on the monitoring basis since the valuation date to due to rising inflation expectations and lower future expected returns relative to gilts (partly due to the high returns experienced). Nominal gilt yields have increased since the valuation date, partly offsetting these effects.
- Overall the Technical Provisions deficit has fallen due to the increase in asset prices being greater than the increase in Technical Provisions liability.
- The future service contribution requirement has slightly decreased on the monitoring basis due to higher nominal gilt yields. The 2.5% cap on annual inflationary increases (on benefits earned since 1 April 2022) has limited the impact of higher expected inflation on the future service cost.
- The reduction in the TP deficit has led to the deficit recovery contributions falling on the monitoring basis. This effect outweighs the increase in the future service cost and so the total contribution requirements based on the interim monitoring are lower than at the valuation date.
- The Total Contribution metric has improved from Amber to Green since the valuation date. The other metrics show the same status as at the valuation date.
- We have also estimated the future contribution requirement for pre-1 April 2022 benefits as 36.4% with a deficit of £3.1bn. Deficit contribution requirements would be 0.3% allowing for a 15-year recovery period from the monitoring date and 0.25% p.a. out-performance, and 2.9% assuming a recovery period of 10 years and no out-performance. This is based on a deficit calculated with a pre-retirement discount rate 0.25% lower than for post-22 benefits.
- Since 31 March 2020 experience month-by-month has been volatile.

If, at the next valuation, there is a significantly improved financial position relative to the 2020 valuation, it may be possible to increase benefits, decrease contributions or do a combination of both.

Information is based on the monitoring approach, which is not intended to reflect the results that would be given by an actuarial valuation. This should be read in conjunction with the full monitoring report.

FMP MONITORING REPORT - END MARCH 2022

Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Reliance Risk Metric

9.5%

Valuation date 13.2%

Affordable Risk Capacity (ARC) £33 - 36bn

Valuation date £30 - 33bn

Reliance Risk Metric: Amber

Total contribution

Remaining recovery period 0.25% outperformance **24.4%**

10 year recovery period No outperformance **26.2%**

Valuation date 31.4%

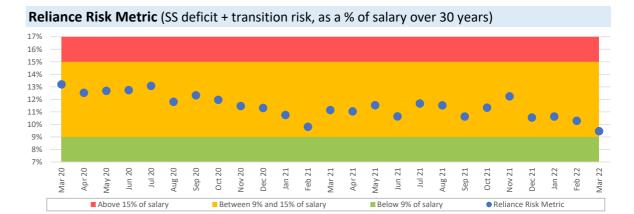
Total contribution: Green

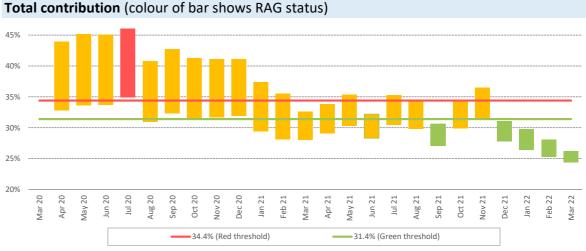
Covenant

Unchanged

Valuation date Strong

Covenant: Green





The height of the bar shows the range in contribution requirements, with the lower end of the bar showing the contributions using DRCs based on the remaining recovery period with outperformance and the upper end using DRCs based on a 10-year recovery period with no outperformance.

Note: Affordable Risk Capacity represents the present value of 10% of salary over 30 years.

Liabilities at the valuation date included an allowance in the liabilities of £0.5bn for certain late retirement entitlements and short service members with less than two years' service who retain rights to cash transfer sums. This adjustment is included in the monitoring figures.

The DRC calculation is approximate and assumes an immediate change in contributions. The FSC has been adjusted approximately to allow for the agreed delayed implementation of the 2.5% pa pension increase cap. The actual DRC will increase to 6.3% when this is implemented.

FMP MONITORING REPORT - END MARCH 2022

Quarterly covenant monitoring update

SUMMARY: The covenant remains Strong

HIGHLIGHTS/LOWLIGHTS

- Employer debt monitoring survey launched 28 March
- · Employer engagement so far limited but constructive
- No secured debt or urgent cases in 2022 to date

Sector insights and events:

- DfE HE funding policy update and proposals announced 24/2. Initial assessment is limited and manageable overall covenant impact. Uneven impact across employer base, potentially more severe for some post-92 institutions. Consultations running on possible future controls on student numbers.
- Limited direct financial exposure to Russia (or Ukraine) across employer group (~3,000 Russian, ~800 Ukrainian students in UK institutions as of 2021 out of 2.1m full-time total)

ACTIVITY LOG (to 31/3/21)	(Number of interactions)	
	QTD	YTD
 Debt monitoring notifications 	2	2
Of which:		
 intention to secure deb 	t 0	0
 Quasi-security planned 	0	0
 Open engagement cases 	1	1
 Requests for clarification 	21	21
 Complaints received 	0	0

OPEN CASES	Issue raised	DATE FIRST REPORTED	CURRENT STATUS	PLANNED NEXT STEPS	RAG
One institution	Notification of intention to raise additional £50m of unsecured debt and refinance further £30m. No expected metric exceedance.	2/3/2022	USS requested meeting to understand intended use of proceeds, growth plans	None anticipated	G

FMP MONITORING REPORT - END MARCH 2022

Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Technical Provision	s Deficit	Self-Suffici	iency Deficit	Reliance Risk Met	ric
£1.6bn		£26	.6bn	9.5%	
Valuation date (31/03/2020)	£14.1bn	Valuation date	£35.5bn	Valuation date	13.2%
Liability	£90.4bn	Liability	£115.4bn	Components:	
Pre-retirement discount rate Post-retirement discount rate	Gilts + 2.45% Gilts + 0.60%	Discount rate	Gilts + 0.60%	Self suff deficit + transition risk (£ ÷ Value of salary over 30 years	6bn) £32.6bn £344bn
r ost retirement dissount rate	G1165 × 616670	Self-sufficiency VaR	£22.2bn	Reliance Risk M	etric: Amber
Future Service Contribution	n Requirement	Deficit Recove	ery Contribution	Total Contributio	n
24.7%		Remaining recovery period 0.25% outperformance	0.0%	Remaining recovery period 0.25% outperformance	24.4%
The Future Service Contribution Requirems allowance for outperformance, allowing for reduces the Future Service Contribution Re	or outperformance	10 year recovery period No outperformance	1.5%	10 year recovery period No outperformance	26.2%
approximately 0.3%.	quirement by	Valuation date	6.2%	Valuation date	31.4%
Valuation date (amount being	paid) 25.2%			Total contribu	ution: Green
Assets		IRMF	metrics	Covenant	
£88.8br	1	з	31-Mar-20 31-Mar-22	Unchange	d
Valuation date	£66.5bn	Metric A	10.0 9.4	Valuation date	Strong
'Breakeven' discount rate	Gilts + 1.31%	Metric B	-4.0 7.8		
Diedice en discount late	CPI - 0.02%	Metric C	40.6 49.5	Cove	nant: Green

Note: Affordable Risk Capacity represents the present value of 10% of salary over 30 years. The 'Breakeven' discount rate is that at which the liability value equals the asset value.

Liabilities at the valuation date included an allowance in the liabilities of £0.5bn for certain late retirement entitlements and short service members with less than two years' service who retain rights to cash transfer sums. This adjustment is included in the monitoring figures.

The DRC calculation is approximate and assumes an immediate change in contributions. The FSC has been adjusted approximately to allow for the agreed delayed implementation of the 2.5% pa pension increase cap. The actual DRC will increase to 6.3% when this is implemented. The total contribution allowing for outperformance includes allowance for outperformance on the future service contributions, and therefore is not equal to the sum of the components.

FMP MONITORING REPORT - END MARCH 2022

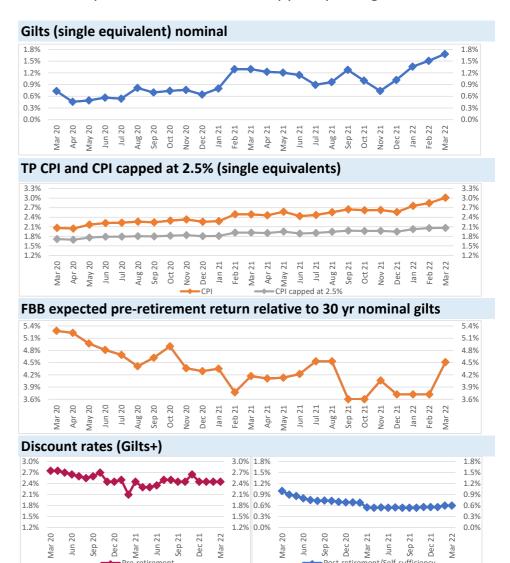
Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Technical Provisions - Assumptions				
	31-Mar-20	31-Mar-22		
FBB Pre ret 30 yr expected return *	Gilts + 5.28%	Gilts + 4.51%		
Pre-retirement discount rate	Gilts + 2.75%	Gilts + 2.45%		
Post-retirement discount rate	Gilts + 1%	Gilts + 0.60%		
Gilts (single equivalent) nominal	0.7%	1.7%		
CPI (single equivalent)	2.1%	3.0%		
CPI with 2.5% cap (single equivalent)	1.7%	2.1%		
Single equivalent dissount rate	Gilts + 1.6%	Gilts + 1.3%		
Single equivalent discount rate	CPI + 0.3%	CPI + 0.0%		

^{* 55%} growth portfolio until February 2022 then VIS portfolio

Self-sufficiency - Assumptions			
	31-Mar-20	31-Mar-22	
Discount rate	Gilts + 1%	Gilts + 0.60%	
Gilts (single equivalent) nominal	0.7%	1.7%	
CPI (single equivalent)	2.6%	3.5%	
Single equivalent discount rate	CPI - 0.9%	CPI - 1.2%	

Affordable Risk Capacity		
	31-Mar-20	31-Mar-22
Discount rate used to calculate the ARC	Gilts + 1.2%	Gilts + 0.87%



At 31 March 2020, an allowance for investment outperformance of 0.5% pa was made in calculating the future service contribution requirement and deficit recovery contributions. For monitoring subsequent dates, the allowance for investment outperformance is made in calculating the deficit recovery contribution and total contributions where indicated. Within the monitoring, the future service contribution requirement shown does not include outperformance. The outperformance allowance was reduced to 0.25% pa from 31 March 2021.

Page 7

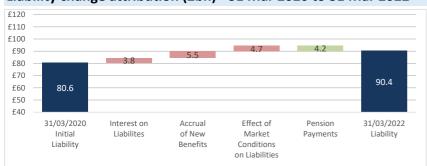
FMP MONITORING REPORT - END MARCH 2022

Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

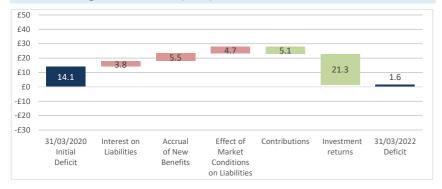
Technical Provisions

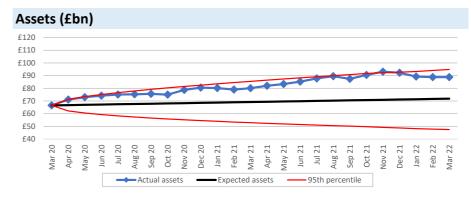
	31-Mar-20	31-Mar-22	Change
Assets £bn	66.5	88.8	+22.3
Liabilities £bn	80.6	90.4	+9.8
Deficit £bn	14.1	1.6	-12.5
Funded Status %	83%	98%	+15%

Liability change attribution (£bn) - 31 Mar 2020 to 31 Mar 2022

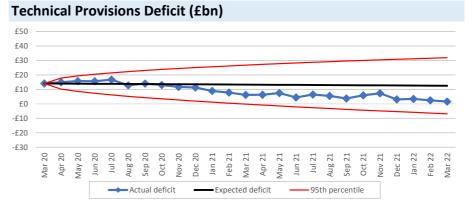


Deficit change attribution (£bn) - 31 Mar 2020 to 31 Mar 2022









FMP MONITORING REPORT - END MARCH 2022

Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Future service contributions required

	31-Mar-20	31-Mar-22
DB Future Service Cost over next 12 months	19.5%	19.0%
Expenses	0.4%	0.4%
Expected DC conts over next 12 months ¹	5.3%	5.3%
Total ²	25.2%	24.7%

Note

- 1. Includes 0.1% subsidy.
- 2. Excludes deficit contributions.

Future service contributions required (including DC)



Sensitivity and Duration

	31-Mar-20	31-Mar-22
TP Sensitivity (£bn) ¹	-1.6	-1.8
TP Duration of scheme (years)	20	19

Note

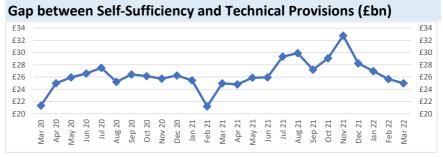
1. Sensitivity is the impact of a +0.1% change in the discount rates on the TP basis

Self-Sufficiency

	31-Mar-20	31-Mar-22	Change
Assets £bn	66.5	88.8	+22.3
Liabilities £bn	102.0	115.4	+13.4
Deficit £bn	35.5	26.6	-8.9
Funded Status %	65%	77%	+12%

	31-Mar-20	31-Mar-22	Change
10% of pay for 30yrs £bn	31.4	34.4	+3.0





At 31 March 2020, an allowance for investment outperformance of 0.5% pa was made in calculating the future service contribution requirement and deficit recovery contributions. For monitoring subsequent dates, the allowance for investment outperformance is made in calculating the deficit recovery contribution and total contributions where indicated. Within the monitoring, the future service contribution requirement shown does not include outperformance. The outperformance allowance was reduced to 0.25% pa from 31 March 2021.

Page 9

FMP MONITORING REPORT - END MARCH 2022

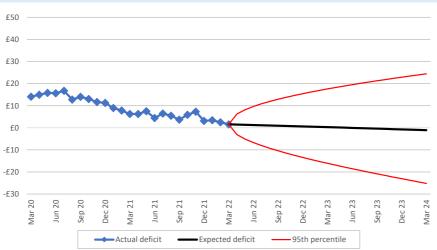
Figures allow for revised benefits from 1 April 2022 and implemented covenant support package

Probability of TP full-funding by end of recovery plan (April 2038)



All figures quoted to the nearest 0.5%. There was no FBB calibration for June 2021

Technical Provisions Deficit (£bn) - projection



95th percentile of Reliance Risk Metric in 3 years' time



All figures quoted to the nearest 0.5%. There was no FBB calibration for June 2021

Position of TP Pre Discount Rate on VIS Pre Portfolio Distribution

Percentile of pre-retirement discount rate on VIS Pre-retirement portfolio distribution vs Nominal gilts

	31/03/2022
Pre-retirement discount rate	Gilts + 2.45%
Percentile	74%

FMP MONITORING REPORT - END MARCH 2022

APPENDIX A - RAG rating definitions

Covenant

Green No apparent deterioration since previous review

Amber Potential deterioration due to emerging news and/or financial information

Red Significant deterioration due to emerging news and/or financial information

Reliance Risk Metric

Self-sufficiency liability + asset transition risk - assets, expressed as a percentage of salary over 30 years

Green Below 9% of salary (Approx £28bn at the valuation date - consistent with the position if we had been fully funded on a TP basis)

Amber Between 9% and 15% of salary (Between £28bn and £47bn at the valuation date)

Red Above 15% of salary (Above £47bn at the valuation date)

Total contribution

Sum of Future Service Contribution plus Deficit Recovery Contributions

With DRC calculated on:

- Calculation 1: Remaining term of the recovery period with outperformance (from March 2021 outperformance is set at 0.25% a year); and
- Calculation 2: A fixed recovery period of 10 years with no outperformance (which will lead to a higher figure than Calculation 1)

Green If the total contribution requirement using DRC 2 is less than or equal to the total contribution payable (31.4%)

Amber If the total contribution requirement using DRC 2 is greater than the total contribution payable (31.4%) and

the total contribution requirement using DRC 1 is less than or equal to 34.4%

Red If the total contribution requirement using DRC 1 is greater than or equal to 34.4%

FMP MONITORING REPORT - END MARCH 2022

APPENDIX B - IRMF Metric definitions

Metric A

Affordable risk capacity less (self-sufficiency liability less Technical Provisions)

Green Headroom > Asset transition and demographic risks

Amber Asset transition risk < Headroom < Asset transition risk and demographic risks

Red Headroom < Asset transition risk

Metric B

Affordable risk capacity less self-sufficiency deficit

Green Headroom > Asset transition risk

Amber 0 < Headroom < Asset transition risk

Red Headroom < 0

Metric C

Available risk capacity less self-sufficiency deficit

Green Headroom > 'Value at risk'

Amber Asset transition risk and demographic risks < Headroom < 'Value at risk'

Red Headroom < Asset transition risk and demographic risks

Note

Affordable Risk Capacity represents the present value of 10% of salary over 30 years

Asset and demographic transition risk, and available risk capacity, have not been updated since the valuation date

The figures in this report have been derived for the purpose of monitoring the movement in funding over time. The approach adopted is not as accurate as when determining the liabilities in a one-off calculation and therefore these figures are not intended to be used as a basis for advice without further consideration. Advice from the Scheme Actuary should be sought prior to any decision being taken on the funding of the scheme.