

Monitoring of the 2020 Financial Management Plan

September 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 September 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 which came in to effect from 1 April 2022 with the associated additional covenant support measures provided by our sponsoring employers .

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Monitoring of the 2020 Financial Management Plan

September 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.

- Market conditions at the end of September were particularly volatile given the turmoil following the announcements of the Chancellor's mini-budget on 23 September; yields on nominal and index-linked gilts both rose sharply at an unprecedented pace. Further, the volatility in the market is such that it is difficult to reliably value the Scheme's assets and liabilities at that date and the weeks that followed. Establishing the Scheme's financial position in such conditions with any certainty is extremely difficult and the monitoring does not attempt to do this comprehensively. Having said that, higher gilt yields, if maintained, should be good news for the funding level of the Scheme and will lead to lower required future service contributions, all other things being equal.

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FMP MONITORING REPORT - END SEPTEMBER 2022

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

Monitoring results	Valuation	Monitoring	
	31-Mar-20	30-Sep-22	Change
Assets (£bn)	66.5	72.6	+6.1
Technical Provisions liabilities (£bn)	80.6	67.0	-13.6
Technical Provisions deficit (£bn)	14.1	-5.6	-19.7
Future service cost	25.2%	18.5%	-6.7%
Deficit recovery contribution	6.2%	0.0%	-6.2%

Monitoring metrics

Reliance Risk Metric <i>Measures potential contribution required to reach self-sufficiency</i>	Green	Total contribution Remaining recovery period 0.25% outperformance	Green	Covenant <i>Measures strength of the sector</i>	Green
6.0%		10 year recovery period No outperformance		Unchanged	
Valuation date	13.2%	Valuation date	31.4%	Valuation date	Strong

Main drivers of change since 31 March 2020 valuation date

- Over the last six months there has been a significant reduction in the value of the Scheme's assets (from £88.9bn at 31 March 2022 to £72.6bn), which has largely been driven by prices in equity and bond markets falling. The value of the Scheme's assets at the end of September is still above that at the 2020 valuation date (£66.5bn).
- The Technical Provisions liability has decreased significantly on the monitoring basis since the valuation date due to rising real gilt yields, partly offset by higher inflation expectations.
- Overall the Technical Provisions deficit on the valuation date has been eliminated on the monitoring basis and is now showing a surplus of £5.6bn.
- The future service contribution requirement has 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) limits the impact of changes in expected inflation on the future service cost.
- Total contribution requirements (including deficit contributions) are significantly lower than at the valuation date based on the monitoring approach.
- Both the Reliance Risk Metric and Total Contribution Metric have improved since the valuation date, from Amber to Green, to be substantially within Green.
- Market conditions have remained highly volatile, since 31 March 2022 when the assumptions were last looked at in more detail as part of the Accelerated Year-end Review (AYR). During September the self-sufficiency deficit, estimated on a daily basis, ranged from -£8bn to +£10bn. This volatility has continued into October.
- The end of September was a very volatile period in markets following (now former) Chancellor Kwasi Kwarteng's mini-budget and the resulting uncertainty. As a result the exact position of the Scheme at the end of September cannot be established with any certainty and as such the figures in this report should be viewed with a degree of caution, although they are indicative of the direction of travel. Next quarter's FMP monitoring report, as at 31 December 2022, may be a better indicator of the Scheme's financial position providing markets have become more settled.

If, at the next valuation, there is a significantly improved financial position relative to the 2020 valuation, as is currently indicated by the monitoring, 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.

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Reliance Risk Metric

6.0%

Valuation date 13.2%

Affordable Risk Capacity (ARC) £22 - 24bn

Valuation date £30 - 33bn

Reliance Risk Metric: **Green**

Total contribution

Remaining recovery period 0.25% outperformance **18.5%**

10 year recovery period No outperformance **18.5%**

Valuation date 31.4%

Total contribution: **Green**

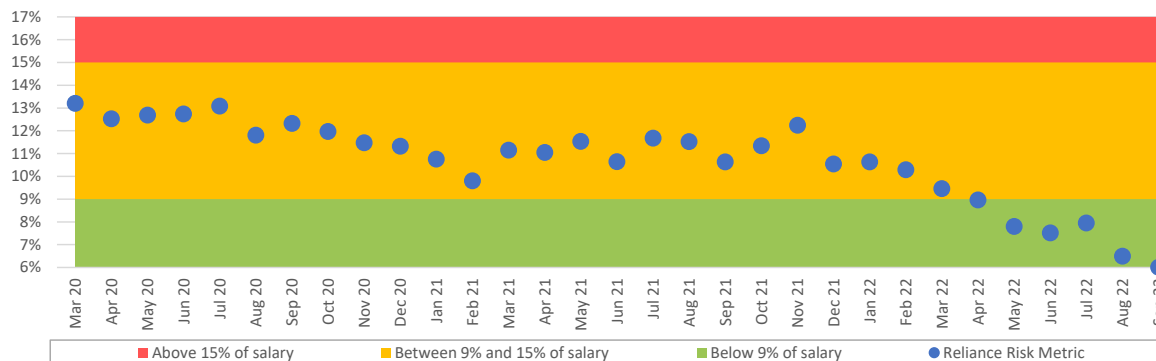
Covenant

Unchanged

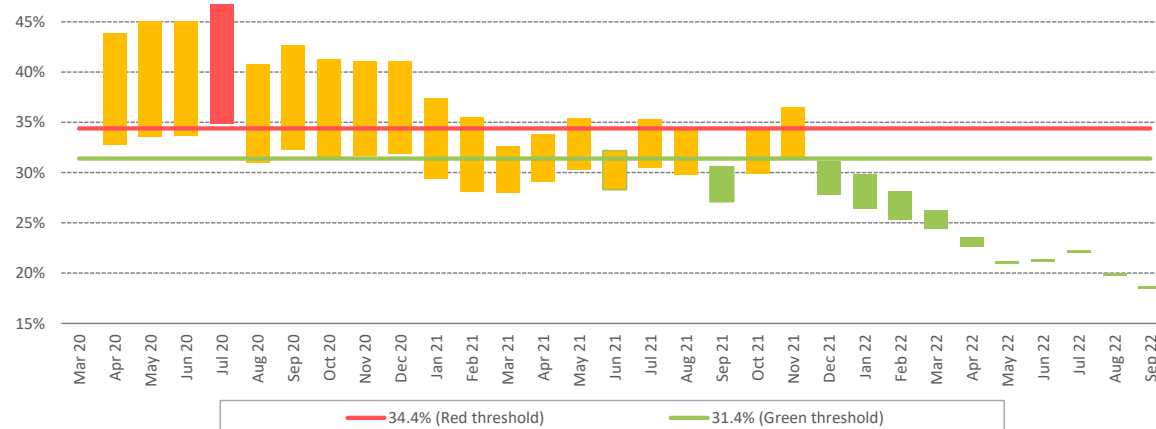
Valuation date Strong

Covenant: **Green**

Reliance Risk Metric (SS deficit + transition risk, as a % of salary over 30 years)



Total contribution (colour of bar shows RAG status)



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 is determined as the present value of 10% of eligible sector salaries 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.

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FMP MONITORING REPORT - END SEPTEMBER 2022

Quarterly covenant monitoring update

SUMMARY: The covenant remains Strong

HIGHLIGHTS/ LOWLIGHTS

- Preliminary informal discussions with HEIs on impact of inflation indicate immediate situation remains manageable but is being closely monitored by HEIs. Impact so far mainly on utility costs (<2% of total costs for USS employer group in FY21). Potential knock on impact on payroll cost remains main concern.

Sector insights and events:

- Research England confirms 16% increase in QR portion of research funding (to £1.97bn). All but 13 HEIs see funding increase with funding following REF21 Research Power rankings.
- China Daily reports UK continues to grow in popularity as destination for Chinese Students, US losing out (September)
- UK signs MoU with India officially recognising each other’s higher education qualifications (July)

ACTIVITY LOG (Number of cases)

	QTD	YTD
• Non-survey DM notifications	1	6
• Of which:		
• intention to secure debt	1	2
• Quasi-security planned	0	1
• Open engagement cases	0	1
• Requests for clarification	24	45
• Complaints received	0	0
• Other feedback	10	14

Debt monitoring survey:

	2022	2021
• Completed DM survey responses	285	250
• # in-scope HEIs exceeding follow-up thresholds	9	N/A
• In-scope cases requiring further measures	0	N/A

OPEN CASES	Issue raised	DATE FIRST REPORTED	CURRENT STATUS	PLANNED NEXT STEPS	RAG
Institution A	An employer seeks security over new-build facilities	25/05/2022	Discussions ongoing	Discussions to continue	G

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Technical Provisions Deficit		Self-Sufficiency Deficit		Reliance Risk Metric	
-£5.6bn		£6.9bn		6.0%	
Valuation date (31/03/2020)	£14.1bn	Valuation date	£35.5bn	Valuation date	13.2%
Liability	£67.0bn	Liability	£79.5bn	Components:	
Pre-retirement discount rate	Gilts + 1.85%	Discount rate	Gilts + 0.70%	Self suff deficit + transition risk (£7bn)	£13.9bn
Post-retirement discount rate	Gilts + 0.70%			÷ Value of salary over 30 years	£231bn
		Self-sufficiency VaR	£17.3bn	Reliance Risk Metric:	Green
Future Service Contribution Requirement		Deficit Recovery Contribution		Total Contribution	
18.5%		0.0%		18.5%	
		Remaining recovery period	0.0%	Remaining recovery period	18.5%
		0.25% outperformance		0.25% outperformance	
		10 year recovery period	0.0%	10 year recovery period	18.5%
		No outperformance		No outperformance	
Valuation date (amount being paid)	25.2%	Valuation date (amount being paid)	6.2%	Valuation date (amount being paid)	31.4%
				Total contribution:	Green
Assets		IRMF metrics		Covenant	
£72.6bn				Unchanged	
Valuation date	£66.5bn			Valuation date	Strong
'Breakeven' discount rate	Gilts + 0.67%	Metric A	31-Mar-20 10.0 30-Sep-22 10.7		
	CPI + 1.16%	Metric B	-4.0 16.2		
		Metric C	40.6 69.1	Covenant:	Green

Note: Affordable Risk Capacity is determined as the present value of 10% of eligible sector salaries 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.

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Technical Provisions - Assumptions

	31-Mar-20	30-Sep-22
FBB Pre ret expected rtn vs Gilts *	Gilts + 5.28%	Gilts + 3.39%
FBB Pre ret expected rtn vs Index-linked gilts *	ILG + 5.74%	ILG + 3.99%
Pre-retirement discount rate	Gilts + 2.75%	Gilts + 1.85%
Post-retirement discount rate	Gilts + 1%	Gilts + 0.70%
Gilts (single equivalent) nominal	0.7%	3.7%
CPI (single equivalent)	2.1%	3.2%
CPI with 2.5% cap (single equivalent)	1.7%	2.0%
Single equivalent discount rate	Gilts + 1.6%	Gilts + 1.1%
	CPI + 0.3%	CPI + 1.6%

* 30 yr expected return. 55% growth portfolio until February 2022 then VIS portfolio. Calculated on a deterministic basis allowing for an estimated rebalancing premium for monitoring purposes. At the 2020 valuation, the expected return calculated on a stochastic basis which allows for rebalancing was Gilts+5.9%.

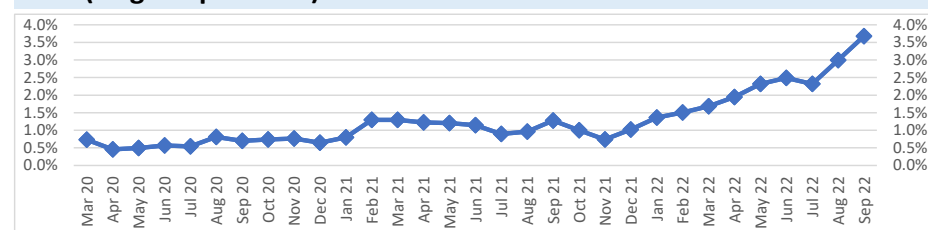
Self-sufficiency - Assumptions

	31-Mar-20	30-Sep-22
Discount rate	Gilts + 1%	Gilts + 0.70%
Gilts (single equivalent) nominal	0.7%	3.7%
CPI (single equivalent)	2.6%	3.7%
Single equivalent discount rate	CPI - 0.9%	CPI + 0.7%

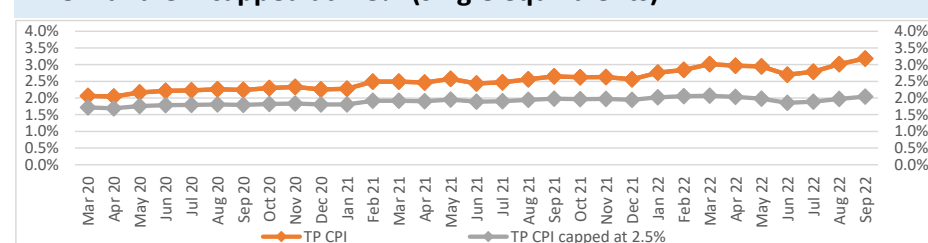
Affordable Risk Capacity

	31-Mar-20	30-Sep-22
Discount rate used to calculate the ARC	Gilts + 1.2%	Gilts + 1.22%

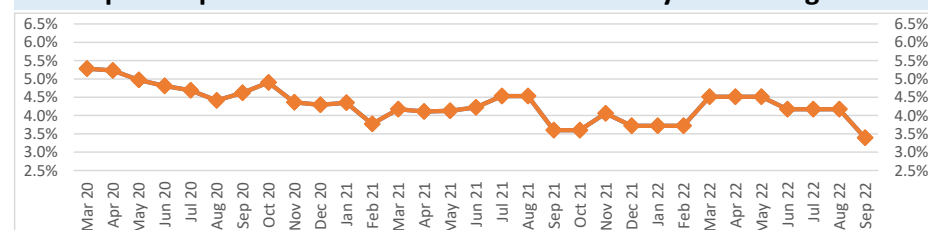
Gilts (single equivalent) nominal



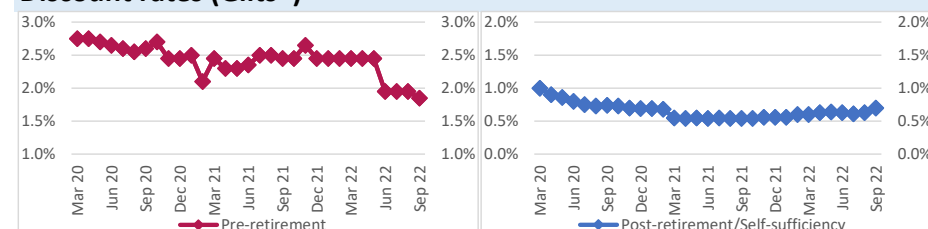
TP CPI and CPI capped at 2.5% (single equivalents)



FBB expected pre-retirement return relative to 30 yr nominal gilts



Discount rates (Gilts+)



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.

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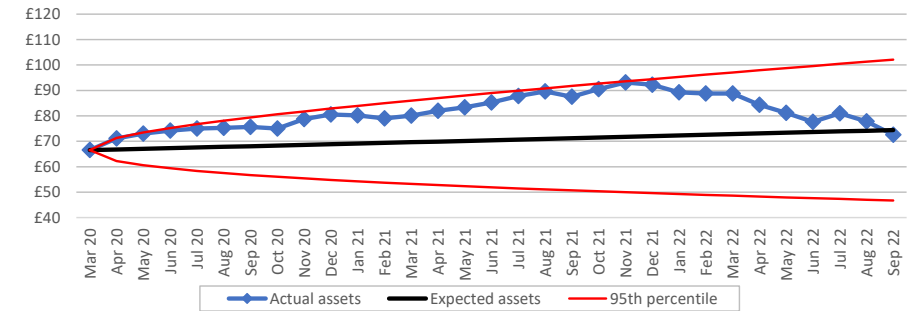
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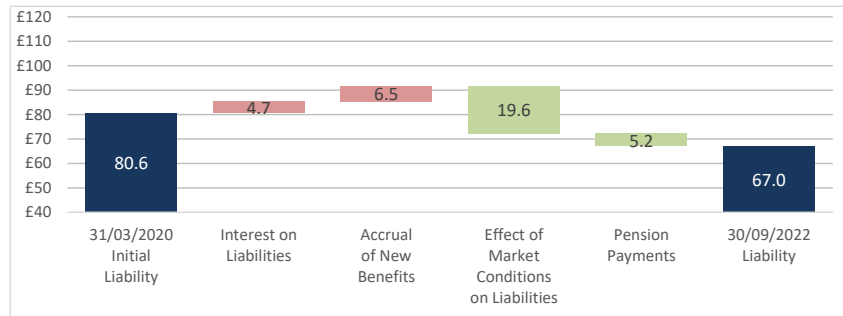
Technical Provisions

	31-Mar-20	30-Sep-22	Change
Assets £bn	66.5	72.6	+6.1
Liabilities £bn	80.6	67.0	-13.6
Deficit £bn	14.1	-5.6	-19.7
Funded Status %	83%	108%	+25%

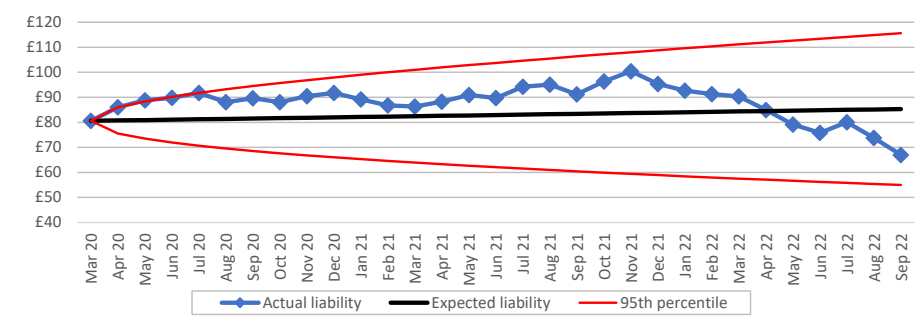
Assets (£bn)



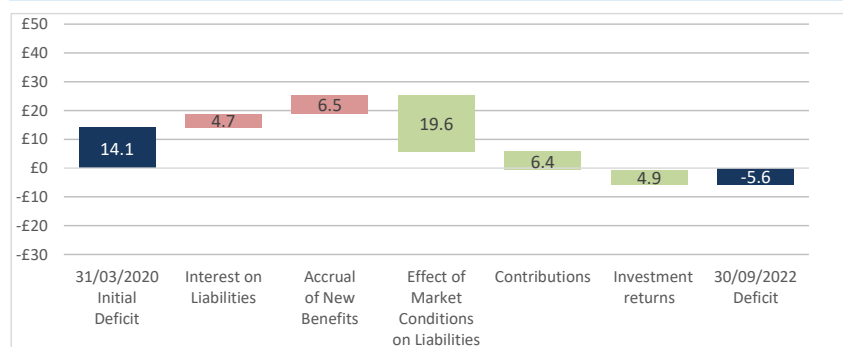
Liability change attribution (£bn) - 31 Mar 2020 to 30 Sep 2022



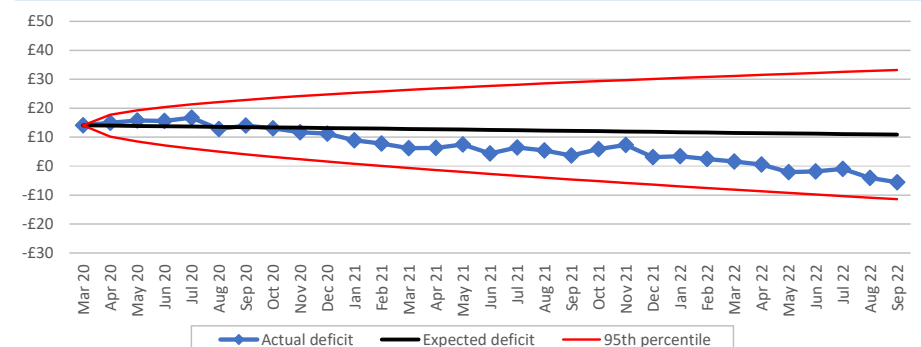
Liabilities (£bn)



Deficit change attribution (£bn) - 31 Mar 2020 to 30 Sep 2022



Technical Provisions Deficit (£bn)



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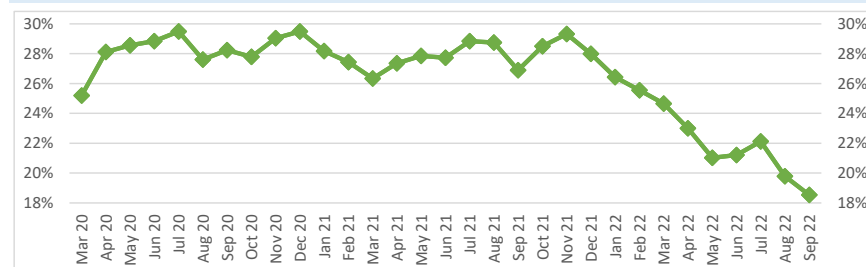
Future service contributions required

	31-Mar-20	30-Sep-22
DB Future Service Cost over next 12 months	19.5%	12.8%
Expenses	0.4%	0.4%
Expected DC conts over next 12 months ¹	5.3%	5.3%
Total ²	25.2%	18.5%

Note

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

Future service contributions required (including DC)



Sensitivity and Duration

	31-Mar-20	30-Sep-22
TP Sensitivity (£bn) ¹	-1.6	-1.2
TP Duration of scheme (years)	20	17

Note

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

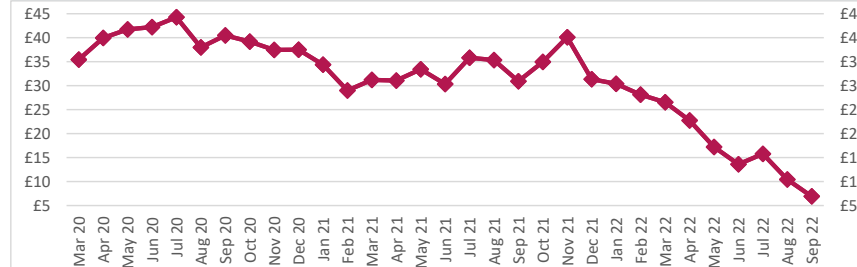
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Self-Sufficiency

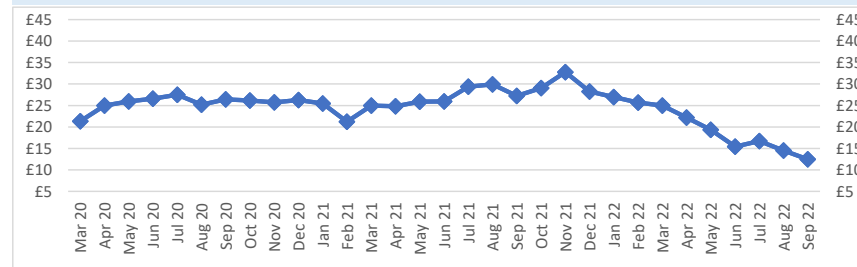
	31-Mar-20	30-Sep-22	Change
Assets £bn	66.5	72.6	+6.1
Liabilities £bn	102.0	79.5	-22.5
Deficit £bn	35.5	6.9	-28.6
Funded Status %	65%	91%	+26%

	31-Mar-20	30-Sep-22	Change
10% of pay for 30yrs £bn	31.4	23.1	-8.3

Self-Sufficiency Deficit (£bn)



Gap between Self-Sufficiency and Technical Provisions (£bn)

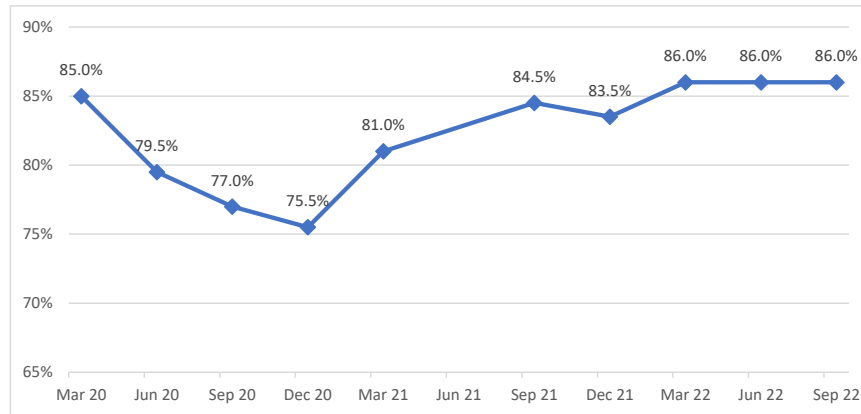


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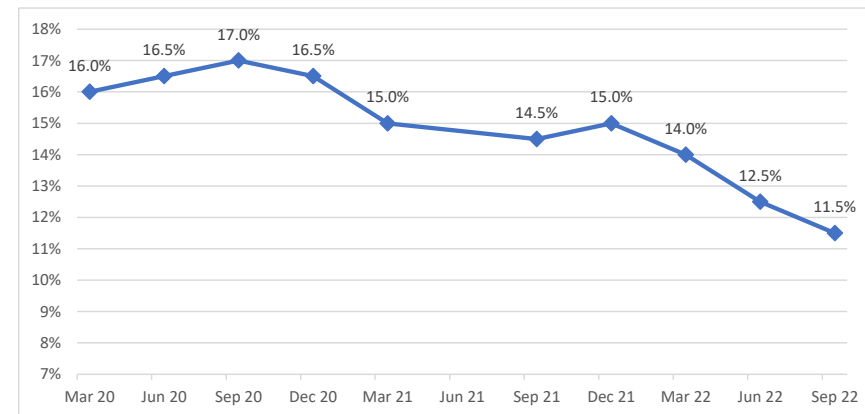
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Probability of TP full-funding by end of recovery plan (April 2038)



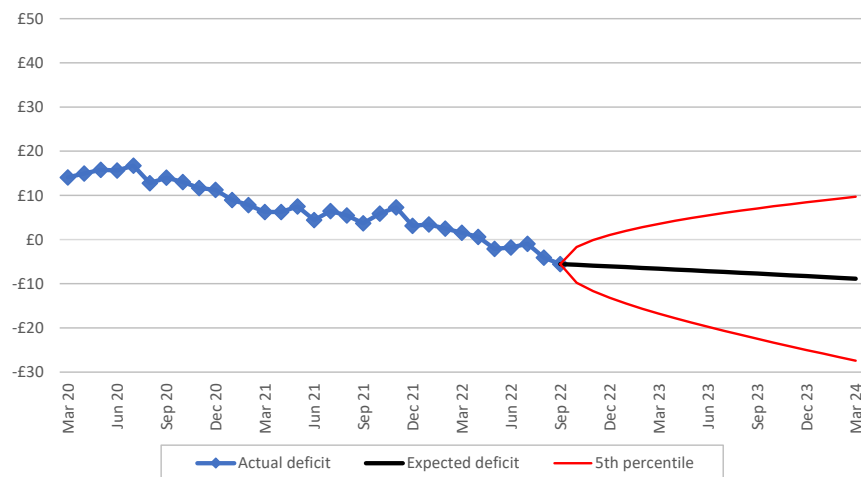
All figures quoted to the nearest 0.5%. There was no FBB calibration for June 2021

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

Technical Provisions Deficit (£bn) - projection



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

	30/09/2022
Pre-retirement discount rate	Gilts + 1.85%
Percentile	69%

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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%

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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 $0 < \text{Headroom} < \text{Asset transition risk}$

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.