

Update on funding position as at 30 June 2021

Executive summary

Since the 2019 valuation, as at 30 June 2020:

- **Past service funding position:** The past service funding position has improved from a **surplus of £27m** (102% funded) to a **surplus of £378m** (123% funded). This funding position is based on the Fund targeting an annual future investment return which has a 70% likelihood of being achieved. The improvement has been largely driven by strong investment performance since 31 March 2019.
- **Expected future investment returns:** The outlook for future investment returns has worsened since the last formal valuation. At 30 June 2021, we estimate that the Fund's asset allocation has a 70% likelihood of achieving an annual return of at least 3.7% p.a. (at 31 March 2019, the equivalent return was 4.0% p.a.).
- **Fully funded required rate:** The future investment return required to be notionally fully funded has fallen from 3.9% p.a. to 2.4% p.a. The likelihood of the Fund's assets achieving this required level of return has increased from 71% to 84%. Therefore, the Fund is now more likely than not to achieve the future returns needed to be fully funded.
- **Impact on future contributions (indicative)**
 - **Secondary rate contributions:** the improved past service funding position will have a positive impact on Secondary rate contributions, all else being equal.
 - **Future service cost (Primary rate contributions):** The cost of future benefit accrual has increased. Longer term future market conditions for valuing benefit costs are expected to be more challenging and are applying upward pressure to the future service cost (compared to March 2019).

Purpose and scope

This paper has been commissioned by and is addressed to London Borough of Tower Hamlets as Administering Authority of the London Borough of Tower Hamlets Pension Fund ("the Fund").

Its purpose is to provide the Fund with an update on the overall fund level funding position as at 30 June 2021 and how it compares to the position at the last formal valuation of the Fund carried out as at 31 March 2019.

Information regarding the data, assumptions, methodology and funding risks associated with the results in this paper is contained in the Appendix.

In particular it should be noted that the financial assumptions have been derived as per the Funding Strategy Statement in force as at the 31 March 2019 formal valuation of the Fund. As such, no allowance has been made for RPI reform whereby it is expected that RPI will align with CPIH from 2030 onwards. As part of the 2022 valuation, the Fund will need to consider how this announcement is reflected in the assumption made for long term CPI inflation expectations (to which the majority of benefits are linked).

Liabilities

The Fund’s liabilities are the future benefit payments due to members in respect of their service accrued in the Fund. Future benefit payments will be in respect of both service accrued up to today (“past service”) and service that will be accrued in the future (“future service”).

To better understand the Fund’s past service liabilities, we have detailed below in Chart 1 the projected annual future benefit payments due to all members in respect of service earned up to **30 June 2021**:

- **Pensioners**: those members currently in receipt of their benefits;
- **Deferreds**: those members who have left the Fund but are yet to retire; and
- **Actives**: those members who are still participating in the Fund and accruing service.

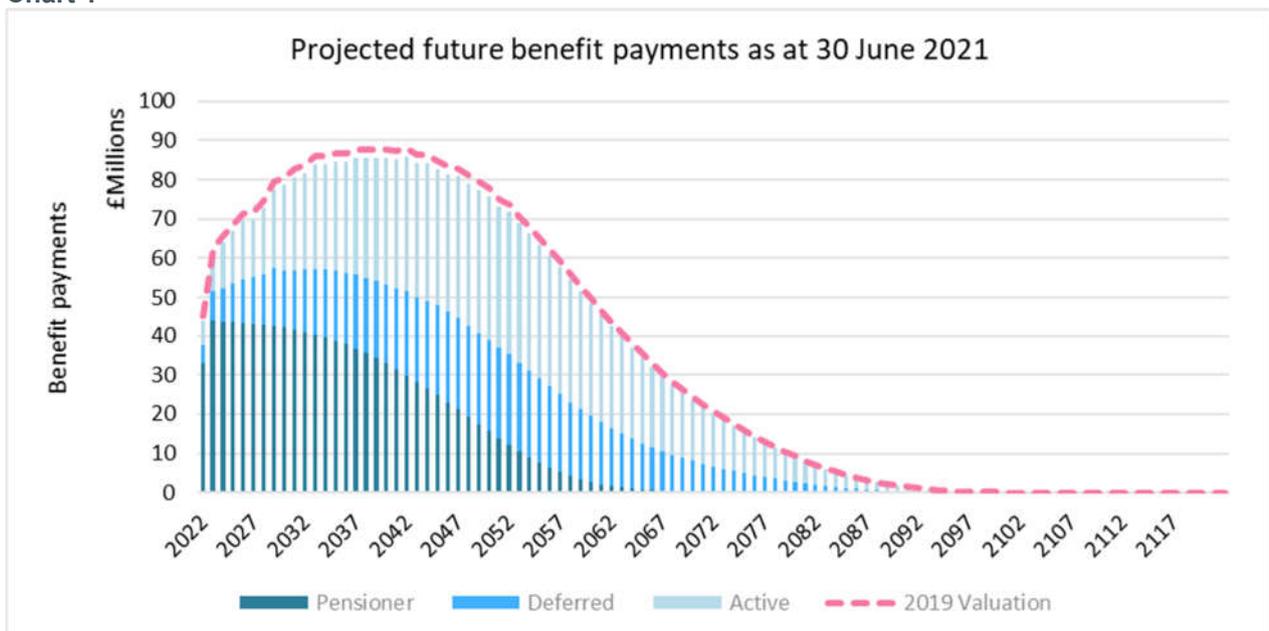
The member group classification is based on each individual member’s status as at the last formal valuation (31 March 2019) and the figures are in nominal terms.

Change since 2019 valuation

The projected benefit payments are based on the membership data and the financial and demographic assumptions used for the 2019 formal valuation and in line with the Funding Strategy Statement (FSS) dated March 2020. However, they have been updated to reflect actual pension increases since the valuation and changes in future long-term inflation expectations derived consistently with the approach in the current FSS. Actual pension increases at April 2020 and April 2021 were less than expected (1.7% vs. 2.3% and 0.5% vs 2.3% respectively) and market derived long-term inflation expectations have broadly stayed the same since 31 March 2019 (*noting that no allowance has been made for any changes resulting from RPI reform*).

The pink line on Chart 1 below shows the total projected annual future benefit payments as they were at 31 March 2019. **The impact of lower than expected pension increases has resulted in a slight reduction in the projected benefit payments as at 30 June 2021.**

Chart 1



Asset Values and Projected Asset Returns

As at 30 June 2021, the Fund's asset value was £2,034m, increased from £1,552m at the last valuation. The Fund's assets are there to pay all the member benefits accrued to date. **The investment return since March 2019 has been c32%.**

At 30 June 2021, we estimate that the Fund's asset allocation has a 70% likelihood of achieving an annual return of at least 3.7% p.a. (at 31 March 2019, the equivalent return was 4.0% p.a.). **Therefore, the outlook for future investment returns has worsened since the last formal valuation.**

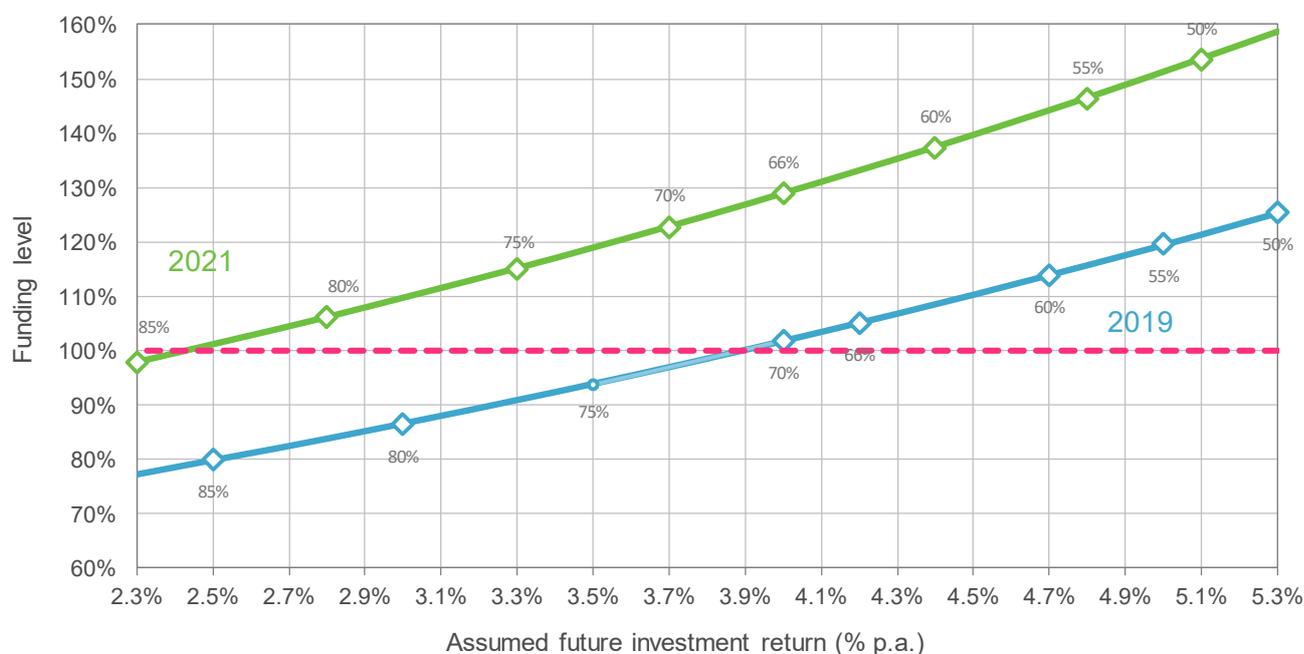
Funding Level

The funding level is derived as the ratio of the value of the Fund's assets to the value of its accrued liabilities. Actual benefit payments in the future will be in respect of both service accrued up to today ("past service") and service that will be accrued in the future ("future service"). However, the funding level presented is only in respect of **past service** benefits.

The funding level is only a snapshot in time based on a single set of assumptions about the future and is therefore sensitive to the choice of assumptions, in particular the expected future investment return assumption.

Chart 2 below shows how the funding level varies with the future investment return assumption at 30 June 2021 (green line). For comparison, we have also shown the results of the same analysis as at 31 March 2019 (blue line). Along each line we have highlighted points which show the likelihood of the Fund's assets achieving the corresponding assumed future investment return. The likelihoods are those that were estimated at the relevant date i.e. 31 March 2019 or 30 June 2021.

Chart 2



Points to note

- From this chart, we can see that regardless of the investment return assumption used, there has been an improvement in the funding position at 30 June 2021 compared to the 2019 valuation, reflecting an increase in assets held today per pound of benefit to be paid out in future.

- Based on the Fund targeting an annual future investment return which has a 70% likelihood of being achieved, the past service funding position has improved from being 102% funded (surplus of £27m) to being 123% funded (surplus of £378m). The improvement has been largely driven by strong investment performance since 31 March 2019.
- The outlook for future investment returns has worsened since the last formal valuation. At 30 June 2021, we estimate that the Fund's asset allocation has a 70% likelihood of achieving an annual return of at least 3.7% p.a. (at 31 March 2019, the equivalent return was 4.0% p.a.).

Fully funded required rate of return

The future investment return required to be notionally fully funded has fallen from 3.9% p.a. to 2.4% p.a. The likelihood of the Fund's assets achieving this required level of return has increased from 71% to 84%. Therefore, the Fund is now more likely than not to achieve the future returns needed to be fully funded.

Indicative impact on future contributions

The LGPS Regulations require employer contribution rates to be broken down into:

- the Primary contribution rate – defined as the actuarial cost of new benefits being earned by current employees (active members) expressed as a percentage of pensionable pay; and
- the Secondary contribution rate – any adjustment to the primary contribution rate (such as additional contributions to repair any deficits).

Employer contributions are reviewed and certified every 3 years at formal valuations. The next formal valuation of the Fund will be at 31 March 2022. Therefore, the impact on employer contributions described below is purely indicative based on the funding update at 30 June 2021. Any changes in markets before the next formal valuation will affect these projections.

As set out in the previous section, due to strong investment returns over the period since the last formal valuation, the past service funding position has improved. However, whilst this may give a positive outlook for those employers looking to cease from participating in the Fund in the near future, most employers are in a different position. Many employers such as the Unitary Authorities will remain in the Fund over the longer term and will, instead, be interested in the outlook for contribution rates to be certified as part of the 2022 valuation.

Secondary rate contributions

Secondary rate contributions are paid by employers to target a funding position over an agreed time horizon (as detailed in the Fund's FSS). Employers have their own funding plans within the Fund with varying funding positions and time horizons.

It can be inferred that the improved past service funding position at 30 June 2021 is likely to have a positive impact on Secondary rate contributions at the next valuation for the average employer, all else being equal.

Of course, any changes in funding position (and any impact on contributions rates) will be varied across the Fund's employers and is dependent on each individual employer's membership.

Primary rate contributions

As discussed above, the past service funding position has improved. However, being 100% funded in a scheme like the LGPS which is both open to future accrual and new entrants, is not the endgame. For the average fund, two-thirds of the benefit payments made over the next 50 years will be in respect of benefits yet to be earned. This will include benefits earned by existing members (new accrual) and benefits earned by new members who

begin service in the LGPS after the valuation date (new joiners). The assets held today only cover past service benefits – we still need to fund those benefits yet to be earned.

Given the relatively strong funding position of the LGPS as a whole, the majority of LGPS employer contribution rates are currently in respect of the Primary Rate (payment towards future accrual of new benefits). In fact, the average LGPS employer contribution rate is 22.9% of pay, of which 18.6% of pay is in respect of the Primary Rate. Therefore, when looking ahead to the 2022 valuation, as well as focussing on whether the funding position is 100%, we need to also consider the factors that may affect the cost of future benefit accrual.

As at 30 June 2021, longer term future market conditions for valuing benefit costs are expected to be more challenging and are applying upward pressure to the future service cost (compared to March 2019).

The increased cost of future accrual will lead to increased Primary contribution rates. For the average employer any increases in Primary contribution rates may be partially (or wholly) offset by reductions in Secondary contribution rates.

Other factors to consider

Even targeting 100% funding, there is still around a c16% chance that future investment returns would not be sufficient to fully fund all the accrued benefits. In addition to this investment risk, there are other major risks that are likely to be of important focus at the 2022 valuations, in particular life expectancy and climate change. We would recommend that these risks are analysed, understood and managed.

Interaction with investment strategy

The results in this paper focus on the Fund's funding strategy which is required to include a margin of prudence to ensure security of member benefits.

However, as discussed earlier, within the figures above there is still significant investment risk. Although the fund is notionally more than fully funded as at 31 June 2021, due to the large exposure to equities and other growth assets, it is likely that the Fund (and its employers) will experience volatility in their funding position.

Given that the ratio of employers' accrued liabilities and assets compared to payroll is higher than it has been in the past, there is a lower tolerance for a change in the assets or liabilities before it feeds through to contribution rates. Furthermore, the current pressures on employers' finances have resulted in a much lower ability to afford contribution rate increases. Therefore, the investment strategy should be considered alongside the funding strategy to manage investment risk and reduce volatility in funding positions (which would otherwise lead to such rate increases).

Managing investment risk is typically achieved by "de-risking" the investment strategy and can be achieved in a number of different ways, these are summarised below. Note that de-risking can often be achieved within the Fund's current manager structure.

- Cut the investment risk – this would involve selling growth assets and purchasing protection assets e.g. selling equities and purchasing gilts. Although gilts are priced high (at the moment), so too are equities.
- Diversify the investment risk – this would involve increasing the allocation to asset classes which pay an alternative risk premium to equities, such as property, infrastructure and private debt. The income associated with the return on these assets could also be used to help manage the Fund's cashflow requirements
- Hedge the investment risk – implement strategies that involve derivatives or fixed income assets to explicitly hedge specific risks.

In considering the options available to the Fund on managing investment risk, the focus should be on simplicity and delivering the best outcomes for the lowest cost. In particular, as mentioned above, de-risking the past

service position still leaves a greater cost relating to future service: a de-risked investment strategy may well result in higher Primary contribution rates albeit with lesser volatility. These are long-term balances which need to be carefully struck.

Funding versus accounting assumptions

The actuarial assumptions adopted by the Fund for funding purposes are different to those prescribed for preparation of accounting disclosures. In particular, the funding discount rate (future investment return) assumption is currently much higher than the discount rate prescribed for accounting purposes. All else being equal, this places a much higher value on pension liabilities when using accounting assumptions compared to the funding assumptions. This means that, for the average LGPS employer, their accounting balance sheet will be much worse than their funding position.

It is important to note that cash contribution requirements are set by the Fund with reference to the employers' funding positions only, the accounting position does not affect the cash contributions that an employer needs to pay to the LGPS.

Summary of results

Reported funding position	31 March 2019	30 June 2021
Assets (£m)	1,552	2,034
Past service liabilities (£m)	1,525	1,656
Surplus/(Deficit) (£m)	27	378
Funding level	102%	123%
Assumed future investment return	4.00%	3.70%
Likelihood of achieving this return*	70%	70%
Fully funded target	31 March 2019	30 June 2021
Funding target	100%	100%
Future investment return required to be 100% funded	3.90%	2.40%
Likelihood of achieving this return*	71%	84%

Sensitivity of results

The results in this report are dependent on factors including future market conditions, the membership details and demographic trends such as longevity. Changes in each of these factors can have a material impact on the results. I have not sought to quantify the impact of any changes other than the below. If further information about the sensitivity of the results to different data or assumptions is required, this can be provided on request.

The results are extremely sensitive to market conditions, in particular the future investment returns assumption and future inflation. The approximate impact of a 0.1% change in either assumption (i.e. lower investment returns or higher inflation) is noted below.

0.1% change in future investment return (or inflation) assumption	
Increase in liabilities (%)	2%
Impact on funding position (£m)	£27m loss

Important caveats

There are many moving parts and as such the following caveats apply to these results:

- the funding position and cost of future benefit accrual may change when an allowance is made for RPI reform and the resulting impact on future inflation expectations;
- the impact on the rates of different employers will vary depending on their membership profile;
- the various judgements relating to McCloud and Goodwin will impact employers differently (the above analysis doesn't make any allowance for these matters); and
- any change to market conditions and the outlook for future returns will impact contributions requirements.

Next steps

The paper has been provided for information purposes only and does not seek to propose any changes to the Fund's funding or investment strategy. The indicative contribution rate impact should not be taken as suggestions for rates that will payable at the next formal valuation or advice that contribution rates need to be amended before the next valuation.

Reliances and limitations

This paper has been prepared for London Borough of Tower Hamlets as Administering Authority of the London Borough of Tower Hamlets Pension Fund for the purpose described above. It has not been prepared for use for any other purpose and should not be so used. The paper should not be disclosed to any third party except as required by law or regulatory obligation or with our prior written consent. We accept no liability where the paper is used by or disclosed to a third party unless we have expressly accepted such liability in writing. Where this is permitted, the paper may only be released or otherwise disclosed in a complete form which fully discloses our advice and the basis on which it is given.

The following Technical Actuarial Standards are applicable in relation to this advice, and have been complied with where material and to a proportionate degree:

- TAS100 (Principles of technical actuarial work)
- TAS300 (Pensions)

This report together with the formal valuation report for the Fund (issued March 2020) and the Fund's Funding Strategy Statement set out the aggregate of my advice.

Prepared by:-



Barry Dodds FFA

27 August 2021

For and on behalf of Hymans Robertson LLP

Appendix

Assumptions and methodology

Liabilities

All demographic and financial assumptions underlying the benefit projections are as per the 31 March 2019 formal valuation with the exception of the future inflation assumption (which affects the rate of future pension increases, CARE revaluation and salary increases).

Further details about the assumptions can be found in the 2019 formal valuation report dated March 2020.

The future long-term inflation assumption used in the benefit projections as at 30 June 2021 is 2.3% p.a.. Therefore, as at 30 June 2021 we have assumed that:

- Future pension increases are 2.3% p.a.
- Future CARE pot revaluation is 2.3% p.a.
- Future salary increases are 2.50% p.a.

These are unchanged from those at 31 March 2019.

The benefit projections assume that membership experience since 31 March 2019 has been in line with the assumptions made. At a whole fund level, this assumption is reasonable to make and, for the purpose of this paper, we do not expect this to result in a material inaccuracy.

We have also allowed for additional benefit accrual between 1 April 2019 to 30 June 2021. This allows comparison with the Fund's asset value as at 30 June 2021.

To calculate the expected future investment returns, we have used our proprietary Economic Service Scenario ("ESS") model, and the same methodology used at the last formal valuation. Further details about the ESS model, and the calibration of the model as at 31 March 2019, can be found in the 2019 valuation formal report dated March 2020.

The calibration of the model as at 30 June 2021 is detailed below. The following figures have been calculated using 5,000 simulations of the ESS, calibrated using market data as at 30 June 2021. All returns are shown net of fees. Percentiles refer to percentiles of the 5,000 simulations and are the annualised total returns over 5, 10 and 20 years, except for the yields which refer to the simulated yields for at that time horizon. Only the overall Fund portfolio returns are shown, however similar information for separate asset classes is available on request.

	Annualised total returns								Inflation (RPI)	17 year real yield (RPI)	Inflation (CPI)	17 year real yield (CPI)	17 year yield
	Cash	Index Linked Gilts (medium)	Fixed Interest Gilts (medium)	UK Equity	Overseas Equity	Property	CorpMedium A						
5 years	16th %ile	-0.3%	-3.3%	-2.6%	-4.0%	-3.7%	-3.5%	-3.0%	1.9%	-2.6%	0.8%	-2.4%	0.6%
	50th %ile	0.4%	-0.4%	0.0%	4.2%	4.3%	2.4%	-0.1%	3.4%	-1.7%	2.4%	-1.5%	1.7%
	84th %ile	1.2%	2.6%	2.6%	12.0%	12.0%	8.8%	2.7%	5.0%	-0.8%	3.9%	-0.6%	2.9%
10 years	16th %ile	0.0%	-2.7%	-1.3%	-1.0%	-1.1%	-1.3%	-1.3%	1.7%	-1.9%	0.8%	-1.8%	0.9%
	50th %ile	1.0%	-0.7%	0.1%	4.7%	4.8%	3.1%	0.4%	3.3%	-0.6%	2.5%	-0.6%	2.3%
	84th %ile	2.2%	1.5%	1.5%	10.5%	10.6%	7.9%	1.9%	5.0%	0.6%	4.1%	0.6%	4.0%
20 years	16th %ile	0.6%	-2.2%	0.0%	1.3%	1.3%	0.7%	0.3%	1.1%	-0.7%	0.7%	-0.7%	1.3%
	50th %ile	1.9%	-0.5%	0.8%	5.7%	5.7%	4.1%	1.4%	2.7%	1.0%	2.2%	1.0%	3.2%
	84th %ile	3.5%	1.3%	1.6%	10.2%	10.1%	8.0%	2.4%	4.3%	2.7%	3.8%	2.7%	5.6%
	Volatility (Disp) (1 yr)	0%	7%	7%	16%	16%	14%	8%	1%		1%		

The current calibration of the model indicates that a period of outward yield movement is expected. For example, over the next 20 years our model expects the 17 year maturity annualised real (nominal) interest rate to rise from -2.3% (1.3%) to 1.0% (3.2%).

Assets

The asset value as at 30 June 2021 has been provided to us by the Fund. To derive the level of likelihood associated with certain level of expected future returns, we have used the ESS model as described above and the Fund's current strategic asset allocation:

% allocation	
Global equity	50.0%
Diversified growth	20.0%
Absolute return bonds	12.0%
Property	12.0%
Index linked gilts (long)	6.0%
Total	100%

Model limitations

The models used to calculate the results in the paper make some necessary simplifying assumptions. I do not consider these simplifications to be material and I am satisfied that they are appropriate for the purposes described in this report.

Funding Risks

Please see the FSS for details of the funding risks that apply to the future ability of the Fund to pay all members' benefits. These include, but are not limited to:

- Market risks – these include investment returns being less than anticipated or liabilities increasing more than expected due to changes in market conditions underlying the financial assumptions (e.g. inflation or pay increases above that assumed etc.).
- Demographic risks – these include anything that affects the timing or type of benefits (e.g. members living longer than anticipated, fewer members opting into the 50/50 option, etc.).
- Regulatory risks – the LGPS is a statutory scheme. There is a risk that central Government legislation could significantly change the cost of the scheme in future.

In particular, the benefit structure of the LGPS is currently under review as a result of the consultation on the McCloud and Sargeant judgement, HM Treasury's and Scheme Advisory Board's cost-sharing valuations as well as the recent outcome of the Goodwin tribunal. Benefit changes as a result of these issues may materially affect the value of benefits earned by members both in the past and future. I have made no direct allowance for these changes and may need to review my calculations once the outcomes are known.

- Administration and Governance risks – failures in administration processes can lead to incorrect actuarial calculations. For example, where membership data is not up to date (e.g. leaver forms not being submitted in a timely matter) material inaccuracies in respect of the level of deficit and contributions may occur at future valuations.

- Resource and Environmental risks – i.e. risks relating to potential resource constraints and environmental changes, and their impact on Fund employers and investments: such risks exist and may prove to be material. Given the lack of relevant quantitative information available specifically relevant to the Fund, I have not explicitly incorporated such risks in this advice. The Administering Authority may wish to seek direct advice on these risks.