Public Document Pack

Havering
LONDON BOROUGH

PENSIONS COMMITTEE AGENDA

7.00 pm	Tuesday 1 October 2024	Council Chamber - Town Hall

Members 6: Quorum 3

COUNCILLORS:

Conservative Group (2)	Havering Residents' Group (3)	Labour Group (1)
Joshua Chapman Viddy Persaud	James Glass Jacqueline Williams Stephanie Nunn (Vice-Chair)	Mandy Anderson (Chairman)

Trade Union Observers

(No Voting Rights) (2)

Derek Scott

Andy Hampshire

Admitted/Scheduled Bodies Representative

(Voting Rights) (0)

For information about the meeting please contact:
Luke Phimister 01708 434619
luke.phimister@onesource.co.uk

Under the Committee Procedure Rules within the Council's Constitution the Chairman of the meeting may exercise the powers conferred upon the Mayor in relation to the conduct of full Council meetings. As such, should any member of the public interrupt proceedings, the Chairman will warn the person concerned. If they continue to interrupt, the Chairman will order their removal from the meeting room and may adjourn the meeting while this takes place.

Excessive noise and talking should also be kept to a minimum whilst the meeting is in progress in order that the scheduled business may proceed as planned.

Protocol for members of the public wishing to report on meetings of the London Borough of Havering

Members of the public are entitled to report on meetings of Council, Committees and Cabinet, except in circumstances where the public have been excluded as permitted by law.

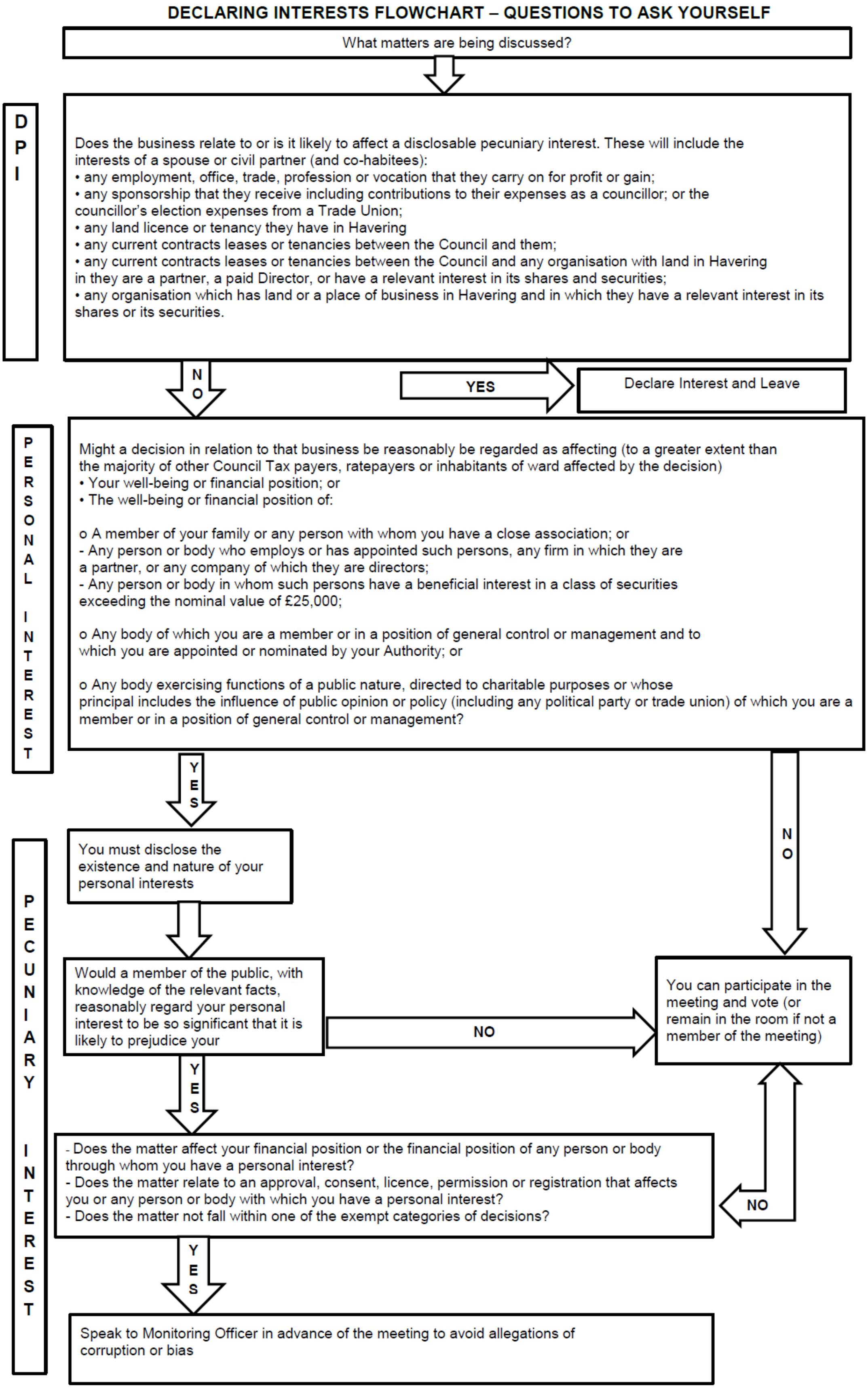
Reporting means:-

- filming, photographing or making an audio recording of the proceedings of the meeting;
- using any other means for enabling persons not present to see or hear proceedings at a meeting as it takes place or later; or
- reporting or providing commentary on proceedings at a meeting, orally or in writing, so that the report or commentary is available as the meeting takes place or later if the person is not present.

Anyone present at a meeting as it takes place is not permitted to carry out an oral commentary or report. This is to prevent the business of the meeting being disrupted.

Anyone attending a meeting is asked to advise Democratic Services staff on 01708 433076 that they wish to report on the meeting and how they wish to do so. This is to enable employees to guide anyone choosing to report on proceedings to an appropriate place from which to be able to report effectively.

Members of the public are asked to remain seated throughout the meeting as standing up and walking around could distract from the business in hand.


DECLARING INTERESTS FLOWCHART – QUESTIONS TO ASK YOURSELF
What matters are being discussed?
DPI
Does the business relate to or is it likely to affect a disclosable pecuniary interest. These will include the interests of a spouse or civil partner (and co-habitees):
• any employment, office, trade, profession or vocation that they carry on for profit or gain;
• any sponsorship that they receive including contributions to their expenses as a councillor; or the councillor's election expenses from a Trade Union;
• any land licence or tenancy they have in Havering
• any current contracts leases or tenancies between the Council and them;
• any current contracts leases or tenancies between the Council and any organisation with land in Havering in they are a partner, a paid Director, or have a relevant interest in its shares and securities;
• any organisation which has land or a place of business in Havering and in which they have a relevant interest in its shares or its securities.
NO
YES
Declare Interest and Leave
PERSONAL INTEREST
Might a decision in relation to that business be reasonably be regarded as affecting (to a greater extent than the majority of other Council Tax payers, ratepayers or inhabitants of ward affected by the decision)
• Your well-being or financial position; or
• The well-being or financial position of:
o A member of your family or any person with whom you have a close association; or
- Any person or body who employs or has appointed such persons, any firm in which they are a partner, or any company of which they are directors;
- Any person or body in whom such persons have a beneficial interest in a class of securities exceeding the nominal value of £25,000;
o Any body of which you are a member or in a position of general control or management and to which you are appointed or nominated by your Authority; or
o Any body exercising functions of a public nature, directed to charitable purposes or whose principal includes the influence of public opinion or policy (including any political party or trade union) of which you are a member or in a position of general control or management?
YES
NO
PECUNIARY INTEREST
You must disclose the existence and nature of your personal interests
Would a member of the public, with knowledge of the relevant facts, reasonably regard your personal interest to be so significant that it is likely to prejudice your
NO
You can participate in the meeting and vote (or remain in the room if not a member of the meeting)
YES
- Does the matter affect your financial position or the financial position of any person or body through whom you have a personal interest?
- Does the matter relate to an approval, consent, licence, permission or registration that affects you or any person or body with which you have a personal interest?
- Does the matter not fall within one of the exempt categories of decisions?
NO
YES
Speak to Monitoring Officer in advance of the meeting to avoid allegations of corruption or bias

AGENDA ITEMS

1 CHAIRMAN'S ANNOUNCEMENTS

The Chairman will announce details of the arrangements in case of fire or other events that might require the meeting room or building's evacuation.

2 APOLOGIES FOR ABSENCE AND ANNOUNCEMENT OF SUBSTITUTE MEMBERS

(if any) - receive

3 DISCLOSURE OF INTERESTS

Members are invited to disclose any interest in any of the items on the agenda at this point of the meeting.

Members may still disclose any interest in any item at any time prior to the consideration of the matter.

4 MINUTES OF THE MEETING (Pages 5 - 8)

To approve as correct the minutes of the meeting held on 25th June 2024 and authorise the Chairman to sign them.

5 EXCLUSION OF THE PUBLIC

To consider whether the public should now be excluded from the relevant sections of the meeting on the grounds that it is likely that, in view of the nature of the business to be transacted or the nature of the proceedings, if members of the public were present during those items there would be disclosure to them of exempt information within the meaning of paragraph 3 of Schedule 12A to the Local Government Act 1972; and, if it is decided to exclude the public on those grounds, the Committee to resolve accordingly on the motion of the Chairman.

6 PENSION FUND PERFORMANCE MONITORING FOR THE QUARTER ENDED JUNE 2024 (Pages 9 - 70)

7 PUBLIC SERVICE PENSIONS ACT 2013 - SECTION 13 REPORT (Pages 71 - 236)

Zena Smith
Head of Committee and Election Services

MINUTES OF A MEETING OF THE
PENSIONS COMMITTEE
Council Chamber - Town Hall
25 June 2024 (7.02 - 9.08 pm)

Present:

COUNCILLORS

Conservative Group	Joshua Chapman and Viddy Persaud
Havering Residents' Group	Williams and Stephanie Nunn (Vice-Chair)
Labour Group	Mandy Anderson (Chairman)
Admitted/Scheduled Bodies Representatives:	
Trade Union Observers:	Derek Scott

The Chairman reminded Members of the action to be taken in an emergency.

1 **APOLOGIES FOR ABSENCE AND ANNOUNCEMENT OF SUBSTITUTE MEMBERS**

Apologies were received for the absence of James Glass.

2 **DISCLOSURE OF INTERESTS**

There were no disclosures of interests.

3 **MINUTES OF THE MEETING**

The minutes of the previous meeting were agreed as a correct record and signed by the Chairman.

4 **PENSION FUND MONITORING QUARTER END 31 MARCH 2024**

The Committee was presented with the Pension Fund performance for the period ending 31 March 2024.

The Committee agreed to go into an exempt session to deal with the publicly sensitive sections of the report.

Following the exempt session, the Committee noted equities and asset performed well with assets 3.7% up but was behind the 4.1% benchmark. The real asset and private debt mandates had seen positive returns with the overall fund performing well.

Members noted North America and Japan equity grew above 11% due to various factors and inflation had continued to fall with core inflation higher than usual without including food and fuel.

The Committee agreed the recommendations as set out in the report.

5 **PENSION FUND ACCOUNTS**

The Committee was presented with a report on the Pension Fund Accounts.

There had been a briefing session before the meeting at which officers and members went into detail on the Pension Fund accounts.

Members noted the accounts had been published in line with regulations and no code changes in 2023/24 had affected the accounts. The accounts would be presented to the Council's Audit Committee for approval. Members also noted the net assets of the fund had increased to £969million which was an increase of £73million from the previous year.

The Committee agreed the recommendations as set out in the report.

6 **2024-27 BUSINESS PLAN & 2023-24 ANNUAL REPORT**

The Committee was presented with the 2024-27 Business Plan and 2023-24 Annual Report.

Members noted the business plan was backwards looking and would be presented to Full Council. The Committee also noted, as part of the annual report, only 1 report from the year had been delayed but was included as part of the meeting's agenda.

The Committee agreed the recommendations as set out in the report.

7 **PENSION ADMINISTRATION BUDGET 2024-25**

The Committee was presented with the Pensions Administration Budget report.

It was noted that the LGPS scheme was serviced by LPPA through Lancashire County Council. The budget to cover the scheme would need to be increased by 15% to £648k due to the increase of members and rates per member. Officers would continue to monitor the spending to ensure the Council is getting the best value for money.

The Committee agreed the recommendations as set out in the report.

8 **REVIEW OF PENSIONS FUND ADMISSIONS POLICY**

The Committee were presented with a report on the Pensions Admissions Policy.

Members of the Committee noted the policy had been introduced in November 2017 and the Funding Strategy Statement was agreed in January 2024. It was explained that a full review had been carried out by Hymans Robertson to ensure compliance with the LGPS and the cost would be met by the Fund.

The Committee agreed the recommendations as set out in the report.

9 NEW EMPLOYER ADMISSIONS TO THE PENSION FUND

The Committee was presented with a report to admit new employers to the Pension Fund.

Officers explained there were 2 new additions proposed:

- CleanTEC Services Ltd with a contract that commenced on 13 June 1014 and due to expire on 12 June 2017. They would admit 3 members to the Fund.
- Aspens Services Ltd with a contract that commenced on 1 September 2023 and due to expire on 31 August 2026. They would admit 24 members to the Fund.

It was noted that both employers would have contribute rates set at 25%.

The Committee agreed the recommendations as set out in the report.

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Chairman

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Havering
LONDON BOROUGH

PENSIONS COMMITTEE **1 OCTOBER 2024**

Subject Heading:	**PENSION FUND PERFORMANCE MONITORING FOR THE QUARTER ENDED JUNE 2024**
CLT Lead:	**Kathy Freeman**
Report Author and contact details:	***Debbie Ford*** ***Pension Fund Manager (Finance)*** ***01708 432 569*** ***Debbie.Ford@havering.gov.uk***
Policy context:	Pension Fund performance (“the Fund”) is regularly monitored to ensure investment objectives are being met and to keep the committee updated with Pension issues and developments.
Financial summary:	This report comments upon the performance of the Fund for the period ended 31 June 2024

The subject matter of this report deals with the following Council Objectives

Communities making Havering	[X]
Places making Havering	[X]
Opportunities making Havering	[X]
Connections making Havering	[X]

SUMMARY

This report provides an overview of how the Fund’s investments are performing, how the individual Investment Managers are also performing against their set targets and any relevant Local Government Pension Scheme (LGPS) updates for the quarter ending **30 June 2024**. Significant events that occur after production of this report will be addressed verbally at the meeting.

The Fund's value increased by **£13.7m** over the quarter. The overall fund performance of 1.25% underperformed the tactical benchmark by -0.73% and outperformed the strategic benchmark by 2.9%.

The Fund's performance of 1.25% was slightly behind the tactical benchmark but remains ahead of the strategic benchmark over the longer time periods.

All equity mandates continued to deliver positive absolute returns, amid resilient growth and ongoing optimism for AI. However, the majority of equity mandates were marginally behind respective benchmarks over the quarter.

The LCIV Absolute Return Fund and LCIV Global Bond Fund posted modest positive performance.

Over the quarter, wider property markets returned positively as capital values increased modestly. The Fund's property mandates delivered mixed returns. UBS outperformed owing to its overweight allocation to the retail sector, as capital values in the retail sector improved specifically.

Sub-investment grade credit spreads remained tight however RLAM MAC delivered positive returns, only marginally underperforming its benchmark.

Following a wider review of the Fund's RLAM mandate, post quarter-end the Fund's officers agreed to disaggregate the MAC and ILG components within the mandate structure and update the ILG component benchmark to the FTSE Actuaries UK Index-Linked Gilts All Stocks Index (from the FTSE Actuaries UK Index-Linked Gilts Over 5 Years Index).

Amid robust economic activity and sticky inflation, real gilt yields rose over the quarter. As a result, the RLAM ILG Fund delivered negative returns – also underperforming its benchmark, given its current longer-term positioning.

The general position of the Fund is considered plus other matters including any current issues as advised by Hymans. The manager attending the meeting will be:

Legal and General Investment Manager – Passive Equities Manager

Hymans will discuss the Fund's performance after which the manager will be invited to join the meeting, make their presentation and answer any questions.

Hymans and Officers will discuss with Members any issues arising from the monitoring of the other managers.

RECOMMENDATIONS

That the Committee:

1) Consider Hymans Market Background, Strategic Overview and Manager Performance Report (Appendix A)
2) Consider Hymans Performance Report and views (Appendix B **Exempt)**
3) Receive presentation from the Funds Passive Equity Manager (Legal and General Asset Management) for an overview on the fund's performance (Appendix C – **Exempt**)
4) Consider the quarterly reports sent electronically, provided by each fund manager.
5) Note the analysis of the cash balances.

REPORT DETAIL

1. Elements from Hymans report, which are deemed non-confidential, can be found in **Appendix A.** Opinions on fund manager performance will remain as exempt and shown in **Appendix B.**

2. Where appropriate topical LGPS news that may affect the Fund will be included.

3. We welcome feedback and suggestions that will help members gain a better understanding of the reports. Hymans report at Appendix A now includes a one-page summary highlighting key performance takeaways over the quarter.

4. **BACKGROUND**

a. The Committee adopted an updated Investment Strategy Statement (ISS) in September 2023.

b. The objective of the Fund's ISS is to deliver a stable long-term investment return in excess of the expected growth in the Fund's liabilities.

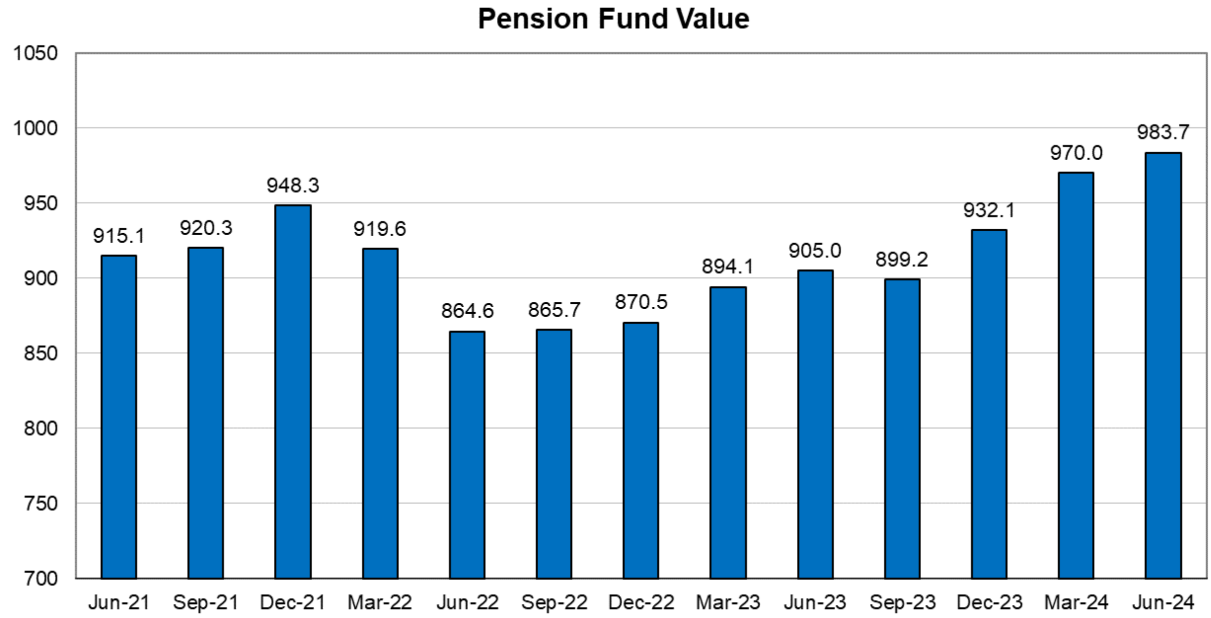
c. The Fund's assets are monitored quarterly to ensure that the long-term objective of the ISS is being delivered.

d. We measure returns against tactical and strategic benchmarks.

5. PERFORMANCE

a. The Fund asset value at 30 June 2024 was **£983.7m** compared with £932.1m at 31 March 2024; an **increase of £13.7m**. This movement is largely attributable to increases in the equity holdings asset classes and a decrease in LCIV renewable infrastructure (2.2m).

Chart 1 – Pension Fund Asset Value



Source: Northern Trust Performance Report

b. The overall net performance of the Fund against the **Tactical Benchmark** - Each asset manager has been set a specific (tactical) benchmark as well as an outperformance target against which performance will be measured. This benchmark is determined according to the type of investments being managed. This is not directly comparable to the strategic benchmark as the majority of the mandate benchmarks are different but contributes to the overall performance.

Table 1: Tactical Performance

	Quarter to 30/06/2024 %	12 Months to 30/06/2024 %	3 Years to 30/06/2024 %	5 years to 30/06/2024 %
Fund	1.25	8.50	1.69	5.40
Benchmark	1.98	11.81	6.19	6.92
*Difference in return	-0.73	3.31	-4.49	-1.52

Source: Northern Trust Performance Report
Totals may not sum due to geometric basis of calculation and rounding

c. The overall net performance of the Fund against the **Strategic Benchmark** (i.e. the strategy adopted of Gilts + 1.8% Net of fees).

The strategic benchmark represents the expected rate at which the Fund's liabilities are growing (or falling) in value. The asset performance relative to the strategic benchmark performance gives an indication of whether the funding level has improved or weakened over a given period.

Table 2: Strategic Performance

	Quarter to 30/06/2024 %	**12 Months to 30/06/2024 %**	**3 Years to 30/06/2024 %**	**5 years to 30/06/2024 %**
Fund	1.25	8.50	1.69	5.40
Benchmark	-1.65	1.32	-9.78	-4.18
*Difference in return	2.90	7.18	11.47	9.58

Source: Northern Trust Performance Report
*Totals may not sum due to geometric basis of calculation and rounding.

d. Further detail on the Fund's investment performance is detailed in **Appendix A** in the performance report which will be covered by the Investment Adviser (Hymans)

6. CASH FORECAST

a. At the end of June 2024, the cash balance stood at £25.1m, which is invested with LBH and available for operational cash requirements as needed.

Table 3: Cash Flow Forecast

	ACTUALS TO 30/06/2024 £000	**ESTIMATE Year to 31/03/2025 £000**	**ESTIMATE Year to 31/03/2026 £000**	**ESTIMATE Year to 31/03/2027 £000**
Balance b/f	24,276	25,008	30,420	18,480
Benefits paid	(8,550)	(34,173)	(44,430)	(46,207)
BACS expenses*	(2,643)	(9,993)	(13,140)	(13,666)
Lump sums by faster payment	(840)	(2,640)	(3,580)	(3,687)
Transfers in	462	5,862	6,510	6,705
Contributions received**	10,858	42,088	41,640	42,473
Pension strain	185	685	500	510
Interest	0	780	560	560
Sweep	1,260	2,804	0	0
Balance c/f	25,008	30,420	18,480	5,168

* BACS expenses also includes grants i.e. lump sums made to members via payments team
** Contributions received from LBH are net of pension payroll deductions (e.g. HMRC)

b. Members updated the cash management policy at their committee meeting on the 19 March 2024.

c. An operational cash balance in the range of £5m to £13m has been set. In the event that cash levels rise above the upper limit of £13m cash will be invested in the most underweight liquid asset allocation. Currently cash is being for reinvestment/rebalancing within the investment strategy.

d. Cash balance may be retained above the upper limit at the discretion of the Section 151 officer.

7. REPORTING ARRANGEMENTS

a. At each reporting cycle, the Committee will see a different fund manager until members have met them all unless there are performance concerns that demand a manager be brought back again for further investigation.

b. Summary fund manager reviews are included within Hymans performance report at **Appendix A.**

c. All fund manager's quarterly reports are distributed electronically prior to this meeting. Where applicable, quarterly voting information, from each fund manager, detailing the voting history of the fund managers is also included in the manager's quarterly report.

d. The fund manager attending this meeting is **Legal and General Asset Management (LGIM)** who manage three separate passive equity portfolios: **All World Equity Index Fund**, **World Emerging Market Fund** and the **Future World Index Fund.** Their report is attached at **Appendix C (Exempt).**

8. FUND UPDATES:

8.1 Changes since the last report and forthcoming changes/events:

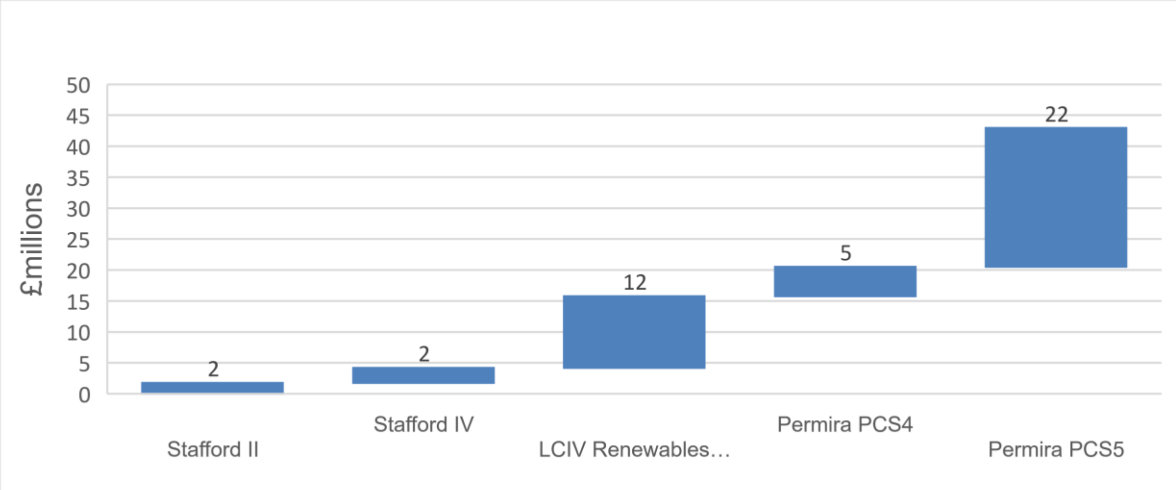
a. In the quarter ending 30 June 2024, the Fund completed £1.5m of capital draw down requests.

b. The capital calls were funded with cash received from investment income which is held with the Custodian

c. Churchill II and IV received formal notification of release of pledge thereby releasing the Fund from any further capital commitments.

d. At 30 June 2024 there was £43m of outstanding capital commitments as follows:

Chart 2 – Outstanding capital commitments at 30 June 2024



8.2 **London CIV UPDATES -**The LCIV is the appointed asset pool manager for the Fund and the governance of investments held with the LCIV is their responsibility. It is therefore crucial that regular communication and contact is upheld and activity updates are reported and covered here as follows:

8.2.1 LCIV meetings (since the last report)

a. Virtual weekly "Coffee with the CIO" are held to share news, learn and develop opportunities. Recordings can be made available to members on request.

b. Business Update Meetings take place monthly (currently held virtually) – since the last report, meetings were held on the 30 May 2024, 27 June 2024, and 22 August 2024. Recordings can be made available to members on request.

c. Each business update meeting includes an update from LCIV Chief Officers covering current fund offerings, fund performance; fund updates (including those funds for which enhanced monitoring is in place) and the pipeline for new fund launches. In addition, relevant topical issues are included as appropriate. Highlights as follows:

- **Fund Monitoring Updates**: All LCIV sub funds undergo in-depth reviews annually unless there are any concerns, in which case the frequency of reviews occurs every six months. All Havering investment funds are on “normal” monitoring. Three investment review and update meetings have taken place since the last report:
    - **30 July 2024 – LCIV Equity Funds -** this review included an overview of the monitoring outcomes for the **Global Alpha Growth Paris Aligned Fund.** This sub fund is currently on ‘normal’ monitoring status but

has received amber scores against the criteria for performance and cost transparency/value for money.

  - **31 July 2024 - LCIV Fixed Income Funds -** this review included an overview of the monitoring outcomes for the **Global Bond Fund**. This sub fund is currently on 'normal' monitoring status and received an amber score against the criteria for performance.
  - **1 August 2024 - LCIV Multi Asset Funds –** this review included the monitoring outcomes for the **Absolute Return Fund.** In-depth review meeting brought forward over concerns about performance, the manager has fallen behind performance target over three years. This sub fund is currently on a six monthly monitoring cycle. Whilst "Normal" monitoring status continues, LCIV will be closely monitoring the against the tests for Resourcing and Business Management. The scores for Resourcing and Responsible Investment/ engagement have been upgraded from amber to green. Amber scores in place against the criteria for Business Risk, Risk Management & Compliance, Cost Transparency/value for money. Officers attended an update review meeting on the 11 July 2024 where the review was covered in detail. Next review update will be provided in January 2025.

- **Fund Activity - New/Changes to Sub Fund Launches:**
  - *New:* Natural Capital/ Nature Based Solution – launched on the 12 July – Implementation stage - 3 managers appointed. Legal and tax due diligence underway with manager names to be announced in due course. Havering currently has no plans to invest in this fund
  - *New*: Private Debt II Fund – launched on 28 June 2024 - Implementation stage - four managers appointed. Legal and tax due diligence underway with names to be announced in due course. The Fund could consider this mandate when more details are available.
  - *New*: Indirect Property Pooling – launched – Initiation stage - continue to engage with CBRE regarding project plan and operational requirements. Moving forward with due diligence checks and aiming to go live at end of the year. Havering currently has no plans to invest in this fund.
  - *New:* Global Equity Value – Launch stage – date to be finalised with initial investors, expected October 2024. Havering currently has no plans to invest in this fund
  - *New:* Buy and maintain Fund Launch stage - date to be finalised with initial investors, expected October 2024. Havering currently has no plans to invest in this fund

- *Change:* LCIV Renewable Infrastructure – 7th & 8th manager due diligence in progress, expected Q2 24. Havering already invest in this fund which will see new managers added due to demand.
- *Change:* LCIV MAC Fund – ESG elements to be strengthened. Transition period to be agreed with manager but expected by end of 2024. No changes to the investment objective. Havering currently does not invest in this fund.
- *Change:* LCIV Global Bond Fund – Approvals obtained to enhance the ESG credentials. Transition period to be agreed with manager. slight reduction of 0.1%. Havering invests in this fund.

- **London CIV Indirect Real Estate Pooling (IREP) Initiative:**
  - New initiative being launched by LCIV with CBRE as the investment manager sub advisor
  - Partner funds will be offered the opportunity to transfer investment management of existing indirect real estate to the LCIV.
  - Each holding will be held on a separately managed account and transitioned to converge with the IREP overtime to collectively benefits of scale.
  - More details will be required to determine whether product is suitable for the Havering Fund.

- **Staffing updates:**
  - **Andrien Meyers**, Head of Pensions Investments at the London Borough of Sutton and Royal Borough of Kingston upon Thames, has agreed to join London CIV in a newly-created role as Chief Proposition Officer, starting September 2024.
  - **Aoifinn Devitt** has decided to move on from her role as London CIV's CIO and will be leaving in Q4. Rob Treich, Head of Public Markets will support oversight of the investment team during the period of transition.

8.3 LGPS GENERAL UPDATES:

8.3.1 Funding Strategy Statement (FSS) Guidance

a. The current FSS guidance was last updated in 2016. The Scheme Advisory Board (SAB), has set up a working group and has begun its review of the guidance. Key aims are to make the guidance shorter, sharper and more accessible for all stakeholders. Aiming to issue revised guidance before the end of December 2024.

8.3.2 Pensions Review

a. Launched on the 19 August 2024, the Chancellor has announced a Pensions Review. The review will focus on defined contribution workplace schemes and the Local Government Pension Scheme, to develop policy across four areas:
   - Driving scale and consolidation of defined contribution workplace schemes;
   - Tackling fragmentation and inefficiency in the Local Government Pension Scheme through consolidation and improved governance;
   - The structure of the pensions ecosystem and achieving a greater focus on value to deliver better outcomes for future pensioners, rather than cost; and
   - Encouraging further pension investment into UK assets to boost growth across the country.

b. Phase one - the review will focus on investment and findings are expected later this year ahead of the introduction of the Pension Schemes Bill.

c. Phase two is expected to launch later in the year and will consider further steps to improve pensions outcomes and increase investments in the UK.

d. Officers will provide updates as appropriate

e. Main focus for the LGPS will be on consolidation and encouragement of further pension investment into UK assets to boost growth.

8.3.3 Training Requirements - UPDATE

a. The Fund subscribes to the LGPS Online Learning Academy (LOLA) Launched by our Actuaries (Hymans) – this is an online platform designed to support the training needs of Pensions Committees, Local Pension Boards and Officers. The training is split into a number of modules covering the CIPFA Knowledge & Skills Framework (KSF) and The Pension Regulator's Code of Practice 14. Each module contains short 'video on demand' presentations with supplemental learning materials and quizzes.

b. In addition to an induction training session, members are expected to complete the LOLA training modules v1.0 (modules 1- 5) or LOLA V2.0 Training modules (1- 8) in support of meeting the Committee procedure rules.

c. The Fund transitioned over to LOLA v2.0 on the **1 October 2023.**

d. New committee members yet to complete modules under version 1.0 will now be required to undertake the LOLA v2.0 to meet the committee procedure rules.

e. New committee members will have 6 months from **1 October 2023** or date of joining to complete the LOLA v2.0 modules.

f. Officers will provide the Committee with regular progress reports allowing it to easily evidence member's development and progress, as follows:

Chart 3 – Pension committee progress LOLA v1

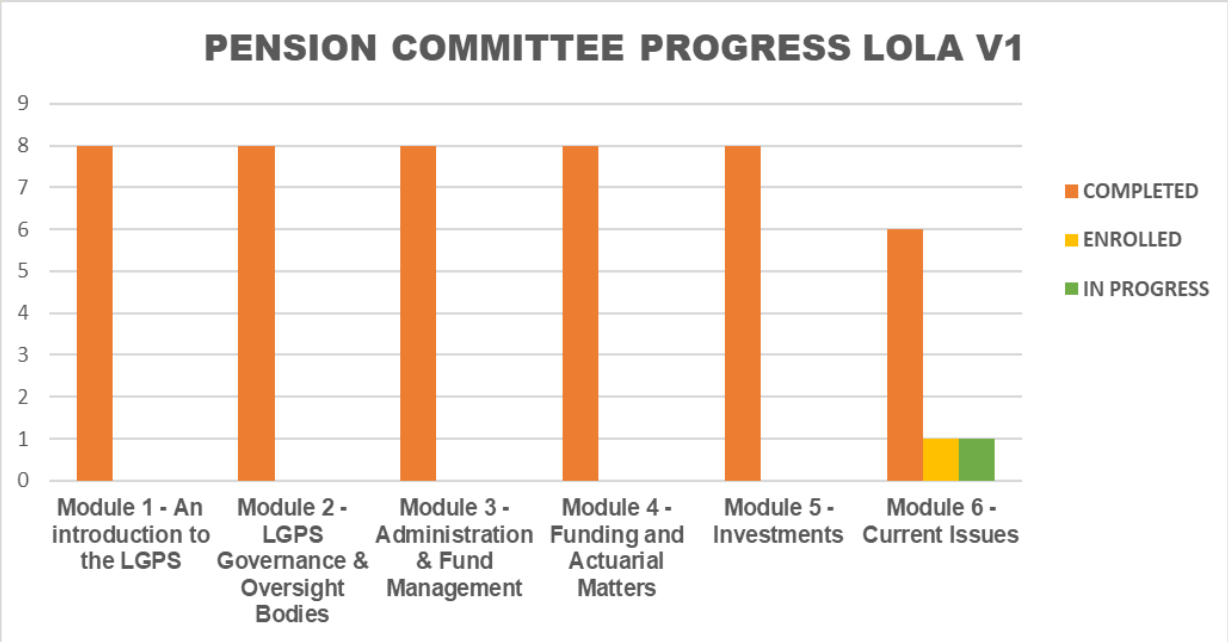
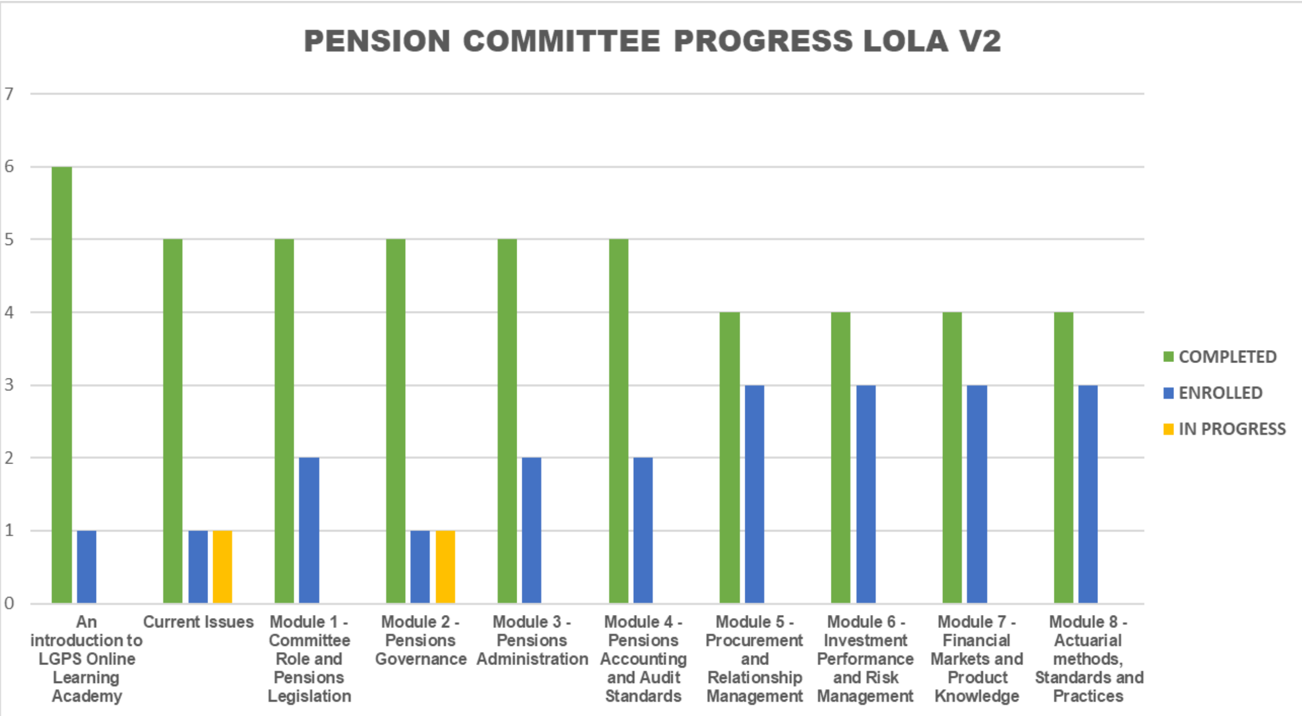


Chart 4 –Pension Committee progress LOLA v2 – as at 31 August 2024



IMPLICATIONS AND RISKS

Financial implications and risks:

Pension Fund Managers' performances are regularly monitored in order to ensure that the investment objectives are being met and consequently minimise any cost to the General Fund and employers in the Fund

Legal implications and risks:

None arising directly from consideration of the content of the Report.

Human Resources implications and risks:

There are no immediate HR implications.

Equalities implications and risks:

The Public Sector Equality Duty (PSED) under section 149 of the Equality Act 2010 requires the Council, when exercising its functions, to have due regard to:

(i) The need to eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;

(ii) The need to advance equality of opportunity between persons who share protected characteristics and those who do not, and;

(iii) Foster good relations between those who have protected characteristics and those who do not.

Note: 'Protected characteristics' are: age, sex, race, disability, sexual orientation, marriage and civil partnerships, religion or belief, pregnancy and maternity and gender reassignment/identity.

The Council is committed to all of the above in the provision, procurement and commissioning of its services, and the employment of its workforce. In addition, the Council is also committed to improving the quality of life and wellbeing for all Havering residents in respect of socio-economics and health determinants.

An EqHIA is not considered necessary regarding this matter as the protected groups are not directly or indirectly affected.

BACKGROUND PAPERS

None

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London Borough of Havering Pension Fund

Q2 2024 Investment Monitoring Report

Shaun Nicol – Investment Consultant

The person responsible for this advice is Shaun Nicol. Members of the London Borough of Havering client team who contributed to the production of this paper but are not responsible for the advice are Meera Devlia and Jennifer Aitken.

HYMANS ROBERTSON

Headlines

This section outlines the key points included in this report.

The tactical benchmark in the Fund Performance table represents the aggregate performance target of the Fund's assets and is a measure of relative outperformance / underperformance from the asset managers.

The strategic benchmark represents the expected rate at which the Fund's liabilities are growing (or falling) in value. The asset performance relative to the strategic benchmark performance gives an indication of whether the funding level has improved or weakened over a given period.

Key Takeaways

Equities continued to perform positively but lagged behind benchmarks.	• Equities continued to perform well over the quarter and as a result, all the Fund's equity mandates provided positive returns. • However, the majority of equity mandates' performance returns were marginally behind their respective benchmarks.
Real gilt yields rose, pushing down expected liability values.	• Real gilt yields rose over the quarter and as such, the Fund's RLAM index-linked gilt mandate slightly decreased in value. • The value of the Fund's liabilities is expected to have fallen due to this over the same period (as proxied by the Fund's strategic benchmark).
Overall Fund performance remained positive, but the Fund continued to underperform its tactical benchmark.	• The Fund's performance of 1.3% was slightly behind the tactical benchmark of 2.0% • The Fund's equity mandates and LCIV Absolute Return Fund's relative underperformance were key contributors to this.
Positive returns were observed across most of the Fund's real asset and private debt mandates.	• Most mandates are measured relative to cash-plus/inflation-plus comparators, but whilst mandates continued to demonstrate underperformance, most also continued to deliver positive absolute returns. • Property capital values modestly increased over the quarter, which meant wider property markets returned positively. • The UBS Fund slightly outperformed over the quarter and longer-term returns remain closer to benchmark • However, the CBRE Fund underperformed over the quarter and continues to underperform its benchmark over the longer-term.

Fund Performance

	Last 3 months (%)	Last 12 months (%)	Last 3 years (%)	Last 5 years (%)
Total Fund Performance	**1.3**	**8.5**	**1.7**	**5.4**
Tactical Benchmark	2.0	11.8	6.2	6.9
Strategic Benchmark	-1.7	1.3	-9.8	-4.2

Fund Asset Valuation

	Fund value (£m)
Q1 2024	**970.0**
Q2 2024	**983.7**

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Manager Performance

The Fund's assets returned 1.3% over the quarter, underperforming the benchmark return of 2.0%.

All equity mandates continued to deliver positive absolute returns, amid resilient growth and ongoing optimism for AI. However, the majority of equity mandates were marginally behind respective benchmarks over the quarter.

The LCIV Absolute Return Fund and LCIV Global Bond Fund posted modest positive performance.

Over the quarter, wider property markets returned positively as capital values increased modestly. The Fund's property mandates delivered mixed returns. UBS outperformed owing to its overweight allocation to the retail sector, as capital values in the retail sector improved specifically.

Sub-investment grade credit spreads remained tight however RLAM MAC delivered positive returns, only marginally underperforming its benchmark.

Following a wider review of the Fund's RLAM mandate, post quarter-end the Fund's officers agreed to disaggregate the MAC and ILG components within the mandate structure and update the ILG component benchmark to the FTSE Actuaries UK Index-Linked Gilts All Stocks Index (from the FTSE Actuaries UK Index-Linked Gilts Over 5 Years Index).

Amid robust economic activity and sticky inflation, real gilt yields rose over the quarter. As a result, the RLAM ILG Fund delivered negative returns – also underperforming its benchmark, given its current longer-term positioning.

Manager Performance

	Actual Proportion	Last 3 Months (%)			Last 12 Months (%)			Last 3 Years (% p.a.)			Since Inception (% p.a.)		
		Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative
Growth	**52.7%**												
LGIM Global Equity	4.4%	2.5	2.9	**-0.4**	19.9	20.4	**-0.4**	8.9	9.0	**-0.2**	12.1	12.1	**-0.1**
LGIM Emerging Markets	4.1%	5.3	5.8	**-0.5**	13.9	14.5	**-0.6**	-0.6	-0.2	**-0.4**	5.1	5.4	**-0.3**
LGIM Future World Fund	11.1%	1.2	1.4	**-0.1**	14.6	14.9	**-0.2**	-	-	**-**	5.5	5.6	**-0.1**
LCIV Global Alpha Growth Paris Aligned Fund	16.2%	1.3	2.6	**-1.2**	13.8	20.9	**-5.8**	-1.7	9.7	**-10.4**	12.2	12.4	**-0.2**
LCIV PEPPA Passive Equity	5.9%	3.6	3.5	**0.1**	24.3	24.0	**0.3**	-	-	**-**	8.0	7.0	**1.0**
LCIV Absolute Return Fund	11.1%	0.4	2.3	**-1.8**	1.0	9.4	**-7.7**	0.6	7.0	**-5.9**	4.3	5.3	**-1.0**
Income	**39.7%**												
LCIV Global Bond Fund	4.8%	0.1	0.1	**0.0**	-	-	**-**	-	-	**-**	6.7	8.1	**-1.3**
UBS Property	5.0%	1.5	1.2	**0.3**	-1.7	0.1	**-1.8**	0.3	0.6	**-0.3**	4.8	5.4	**-0.6**
CBRE	3.3%	-1.3	2.0	**-3.3**	-4.8	6.9	**-11.0**	4.7	11.4	**-6.0**	4.6	9.1	**-4.1**
JP Morgan	5.2%	1.3	2.0	**-0.7**	10.4	6.9	**3.2**	10.1	11.4	**-1.2**	8.6	9.1	**-0.4**
Stafford Capital Global Infrastructure SISF II	4.6%	-1.6	2.0	**-3.5**	3.2	6.9	**-3.5**	8.3	11.4	**-2.8**	7.2	8.9	**-1.6**
Stafford Capital Global Infrastructure SISF IV		1.9	2.0	**-0.1**	7.6	6.9	**0.6**	12.7	11.4	**1.2**	15.6	11.5	**3.7**
LCIV Renewable Energy Infrastructure Fund	1.6%	0.0	2.0	**-2.0**	-2.3	6.9	**-8.7**	-	-	**-**	10.5	11.6	**-0.9**
RLAM Multi-Asset Credit	6.8%	1.5	1.6	**-0.1**	9.1	10.5	**-1.3**	1.4	2.9	**-1.5**	3.1	6.6	**-3.3**
Churchill Senior Loan Fund II	3.2%	1.9	2.3	**-0.4**	11.8	9.4	**2.2**	10.8	7.0	**3.6**	6.6	5.9	**0.7**
Churchill Senior Loan Fund IV		2.4	2.3	**0.1**	12.3	9.4	**2.7**	-	-	**-**	10.3	7.6	**2.5**
Permira IV	5.2%	2.1	2.3	**-0.2**	9.0	9.4	**-0.3**	7.4	7.0	**0.4**	5.4	6.0	**-0.6**
Permira V		2.4	2.3	**0.1**	9.8	9.4	**0.3**	-	-	**-**	9.2	9.3	**-0.1**
Protection*	**7.6%**												
RLAM Index-Linked Gilts	2.3%	-4.0	-2.9	**-1.1**	-6.5	-1.9	**-4.7**	-16.9	-14.0	**-3.4**	-10.9	-8.8	**-2.4**
Total Scheme		1.3	2.0	**-0.7**	8.5	11.8	**-3.0**	1.7	6.2	**-4.2**	5.4	-	**-**

Source: 3m, 12m and 3yr performance returns – Northern Trust and Investment Managers. Individual SI performance returns – Hymans calculated chain-linked. Performance figures for RLAM (including SI performance) and the 3m LCIV PEPPA have been taken from the Investment Manager, rather than Northern Trust. Longer term performance for Baillie Gifford Global Equity and Ruffer Absolute Return funds is inclusive of performance prior to their transfer into the LCIV. Please note, Hymans are conducting a wider review of Northern Trust provided performance figures for the Fund's mandates against investment manager provided performance figures over the respective periods. LGIM Global Equity mandate was managed by SSGA prior to November 2017 and we have retained the performance history for these allocations. The Fund performance figure includes the effect of the currency hedging mandate managed by Russell. All asset performance is in GBP terms and does not make an allowance for currency fluctuations.. The total Fund performance includes the impact of the Russell currency overlay mandate. Please see separate slide for further detail on the Russell mandate, along with asset performance excluding the impact of currency fluctuations

**Includes cash at bank and currency hedging*

Strategic Overview

The Fund's investment strategy is implemented through the London Collective Investment Vehicle ("LCIV"), and retained assets including life funds (with fee structures aligned with LCIV).

The target allocation to LCIV and life funds totals 61.0% of Fund assets. Other retained assets will be delivered through external managers, with the position reviewed periodically.

The chart below right illustrates the underlying asset allocation of the Fund, i.e. taking account of the underlying holdings in the multi-asset funds on a 'look through' basis.

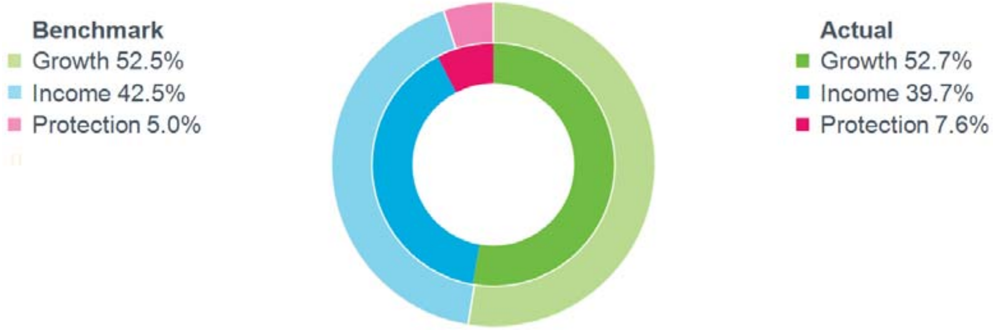
The Fund's overall allocation to equities increased over the quarter to c.44.1% (c.43.0% as at 31 March 2024) as global equities continued to perform well and with the LCIV Absolute Return Fund allocation to equities increasing – from c.16.2% to c.22.5% over the period.

The Fund's overall allocation to gilts decreased further over the quarter to c.5.0% (c.6.2% as at 31 March 2024), with the LCIV Absolute Return Fund allocation to government bonds decreasing – from c.50.7% to c.40.7% over the period.

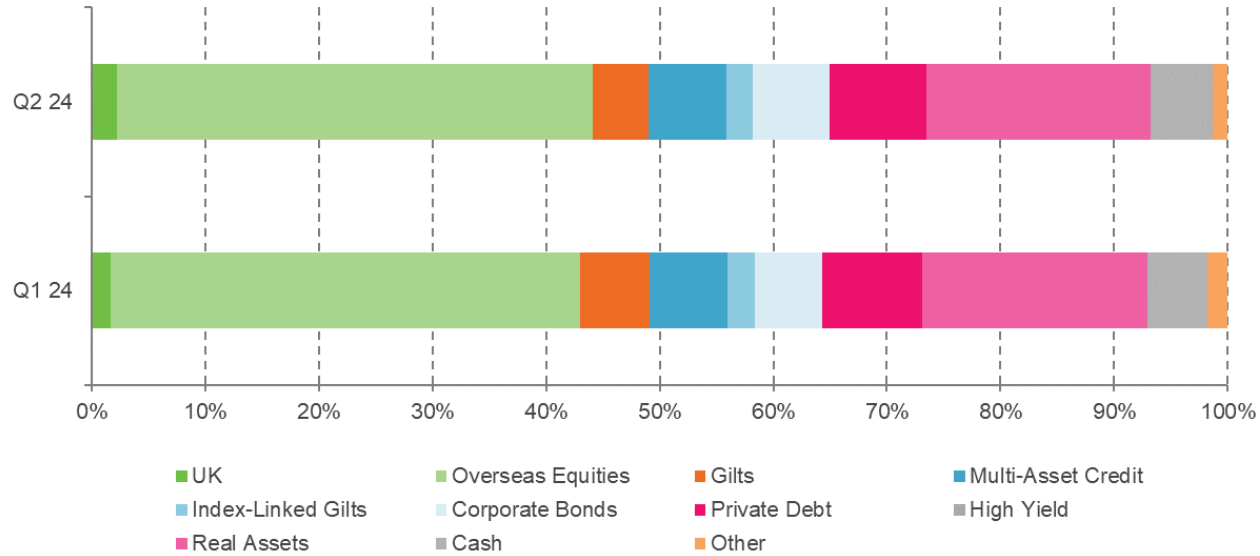
The Fund's allocation to corporate bonds increased over the period to c.6.8% (c.5.9% as at 31 March 2024) with the LCIV Absolute Return Fund allocation to corporate bonds increasing – from c.12.4% to c.21.5% over the period.

The allocations to real assets, multi-asset credit, private debt and high yield assets remained broadly unchanged over the quarter.

Asset Allocation



Asset Class Exposures



Current Investment Implementation

The total value of the Fund's assets increased by £13.7m over the quarter to £983.7m as at 30 June 2024.

The increase in valuation is largely due to the Fund's equity allocation which continued to perform positively.

The Fund's total 'Income' assets allocation remained broadly unchanged over the quarter.

The Fund's 'Protection' assets overall increased over the quarter – primarily due to an increase in the cash held by the Fund over the period. The increase in cash held was primarily due to distribution payments made by the Fund's private market mandates over the period.

The Fund's cash balance at quarter-end was discussed with the Fund's Officers, prior to the October 2024 Pensions Committee meeting – at the time of writing, a decision to the 'surplus' cash balance is due to agreed by the Officers.

Given the rise in real gilt yields over the quarter, the Fund's 'Protection' ILG assets marginally fell in value.

The Fund paid the following capital calls during the quarter:

- c.£1.5m to the LCIV Renewables Fund.

Asset Allocation

		Valuation (£m)		Actual Proportion	Benchmark	Relative
		Q1 24	Q2 24			
Total Growth		**509.8**	**518.7**	**52.7%**	**52.5%**	**0.2%**
LGIM Global Equity	LCIV Aligned	41.9	42.9	4.4%	5.0%	-0.6%
LGIM Emerging Markets	LCIV Aligned	38.4	40.5	4.1%	5.0%	-0.9%
LGIM Future World Fund	LCIV Aligned	107.8	109.1	11.1%	10.0%	1.1%
LCIV Global Alpha Growth Paris Aligned Fund	LCIV	157.3	159.3	16.2%	15.0%	1.2%
LCIV PEPPA Passive Equity	LCIV	55.5	57.5	5.9%	5.0%	0.9%
LCIV Absolute Return Fund	LCIV	108.9	109.4	11.1%	12.5%	-1.4%
Total Income		**389.8**	**390.1**	**39.7%**	**42.5%**	**-2.8%**
LCIV Global Bond Fund	LCIV	47.4	46.9	4.8%	5.0%	-0.2%
UBS Property	Retained	48.9	49.3	5.0%	6.0%	-1.0%
CBRE	Retained	32.5	32.0	3.3%	4.0%	-0.7%
JP Morgan	Retained	50.8	50.7	5.2%	5.5%	-0.3%
Stafford Capital Global Infrastructure SISF	Retained	45.3	45.5	4.6%	3.5%	1.1%
LCIV Renewable Energy Infrastructure Fund	LCIV	14.2	15.7	1.6%	3.5%	-1.9%
RLAM Multi-Asset Credit	Retained	65.7	66.6	6.8%	7.5%	-0.7%
Churchill Senior Loan Funds	Retained	34.6	32.0	3.2%	3.0%	0.2%
Permira Credit	Retained	50.5	51.5	5.2%	4.5%	0.7%
Total Protection		**70.4**	**74.9**	**7.6%**	**5.0%**	**2.6%**
RLAM Index-Linked Gilts	Retained	23.9	23.0	2.3%	5.0%	-2.7%
Cash at Bank	Retained	42.7	47.3	4.8%	0.0%	4.8%
Currency Hedging P/L	Retained	3.7	4.5	0.5%	0.0%	0.5%
Total Scheme		**970.0**	**983.7**	**100.0%**	**100.0%**	

Source: Northern Trust and Investment Managers.
Valuation figures for RLAM have been taken from the Investment Manager.
Note: The target allocations were agreed in August 2023 as part of the last investment strategy review.

Pooling refers to whether the holding benefits from some form of collective bargaining. LCIV and LCIV aligned reflect mandates aligned with or managed by the LCIV. Other pooled indicates mandates where there are collective LGPS fee arrangements in place. Not pooled indicates mandates outside pooling arrangements.

Russell Currency Hedging

Russell Investments have been appointed to manage the Fund's currency overlay mandate.

The current policy is to hedge non-sterling exposures in the Fund's private markets mandates. Currency exposure in equity mandates is retained.

At present, 100% of the exposure to USD, EUR and AUD from the private market investments is hedged with any residual currency exposure retained on a de-minimis basis.

The volatility of returns (measured as the standard deviation of quarterly returns since inception) is 4.6% to date when the impact of currency fluctuations is included and 4.0% when currency movements are stripped out by the Russell currency overlay mandate. This continues to indicate that the Russell mandate is reducing overall volatility and increasing the predictability of returns, as intended.

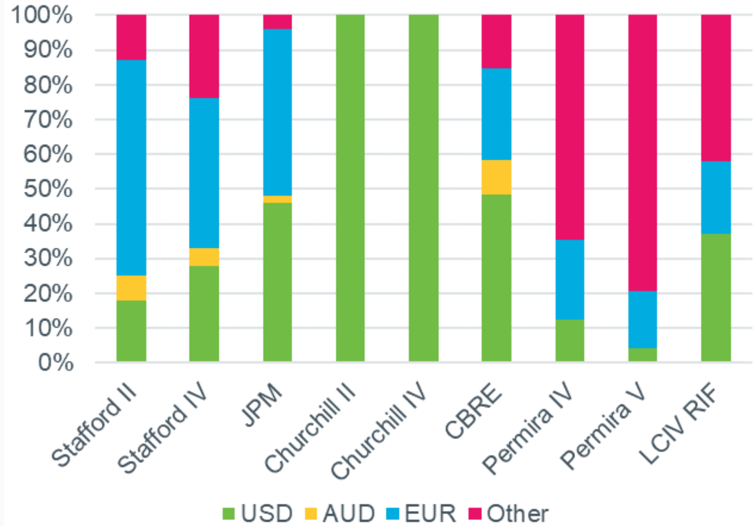
Q2 2024 Performance

	Asset return (inc. FX impact)	Currency return (via Russell mandate)	Asset return (ex. FX impact)	BM return	Relative return (ex. FX impact)
Stafford II	-1.6	0.5	-1.1	2.0	-3.1
Stafford IV	1.9	0.4	2.3	2.0	0.3
JPM	1.3	0.5	1.8	2.0	-0.2
Churchill II	1.9	0.0	2.0	2.3	-0.3
Churchill IV	2.4	-0.0	2.4	2.3	0.1
CBRE	-1.3	0.1	-1.2	2.0	-3.2
Permira IV	2.1	0.6	2.6	2.3	0.3
Permira V	2.4	0.5	2.9	2.3	0.6
LCIV RIF	0.0	0.2	0.2	2.0	-1.8

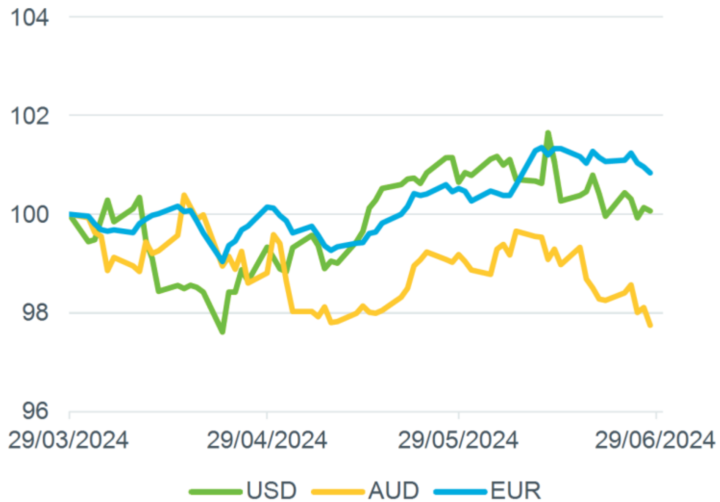
Performance Since Mandate Inception*

	Asset return (inc. FX impact)	Currency return (via Russell mandate)	Asset return (ex. FX impact)	BM return	Relative return (ex. FX impact)
Stafford II	7.5	-0.1	7.4	8.9	-1.4
Stafford IV	15.6	-0.8	14.8	11.5	3.0
JPM	9.6	-0.4	9.3	9.1	0.2
Churchill II	7.8	-1.7	6.1	5.9	0.2
Churchill IV	10.3	-3.0	7.2	7.6	-0.3
CBRE	4.6	-0.4	4.1	9.1	-4.5
Permira IV	5.4	0.4	5.7	6.0	-0.3
Permira V	7.5	-0.2	7.3	9.3	-1.8
LCIV RIF	10.3	-0.4	9.9	11.6	-1.5

Hedged Currency Exposure**



Sterling Performance vs. Foreign Currencies (Rebased to 100 at 31 March 2024)



Source: Northern Trust and Investment Managers.
**Since inception performance is since individual fund inception of inception of the currency hedging mandate, whichever is more recent. ** As at 31 March 2024 (latest available).*

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Private Markets Investments

Since March 2018, the Fund has made commitments to seven private markets funds as outlined right. The table provides a summary of the commitments and drawdowns to 30 June 2024.

Mandate	Infrastructure			Private Debt		
Vehicle	**Stafford Infrastructure Secondaries Fund II**	**Stafford Infrastructure Secondaries Fund IV**	**LCIV Renewable Energy Infrastructure Fund**	**Churchill Middle Market Senior Loan Fund IV**	**Permira Credit Solutions IV Senior Fund**	**Permira Credit Solutions V Senior Fund**
Commitment Date	25/04/2018	18/12/2020	30/06/2021	29/09/2021	12/2018	07/11/2022
Fund Currency	EUR	EUR	GBP	USD	EUR	EUR
Gross Commitment	€28.5m	€30m	£25m	$26.5m	£36.0m	£43.0m
Gross Commitment (GBP estimate)	£24.2m	£25.4m	-	£21.0m	-	-
Capital Called During Quarter (Payments Less Returned Capital)	-	-	£1.5m	-	-	-
Capital Drawn To Date	£26.3m	£19.5m	£12.8m	£17.8	£31.2m	£18.2m
Distributions/Returned Capital To Date (Includes Income and Other Gains)	£15.1m	£1.7m	-	£4.5m	£9.3m	£2.6
NAV at Quarter End	£19.5m	£25.9m	£15.7m	£16.0m	£27.5m	£23.9m
Net IRR Since Inception *	8.0% p.a.	12.8% p.a.	7-10% p.a. (Target)	8.9% p.a.**	7.1% p.a.	14.0% p.a.
Net Cash Yield Since Inception*	6.9% p.a.	3.9% p.a.	3-5% p.a. (Target)	-	-	-
Number of Holdings*	22 funds	16 funds	16 investments	134 investments	46 investments	20 investments

**as at 31 March 2024 (latest available) **Refers to IRR of realised assets in the portfolio*

Source: Investment Managers

Market Background

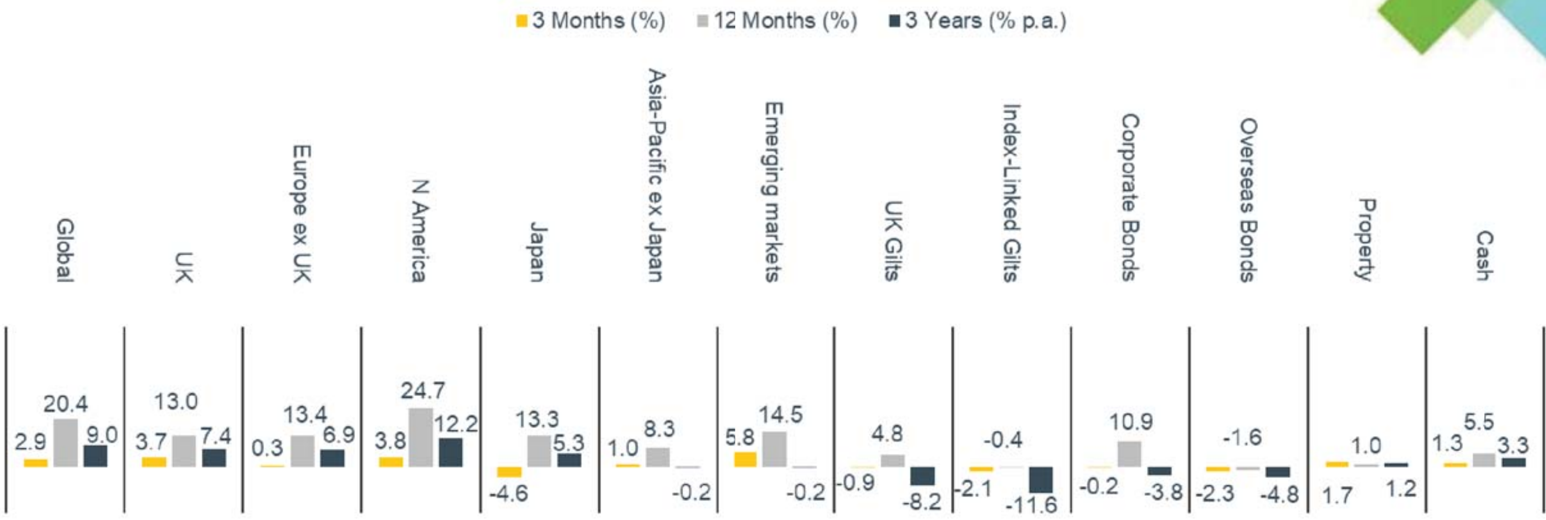
The US economy slowed more than expected in Q1 to an annualised quarterly pace of 1.4%. While this marks a sharp pullback from the blistering 3.4%, the economy still exhibits decent, if slowing, domestic demand. Quarter-on-quarter eurozone and UK GDP rose more than expected in Q1, by 0.3% and 0.7% respectively, with both regions officially exiting technical recession.

UK year-on-year headline CPI slowed meaningfully, returning to the Bank of England's (BoE) 2% target for the first time in almost three years in May and remained unchanged in June. Core CPI slowed but, at 3.5% year-on-year, highlights stubborn underlying inflation pressures. In the eurozone, headline and core CPI measures rose to 2.5% and 2.9%, respectively, in June. US headline CPI fell to 3.0% in June, while core CPI eased to 3.3%.

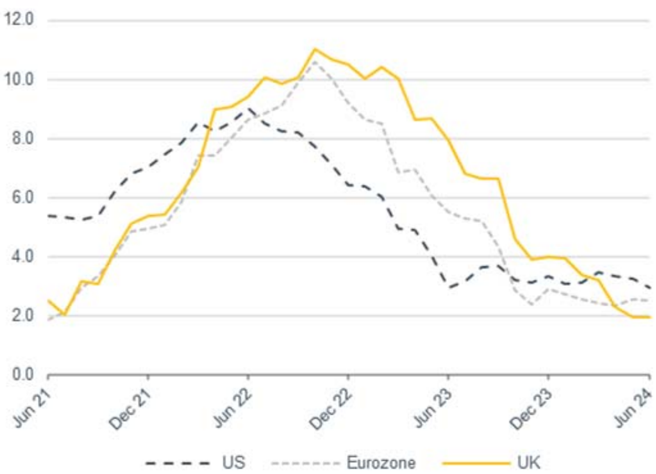
The European Central Bank (ECB) delivered a widely expected 0.25% pa reduction in its deposit facility interest rate, to 3.75% pa. However, the ECB raised its inflation outlook for 2024 and 2025. The Federal Reserve (Fed) and BoE held rates steady, at 5.5% pa and 5.25% pa respectively, and markets continue to expect fewer rate cuts in 2024 than they did at the start of the year.

The US trade-weighted dollar rose 2.4% as market further reduced their rate cut expectations for 2024. The equivalent sterling measure rose 0.7% while the euro measure weakened a little as the ECB lowered rates. The Japanese trade-weighted yen fell a further 5.1% as markets continued to bet on wide interest rate differentials between Japan and its major developed-market peers.

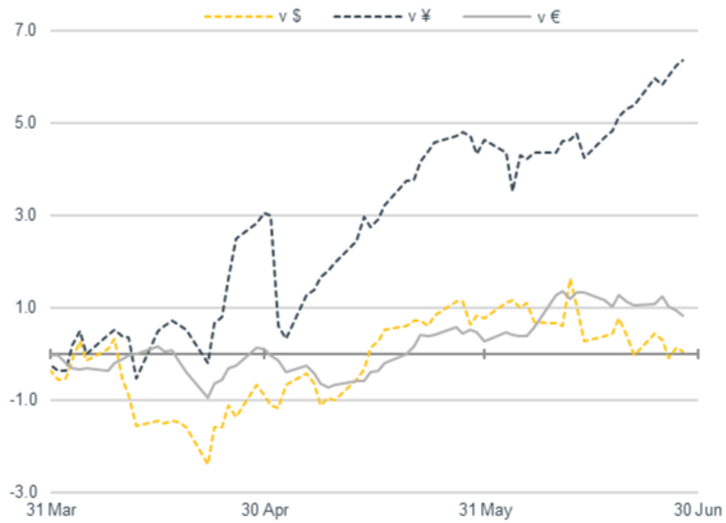
Historic returns for world markets [1]



Annual CPI Inflation (% year on year)



Sterling trend chart (% change)



Source: DataStream. [1] Returns shown in Sterling terms. Indices shown (from left to right) are: FTSE All World, FTSE All Share, FTSE AW Developed Europe ex-UK, FTSE North America, FTSE Japan, FTSE AW Developed Asia Pacific ex-Japan, FTSE Emerging, FTSE Fixed Gilts All Stocks, FTSE Index-Linked Gilts All Maturities, iBoxx Corporates All Investment Grade All Maturities, ICE BofA Global Government Index, MSCI UK Monthly Property; UK Interbank 7 Day

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Market Background

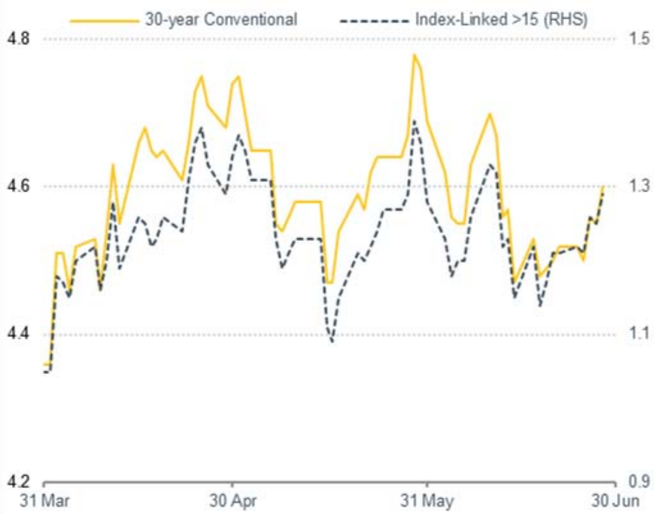
Sovereign bond yields rose on decent growth and sticky inflation data. US and UK 10-year bond yields both rose 0.2% pa to 4.4% pa and 4.2% pa, respectively. Despite the ECB's rate cut, German sovereign bond yields also rose 0.2% pa to 2.5% pa. French 10-year yields rose sharply, by 0.5% pa, due to uncertainties around the parliamentary elections.

Despite little change in credit spreads, UK investment-grade credit markets recorded negative total returns as income was offset by a rise in underlying sovereign bond yields. Speculative-grade markets outperformed, supported by income return and their lower duration profile. Euro and US high-yield bonds delivered total returns of 1.5% pa and 1.1% pa, respectively.

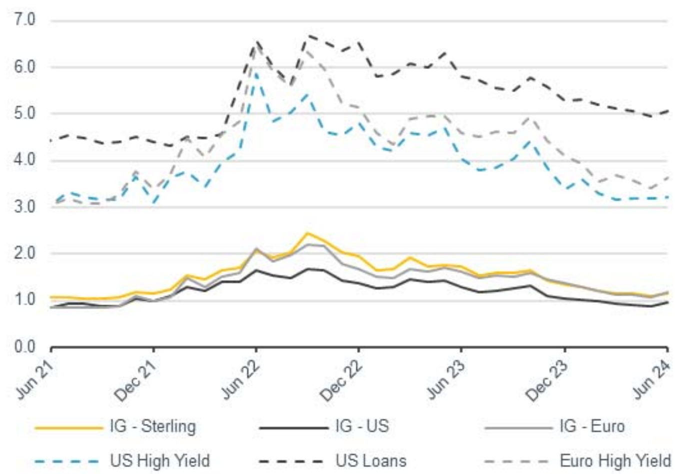
The FTSE All World Total Return Index rose 3.5%. US Q1 earnings comfortably beat expectations and stocks tied to AI continued to benefit. Technology was the clear outperforming sector. Utilities were the only other, albeit modest, outperformer. All other sectors underperformed, with value-orientated sectors seeing the worst underperformance.

The MSCI UK Property Total Return Index rose 1.7% between March and June, as aggregate capital values increased modestly for the fourth consecutive month. On a 12-month basis to June, aggregate property capital values are down 4.7%. Aggregate nominal rental year-on-year growth was 3.6% in June. Given falls in inflation real rental growth, in CPI terms, reached 1.6% year-on-year in June.

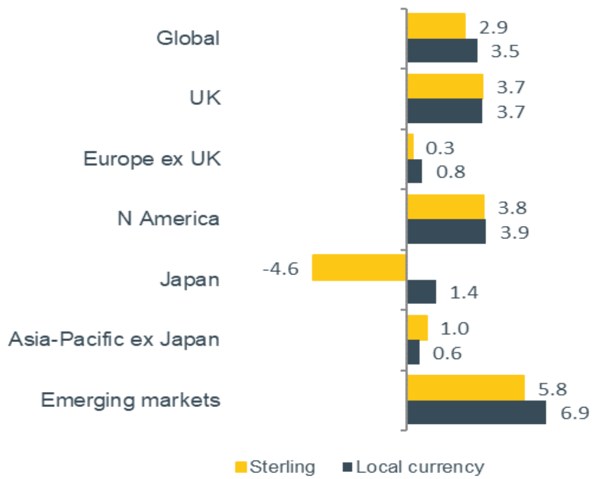
Gilt yields chart (% p.a.)



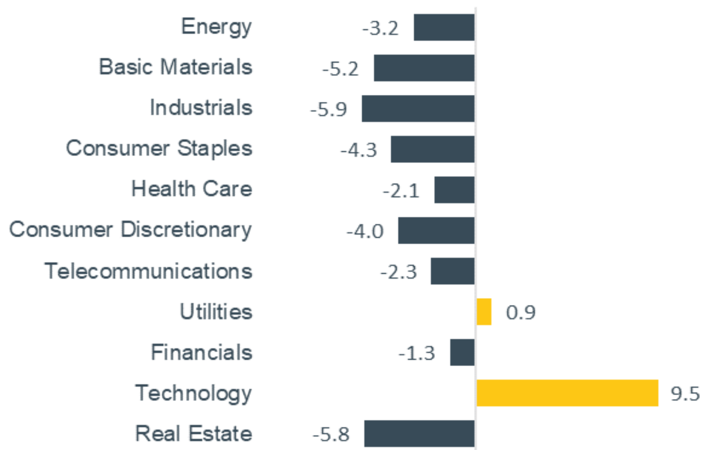
Investment and speculative grade credit spreads (% p.a.)



Regional equity returns [1]



Global equity sector returns (%) [2]



Source: DataStream, Barings, ICE [1] FTSE All World Indices. Commentary compares regional equity returns in local currency. [2] Returns shown in Sterling terms and relative to FTSE All World.

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Capital Markets Outlook

Asset Class	Market Summary
Equities	A large rise in stock prices since the beginning of the year has taken the global equity price-to-earnings ratio above long-term averages, while above-trend earnings mean cyclically adjusted valuations are even higher. However, while elevated valuations are likely to weigh on longer-term returns, the fundamental outlook may support them in the near term: despite cautious forward guidance, the Q1 earnings season was strong enough to prompt modest upgrades to full-year global equity earnings estimates for 2024 and 2025, which now stand at 10.0 and 13.4%, respectively.
Investment Grade Credit	Credit spreads remain low, close to the 25th percentile of their long-term history, as resurgent new issuance was met by ongoing strong demand for high headline yields. Though overall corporate funding costs continue to rise in fixed interest markets as companies refinance existing debt at higher yields, debt affordability metrics remain in decent shape. Robust growth, an upswing in corporate earnings, and supportive financial conditions are all factors that could keep credit spreads at current levels for a while yet.
Emerging Market Debt	Supportive inflation developments, relatively subdued growth, and high real policy rates leave room for interest rate cuts, which is supportive for local currency duration. However, although overall yields are attractive, a potentially stronger for longer dollar may weigh on the asset class in the near-to-medium term. Low EM/DM long-term yield differentials also weigh on optimism towards the asset class.
Liquid Sub-Investment Grade Debt	Default rates have risen, and are slightly above long-term averages, but Moody's estimates that this represents the current cycle's peak and that default rates will fall below historic averages by the end of the year. However, high yields have supported demand in a shrinking market, and speculative-grade bond spreads are very low, providing little cushion against downside risks.
Private Lending	Speculative-grade loan spreads, which are in line with long-term medians, offer better value relative to similarly rated bonds, and a more modest pace of interest-rate cuts points to a potentially attractive income-based return over the medium term.
Core UK Property	We have seen continued improvement in several of the fundamental indicators we track for UK commercial property, as evidenced by the latest Royal Institute of Chartered Surveyors survey. At the same time, real rental growth has continued to rise as inflation has fallen. However, vacancies have continued to rise in the office sector and, given shifts in working patterns and office space requirements, the rise in vacancies in the sector in recent years looks somewhat structural. Our ongoing caution is largely a reflection of the challenging technical environment, characterised by selling pressure on open-ended property funds, low transaction volumes and potentially large discounts to net asset value upon disposal
Conventional Gilts	After a surprisingly strong recovery in GDP growth in Q1, business surveys point to sustained improvement in activity in Q2, leading us to shade down our fundamental assessment. Though, gilt yields remain attractive relative to our assessment of fair value based on long-term growth and inflation forecasts. The technical backdrop remains challenging amidst high issuance and BoE gilts sales.
Index-Linked Gilts	Better-than expected real growth also see us shade down our fundamental assessment for index-linked gilts. Index-linked gilt yields are in-line with our assessment of fair value, while implied inflation looks a little expensive relative to both shorter- and longer-term forecasts.

The table summarises our broad views on the outlook for markets.

Source: Hymans Robertson

HYMANS ROBERTSON

Disclaimer

This report is addressed to the London Borough of Havering Pension Fund. It should not be released or otherwise disclosed to any third party except as required by law or regulatory obligation or without our prior written consent. We accept no liability where the report is used by, or released or otherwise disclosed to, a third party unless we have expressly accepted such liability in writing. Where this is permitted, the report may only be released or otherwise disclosed in a complete form which fully discloses our advice and the basis on which it is given.

Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, and property, whether held directly or in a pooled or collective investment vehicle. Further, investment in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of an investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

In some cases, we have commercial business arrangements/agreements with clients within the financial sector where we provide services. These services are entirely separate from any advice that we may provide in recommending products to our advisory clients. Our recommendations are provided as a result of clients' needs and based upon our independent research. Where there is a perceived or potential conflict, alternative recommendations can be made available.

This report may contain fund and fund manager specific research ratings and comments based on the views of our investment research team. Please speak to your investment adviser before taking any investment decisions or actions. They will advise whether formal investment advice is necessary, including a risk assessment and investment suitability information where appropriate.

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Geometric vs. Arithmetic Performance

Hymans Robertson are among the investment professionals who calculate relative performance geometrically as follows:

$$\frac{(1 + Fund\ Performance)}{(1 + Benchmark\ Performance)} - 1$$

Some industry practitioners use the simpler arithmetic method as follows:

$$Fund\ Performance\ - Benchmark\ Performance$$

The geometric return is a better measure of investment performance when compared to the arithmetic return, to account for potential volatility of returns.

The difference between the arithmetic mean return and the geometric mean return increases as the volatility increases.

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

Document is Restricted

PENSIONS COMMITTEE 1 OCTBER 2024

Subject Heading:	**PUBLIC SERVICE PENSIONS ACT 2013 – SECTION 13 REPORT**
SLT Lead:	**Kathy Freeman**
Report Author and contact details:	***Debbie Ford*** ***Pension Fund Manager (Finance)*** ***01708432569*** ***Debbie.ford@onesource.co.uk***
Policy context:	Public Services Pensions Act 2013 Section 13, requires the Government Actuary's Department to report on whether LGPS funding valuations meet the aims of Section 13
Financial summary:	Actuary fees met by the Pension Fund

The subject matter of this report deals with the following Council Objectives

Communities making Havering	[X]
Places making Havering	[X]
Opportunities making Havering	[X]
Connections making Havering	[X]

SUMMARY

The Government Actuary Department (GAD) has published its report to the Ministry of Housing, Communities and Local Government (MHCLG) on the 14 August 2024, which is required by section 13 of the Public Service Pensions Act 2013.

The purpose of the report is to examine whether the separate 87 fund valuations have achieved the four aims set out in the Act: **compliance**, **consistency**, **solvency** and **long-term cost efficiency**.

This report is published as three documents: The Section 13 Report, **(Appendix A)**, the **Appendices (Appendix B)** and **Funding Analysis (Appendix C).**

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RECOMMENDATIONS

That the committee note

1. The results of the report produced by GAD attached as **Appendix A, B and C.**
2. To note Hymans summary attached as **Appendix A.**

REPORT DETAIL

Background

a. The Ministry of Housing, Communities and Local Government (MHCLG) appointed GAD to report under section 13 of the Public Service Pensions Act 2013 in connection with the actuarial valuations of the Funds in the Local Government Pension Scheme (LGPS).

b. Published on the 14 August 2024, this is the third formal section 13 report based on the results of Fund valuations as at 31 March 2022.

c. The report is published as three documents: the section 13 Report (Appendix A), the appendices (Appendix B) and Funding Analysis (Appendix C).

d. The purpose of the report is to examine whether the 87 separate fund valuations have achieved the four aims set out in the Act, which are:

   I. **Compliance** – to confirm whether the Fund's actuarial valuation has been carried out in accordance with the scheme regulations.
   II. **Consistency** – to confirm whether the Fund's actuarial valuation has been carried out in a way that is NOT inconsistent with other Fund valuations in the LGPS. This being both presentational and evidentially consistent, enabling the reader to make comparisons between different valuation reports.
   III. **Solvency** – to confirm whether the rate of employer contributions is set at an appropriate level to ensure the solvency of the Fund, and
   IV. **Long Term cost efficiency** – to confirm whether the rate of employer contributions is set at an appropriate level to ensure the long-term cost-efficiency of the scheme, ensuring the Fund is not unduly storing up funding problems for later generations.

e. GAD allocated scores to each fund once tested against the aims using a colour classification of red, amber, white or green:

- **Red** – indicates a material issue that may result in the aims of section 13 not being met. In such circumstances, remedial action may be considered.
- **Amber** – indicates a potential material issue that Funds are expected to be aware of. In isolation, this would not usually contribute to a recommendation for remedial action.
- **White** – an advisory flag that indicates a general issue, which does not require an action in isolation. It may have been an amber flag if there were broader concerns.
- **Green** – no material issues that may contribute to a recommendation for remedial action.

f. All Funds met the **compliance** and **consistency** tests, although there were no individual ratings awarded, GAD raised concerns around the continued lack of evidential consistency since the previous review at 2019. Whilst GAD appreciate that specific fund circumstances may merit the use of different actuarial assumptions, they believe that these differences may lead to different outcomes, for example different contribution rates. Wherever possible, GAD believe in the importance of information being presented in a way that facilitates comparisons and made 2 recommendations for the Scheme Advisory Board (SAB) to consider. Hymans response to this recommendation is set out on page 6 in Appendix D attached to this report.

g. The London Borough of Havering Pension Fund received green flags for all the metrics tested under **Solvency** and **Long-Term Cost Efficiency**. All the individual metrics tested for **Solvency** and their ratings for Havering can be seen on page 35 in Appendix B. All the individual metrics tested for **Long-Term Cost Efficiency** and their ratings for Havering can be seen on page 35 in Appendix B.

h. **Long Term Cost efficiency** - GAD made a recommendation to the SAB to consider the treatment of surpluses, where deficits exist how can this be demonstrated as a continuation of the previous plan and treatment of asset transfers from local authorities.

i. The SAB board are facilitating a review of the Funding Strategy Statement guidance. As part of this review, SAB to consider the recommendations made in their report.

j. Any areas which may affect the outputs of the 2025 actuarial valuations mentioned in the report will be considered as part of the 2025 valuations exercise.

k. GAD is required to report on the Scheme every 3 years with the next report based on the outcomes of the Fund valuations as at 31 March 2025.

l. The Fund's actuary (Hymans) will be present at the meeting to take members through their summary report on the findings of the Section 13 report, attached as **Appendix D**.

IMPLICATIONS AND RISKS

Financial implications and risks:

The report focuses on the funding of future benefits. The calculation of members benefits is set out in the regulations and are not dependent on the funding position of the Fund.

There are no remedial actions required for the Havering Pension Fund and it should be noted that a green or white flag does not necessarily indicate that no risk is present and similarly that where there are no suggestions for remedial action does not mean that the Fund should not consider actions.

The Fund will, where required, cooperate with the SAB's consideration/implementation of GAD's recommendations and consider any areas which may affect the outputs of the 2025 actuarial valuations mentioned in the report.

The Fund will receive a total charge from the Actuary for £3,500.00 plus VAT to cover the time reviewing the draft report on the Funds behalf and carrying out a review of the figures in GAD's report.

Actuarial charges will be met from the Pension Fund.

Legal implications and risks:

GAD has been appointed by MHCLG to report under Section 13 of the Public Service Pensions Act 2013 in connection with the actuarial valuations of the funds in the LGPS in England and Wales.

Section 13 (4) requires GAD to report on whether the following aims achieved, using a variety of measures within the following categories: compliance, consistency, solvency and long term cost efficiency.

Section 13 (6) If the report states that, in the view of the person making the report, any of the aims in that subsection (4) (above) has not been achieved the report may recommend remedial steps and the scheme manager must take such remedial steps as considered appropriate, and publish details of those steps and the reasons for taking them;

Human Resources implications and risks:

None arise from this report.

Equalities implications and risks:

The Public Sector Equality Duty (PSED) under section 149 of the Equality Act 2010 requires the Council, when exercising its functions, to have due regard to:

i. the need to eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
ii. the need to advance equality of opportunity between persons who share protected characteristics and those who do not, and;
iii. foster good relations between those who have protected characteristics and those who do not.

Note: 'Protected characteristics' are: age, sex, race, disability, sexual orientation, marriage and civil partnerships, religion or belief, pregnancy and maternity and gender reassignment/identity.

The Council is committed to all of the above in the provision, procurement and commissioning of its services, and the employment of its workforce. In addition, the Council is also committed to improving the quality of life and wellbeing for all Havering residents in respect of socio-economics and health determinants

An EqEIA is not considered necessary regarding this matter as the protected groups are not directly or indirectly affected

None arise from this report as this report is required to be published in order to comply with Local Government Pension Scheme Regulations 2013.

BACKGROUND PAPERS

<u>Background Papers List</u>
none

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Government Actuary's Department

Local Government Pension Scheme England and Wales

Review of LGPS fund valuations as at 31 March 2022 under Section 13

Fiona Dunsire FIA and Aidan Smith FIA

14 August 2024

Contents

1. Executive Summary

1.1 The Government Actuary has been appointed by the Ministry of Housing, Communities and Local Government (MHCLG) (formerly the Department for Levelling Up, Housing and Communities) to report under section 13 of the Public Service Pensions Act 2013, in connection with the 2022 actuarial valuations of the funds in the Local Government Pension Scheme England and Wales (LGPS or "the scheme").

1.2 Section 13 requires the Government Actuary to report on whether the following aims are achieved:

- Compliance
- Consistency
- Solvency
- Long term cost efficiency

1.3 This is the third formal section 13 report. Section 13 was applied for the first time to the fund valuations as at 31 March 2016 and a second exercise was undertaken as at 31 March 2019.

1.4 This report is based on the actuarial valuations of the funds, other data provided by the funds and their actuaries, and engagement exercises with relevant funds. We are grateful to all stakeholders for their assistance in preparing this report. We are committed to preparing a section 13 report that makes practical recommendations to advance the aims listed above. We will continue to work with stakeholders to advance these aims and expect that our approach to section 13 will continue to evolve to reflect ever changing circumstances and feedback received.

Progress since 2019

1.5 We made four recommendations as part of the 2019 section 13 report. In summary, we recommended that:

1. Consideration should be given to the impact of inconsistency on the funds, particularly in relation to emerging risks including climate change.
2. Funds should ensure that their deficit recovery plans can be demonstrated to be a continuation of their previous plan.
3. Additional information about contributions, discount rates and reconciling deficit recovery plans should be added to the dashboard.
4. Governance around asset transfer arrangements from local authorities should be reviewed to ensure any such arrangements meet the fund's long term funding objectives.

1.6 We are pleased to note good progress has been made in relation to recommendations 1 and 3. However, further actions in relation to recommendations 1, 2 and 4 are suggested.

1.7 We set out our comments on this progress in more detail in Chapter 3.

Funding position at 2022

1.8 In aggregate, the funding position of the LGPS has improved since 31 March 2019 and the scheme appears to be in a strong financial position, specifically:

- Total assets have grown from £290bn in 2019 to £366bn in 2022 (taking the value used in the local fund valuations).
- Total liabilities disclosed in the 2022 local valuation reports amounted to £344bn. The local funding bases are required to incorporate prudence (i.e. there is intended to be a greater than 50:50 likelihood of actual future experience being better than the assumptions, in the opinion of the fund actuary).
- The aggregate funding level on these prudent local bases has improved from 98% (at 2019) to 106% (at 2022). However individual funds have seen a range of funding level changes from a decrease of 2.6% to an increase of just under 30%.
- At the date of writing, we are aware that many funds are likely to have seen further subsequent improvements in their funding position. However, this will depend on individual fund circumstances.
- Whilst the aggregate funding position has improved, not all funds were in surplus at 31 March 2022, with 26 out of 87 being in deficit.
- The improved aggregate funding level is due in large part to strong asset returns over the 3 year period to March 2022. Investment returns averaged around 9% pa over the period. Funding also improved due to the continuation of substantial financial contributions from most LGPS employers.
- The aggregate funding level on the Government Actuary's Department's (GAD's) best estimate basis is 119% (at 2022). GAD's best estimate basis is the set of assumptions derived by GAD without allowance for prudence. There is intended to be a 50:50 likelihood of actual future experience being better or worse than the best estimate assumptions, in our opinion. More information on this basis is set out in Appendix G.
- The improved funding position has increased the focus on how funds treat surpluses, with relevant considerations including balancing intergenerational fairness with the priority given to stability of contributions.
- Material solvency risks continue to exist given the range of funding positions across the scheme, the sensitivity of funding levels to future experience (especially investment market conditions) and competing pressures on employers' budgets.

1.9 We set out below our findings on each of the four aims and our recommendations.

Compliance

1.10 Our review indicated that fund valuations were compliant with relevant regulations.

Consistency

1.11 Section 13 requires each fund's valuation to be carried out in a way that is not inconsistent with other LGPS fund valuations. We interpret "not inconsistent" to mean that methodologies and assumptions used, in conjunction with adequate disclosure in valuation reports, should facilitate comparison by a reader of the reports. Local circumstances may merit different assumptions. For example, financial assumptions are affected by the current and future planned investment strategy, and different financial circumstances might lead to different levels of prudence being adopted.

1.12 Further to our recommendations from previous section 13 reports, we are pleased to note all funds have continued to adopt a consistent "dashboard" and that additional information requested following the 2019 section 13 report has been provided. We consider this a useful resource to aid stakeholders' understanding, because information is presented in a consistent way in the dashboards. We consider it important to continue to review the information contained within the dashboard to ensure it remains helpful to stakeholders. We will discuss with fund actuaries if further information could be provided to inform stakeholders on the different approaches to removing surpluses.

1.13 However, even given consistency in presentation in the dashboards, differences in the underlying methodology and assumptions (which we call evidential inconsistency) mean that it is not possible to make a like for like comparison between funds.

1.14 There is no indication of significant improvement in evidential consistency since the previous review. Local variations may merit different assumptions and the approaches and assumptions adopted appear compliant with the relevant requirements. However, these differences will lead to different outcomes, for example in ongoing contribution rates. The Scheme Advisory Board (SAB) are facilitating a review of the Funding Strategy Statement guidance. Therefore, as part of this review, we encourage stakeholders to consider potential benefits of greater presentational and evidential consistency among other relevant factors.

Recommendation 1:

We recommend that the Scheme Advisory Board consider whether greater consistency could and should be achieved to allow easier comparison between funds and better understanding of risks.

1.15 We are grateful to the fund actuaries and MHCLG for engaging on climate risk analysis since the previous review. We believe that the climate risk analysis principles document agreed ahead of the 2022 valuations (see Appendix B) helped to improve consistency across the scheme in this area. We recognise the significant progress made by funds and actuarial advisors in the presentation of climate risk analysis as part of the actuarial valuation process. We strongly promote the further development of climate risk analysis and its integration into decision-making by funds. This remains a rapidly evolving area and we recommend that the Scheme Advisory Board considers with other stakeholders what common principles should be adopted for the 2025 fund valuations to facilitate consistency in climate risk analysis across the scheme.

1.16 The landscape in which the scheme operates is continually changing such that the scheme will face different challenges over time. We support the SAB continuing to proactively engage with stakeholders on such issues and provide guidance where appropriate to ensure greater consistency across funds.

Recommendation 2:

We recommend that the Scheme Advisory Board continue to consider emerging issues and, where appropriate, whether guidance would be helpful to support greater consistency.

As part of greater consistency on climate risk, we recommend that work continues to refine the climate change principles document in advance of the 2025 fund valuations.

Solvency

Under solvency and long term cost efficiency we have designed a number of metrics and raised flags against these metrics, to highlight areas where risk may be present, or further investigation is required, using a red/amber/green rating approach. Where we do not expect specific action, we have maintained the white "for information" flag approach introduced in 2019.

1.17 As currently set out in CIPFA's Funding Strategy Statement Guidance, the employer contribution rate is appropriate to ensure solvency if:

- the rate of employer contributions is set to target a funding level for the whole fund of 100% over an appropriate time period and using appropriate actuarial assumptions

and either:

- employers collectively have the financial capacity to increase employer contributions, should future circumstances require, in order to continue to target a funding level of 100%

or

- there is an appropriate plan in place should there be an expectation of a future reduction in the number of fund employers, or a material reduction

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in the capacity of fund employers to increase contributions as might be needed

1.18 The improvement in the funding position of the scheme has reduced the immediate solvency concerns. We have raised no red or amber flags in relation to solvency. However, risks clearly do remain which are important for funds to consider, particularly in the context of competing pressures on employer budgets and noting the sensitivity of funding levels to future experience (especially investment market conditions).

1.19 Some councils have made a commitment to transfer some property assets to their pension funds at a future date. Whilst we are not aware of any new arrangements or any currently under consideration, we note these are complex and, in some cases, established with a long time horizon. For these reasons care needs to be taken to ensure they are suitable investments for a pension fund and that they are compliant with the wider local government capital framework. The governance around any such asset transfer arrangements requires careful consideration, and we recommend that these arrangements are considered as part of the Funding Strategy Statement guidance review as set out in recommendation 3.

Long term cost efficiency

1.20 As currently set out in CIPFA's Funding Strategy Statement Guidance, we consider that the rate of employer contributions has been set at an appropriate level to ensure long term cost efficiency, if it is sufficient to make provision for the cost of current benefit accrual, with an appropriate adjustment to that rate for any surplus or deficit in the fund.

1.21 In 2022, we are flagging two funds as raising potential concern in relation to long term cost efficiency under the deficit period measure.

1.22 For a further fund, we are concerned that employer contribution rates are decreasing (reducing the burden on current taxpayers) at the same time as the deficit recovery is being extended further into the future (increasing the burden on future taxpayers).

1.23 Different approaches have been taken by different funds at the 2022 valuations to determine how surplus is utilised. GAD has not flagged any funds on the utilisation of surplus at this review. Funds appear to have made decisions having considered relevant factors. However, we also note inconsistencies in outcomes will arise where funds place different weights on these factors, and we recognise the importance of considering intergenerational fairness i.e. the balance between the interests of current and future taxpayers and employers.

1.24 We set out in the long term cost efficiency chapter of this report the approach that we intend to use for future section 13 reviews to assess how funds have utilised surpluses at future valuations. The approach is a mix of qualitative and quantitative analysis, to reflect the range of relevant considerations and approaches. We will expect administering authorities to have considered relevant factors and the trade-off between competing priorities.

1.25 We have illustrated the potential implications of different approaches to surplus management in our Asset Liability Modelling (ALM), as well as the uncertainty of long term contributions and funding and therefore the link to solvency risks.

1.26 We support the SAB in facilitating the review of the guidance on Funding Strategy Statements mentioned above. We recommend that the treatment of surpluses and deficits, together with the governance on asset transfers, should be included as part of this review.

Recommendation 3:

We recommend that the Scheme Advisory Board consider the following:

- Where funds are in surplus, whether additional guidance can be provided to support funds in balancing different considerations.
- Where deficits exist, how can all funds ensure that the deficit recovery plan can be demonstrated to be a continuation of the previous plan.
- Whether additional guidance is required in relation to the treatment of asset transfers from local authorities.

2. Introduction

2.1 This introduction provides background information on the local government pension scheme and the review we have undertaken, including:

- Valuations within the LGPS
- Section 13 and the statutory requirements
- The approach that we adopt to carry out the required section 13 review

What are Local Government Pension Scheme valuations?

The Local Government Pension Scheme in England and Wales (LGPS, or “the scheme”) is a funded scheme comprising 87 different funds. Each individual fund has its own liabilities and assets, and periodic assessments are needed to ensure the fund has sufficient assets to meet its liabilities.

2.3 Each LGPS pension fund is required to appoint their own fund actuary, who carries out the fund's valuation every three years. The fund actuary uses a number of assumptions to value the liabilities of the fund. Costs are split between those that relate to benefits already earned in the past (the past service cost) and those that relate to benefits being earned in the future (the future service cost). The results of the valuation may lead to changes in employer contribution rates for both future and past service costs.

2.4 In addition to the individual valuations carried out by each fund, GAD carries out the following valuations:

- A valuation of the whole scheme, with the latest such valuation occurring as at 31 March 2020: Local Government Pension Scheme (England and Wales). This valuation evaluates the cost of LGPS benefits and assesses if any changes need to be considered to meet an agreed cost control mechanism under directions set by HM Treasury. The Government’s intention is that the cost control mechanism is only triggered by “extraordinary, unpredictable events”. As at 31 March 2020 the cost control mechanism was not breached. The next review will be as at 31 March 2024.
- SAB Cost Management Process (CMP) where the cost of the scheme is considered by the LGPS England and Wales Scheme Advisory Board (SAB) relative to a target cost for the scheme. The SAB CMP follows the valuation of the whole scheme described above.

2.5 Scheme regulations set out member benefits to be paid and when valuations are to be carried out. We have based our assessment on current scheme regulations and benefits (with an allowance for agreement to equalise benefits under “McCloud”). The benefits paid to members are not dependent on the funding position of any particular fund. See Appendix C for further information.

What is section 13?

2.6 Section 13 is a requirement under the Public Service Pensions Act 2013.

2.7 The Government Actuary has been appointed by the Ministry of Housing, Communities and Local Government (MHCLG) to report under section 13 of the Public Service Pensions Act 2013 in connection with the actuarial valuations of the 87 funds in the Local Government Pension Scheme in England and Wales.

2.8 This is the third formal section 13 report and sets out the Government Actuary's findings following the fund valuations as at 31 March 2022.

Statutory requirements

2.9 This report is addressed to MHCLG as the responsible authority for the purposes of subsection (4) of section 13 of the Public Service Pensions Act 2013 (the Act). GAD has prepared this report setting out the results of our review of the 2022 funding valuations of the LGPS. This report will be of relevance to administering authorities and other employers, actuaries performing valuations for the funds within the LGPS, the LGPS Scheme Advisory Board (SAB), HM Treasury (HMT) and the Chartered Institute of Public Finance & Accountancy (CIPFA), as well as other LGPS stakeholders.

2.10 Subsection (4) of section 13 requires the Government Actuary, as the person appointed by MHCLG, to report on whether the four main aims are achieved, namely:

- Compliance: whether the fund's valuation is in accordance with the scheme regulations
- Consistency: whether the fund's valuation has been carried out in a way which is not inconsistent with the other fund valuations within the Local Government Pension Scheme England and Wales (LGPS)
- Solvency: whether the rate of employer contributions is set at an appropriate level to ensure the solvency of the pension fund
- Long term cost efficiency: whether the rate of employer contributions is set at an appropriate level to ensure the long term cost efficiency of the pension fund

2.11 Section 13, subsection (6) states that if any of the aims of subsection (4) are not achieved

a. the report may recommend remedial steps

b. the scheme manager must -

i. take such remedial steps as the scheme manager considers appropriate, and

ii. publish details of those steps and the reasons for taking them

c. the responsible authority may -

i. require the scheme manager to report on progress in taking remedial steps

ii. direct the scheme manager to take such remedial steps as the responsible authority considers appropriate.

GAD’s approach

2.12 We have looked at a range of metrics to identify potential exceptions under the solvency and long term cost efficiency objectives. Each fund is given a colour-coded flag under each measure:

Colour	Interpretation
Red	A material issue that may result in the aims of section 13 not being met. In such circumstances remedial action to ensure solvency and/or long term cost efficiency may be considered.
Amber	A potential issue that we would expect funds to be aware of. In isolation this would not usually contribute to a recommendation for remedial action in order to ensure solvency and/or long term cost efficiency.
White	An advisory flag that highlights a general issue but one which does not require an action in isolation. It may have been an amber flag if we had broader concerns.
Green	There are no material issues that may contribute to a recommendation for remedial action in order to ensure solvency or long term cost efficiency.

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2.13 The trigger points for these flags are based on a combination of absolute measures and measures relative to the funds in scope. Where appropriate, we have maintained consistency with the approach adopted in 2019.

2.14 While they should not represent targets, these measures and flags help us determine whether a more detailed review is required. For example, we would have a concern where multiple measures are triggered amber for a given fund.

2.15 These flags are intended to highlight areas where risk may be present or further investigation is required. For example, where an amber flag remains following engagement, we believe this relates to an area where some risk remains that administering authorities and pension boards should be aware of. There is no implication that the administering authority was previously unaware of the risk.

2.16 A green or white flag does not necessarily indicate that no risk is present and similarly the fact that we are not specifically suggesting remedial action does not mean that scheme managers should not consider actions.

2.17 We have had regard to the particular circumstances of some funds, following engagement with the administering authority and the fund actuary. In some cases, the action taken or proposed has been sufficient to remove flags. We have described these outcomes in the relevant sections below.

2.18 The metrics shown in the tables in this report are based on publicly available information and/or information provided to GAD.

2.19 Further detail of the metrics and fund engagement is provided in the solvency and long term cost efficiency chapters and appendices. In addition, we have considered the overall funding position of the funds within the LGPS in our funding analysis report published alongside this document.

2.20 Within an LGPS fund, contribution rates may vary between employers. Our analysis and metrics focus on the aggregate fund position except where stated. When reading this report, it is important to note that individual employers' contribution rates and funding situations might differ from the aggregate fund position.

2.21 Local valuation outputs depend on both the administering authorities' Funding Strategy Statements and the actuary's work on the valuation. We have reported where valuation outcomes raised concerns in relation to the aims of section 13. It is not our role to express an opinion as to whether that conclusion was driven by the actions of authorities or their actuaries, or other stakeholders.

2.22 The following key has been used to identify the actuarial advisers for each fund:

Adviser	**Colour**
Aon	Purple
Barnett Waddingham	Green
Hymans Robertson	Grey
Mercer	Blue

2.23 The Environment Agency Closed Pension Fund is different from other LGPS funds. The benefits payable and costs of the fund are met by Grant-in-Aid funding by the Department for Environment, Food and Rural Affairs, thus guaranteeing the security of these benefits. Details of this can be found in the Environment Agency Closed Pension Fund valuation published on the LGPS SAB website. In general, the fund has been excluded from the analyses that follow.

Standardised bases used in our approach

2.24 There are some areas of inconsistency highlighted in Chapter 5 which make meaningful comparison of local valuation results difficult. To address this, we have referred to results restated on two bases:

- The SAB standard basis was established by the SAB and is used by fund actuaries to calculate liabilities on a consistent basis allowing comparison of funds.
- Where we consider the potential impact of future funding levels on solvency and long term cost

efficiency we need to compare the value of a fund's assets and liabilities. Therefore, we require a market consistent basis. As the SAB standard basis is not a market related basis GAD calculates liabilities on a consistent best estimate basis, which is based on market conditions as at 31 March 2022.

Additional information on both these bases can be found in Appendix G.

2.25 These bases facilitate comparison but are not suitable for funding purposes, as we would expect a funding basis to reflect the local characteristics of a fund. We note that:

- The SAB standard basis is not consistent with current market conditions and is not suitable for considering possible impacts on solvency and long term cost efficiency.
- The GAD best estimate basis is based on our views of likely future returns on each broad asset class across the Scheme. Regulations and CIPFA guidance call for prudence to be adopted when setting a funding basis. Our best estimate basis does not include prudence and is based on the aggregate investment strategy for the overall scheme, so will not be pertinent to any given fund's particular investment strategy. Further, future asset returns are uncertain and there are other reasonable best estimate bases which may give materially different results.

2.26 The local valuations and our calculations underlying this report are based on specific assumptions about the future. Future experience will differ from these assumptions. Some of our solvency measures are stress tests but they are not intended to indicate a worst case scenario.

Other important information

2.27 The previous section 13 report was published on 16 December 2021 following the valuations as at 31 March 2019, details of which can be found in the Local Government Pension Scheme: review of the actuarial valuations of funds as at 31 March 2019.

2.28 The SAB have collated individual fund valuation reports, together with a summary on their website.

2.29 Appendices, dated 14 August 2024, are contained in a separate document.

2.30 GAD have also published a funding analysis report, dated 14 August 2024. This is a factual document summarising the results of the funds' valuations.

2.31 In performing this analysis, we are grateful for helpful discussions with and cooperation from:

- Actuarial advisors
- CIPFA
- MHCLG
- Fund administrators

- HM Treasury
- LGPS SAB

2.32 This report is GAD's alone, and the stakeholders above are not responsible for the content.

2.33 GAD would like to acknowledge the commitment shown by the funds and their advisors, which is illustrated through their engagement with this process and the improvement in the funding position of funds since the previous valuation.

2.34 GAD has no liability to any person or third party other than MHCLG for any act or omission taken, either in whole or in part, on the basis of this report. No decisions should be taken on the basis of this report alone without having received proper advice. GAD is not responsible for any such decisions taken.

2.35 We understand and assume that there is no regulatory authority assumed by or conferred on the Government Actuary in preparing this or any future section 13 report. The appointment to report under section 13 does not give the Government Actuary any statutory power to enforce actions on scheme managers (or others).

2.36 This work has been carried out in accordance with the applicable Technical Actuarial Standard: TAS 100 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

Future review

2.37 We are grateful to stakeholders for their assistance in preparing this report. We are committed to preparing a section 13 report that makes practical recommendations to advance the aims in the legislation. We will continue to work with stakeholders to advance these aims ahead of the 2025 actuarial valuations and expect that our approach to section 13 will continue to evolve to reflect ever changing circumstances and feedback received.

Limitations

2.38 We recognise that the use of data and models has limitations. For instance, the data that we have from valuation submissions and publicly available financial information is likely to be less detailed than that available to funds. Our risk assessment framework enables us to broadly assess scheme risks and decide on our engagement with funds on an indicative basis. It is the responsibility of administering authorities and their advisors to consider and manage their risks.

2.39 Because of the nature of this exercise, we have not generally allowed for experience since the fund valuations, except for any specific actions described where we have engaged with funds.

3. Progress

3.1 We made four recommendations and a general risk comment in the 2019 section 13 report. We have reported on the progress made against each of these recommendations in the table below:

2019 Recommendation	Progress
1: The SAB should consider the impact of inconsistency on the funds, participating employers and other stakeholders. It should specifically consider whether a consistent approach needs to be adopted for conversions to academies, and for assessing the impact of emerging issues, including McCloud.	The SAB have actively engaged with both areas that the 2019 report focused on, namely academies and equalisation of benefits following the "McCloud" remedy. The SAB have prepared guidance on academy conversion. This is a positive improvement with regard to presentational consistency although little has changed in respect of evidential consistency, i.e. the underlying differences in approaches remain. In relation to McCloud liabilities all funds quantified the estimated impact as a percentage of liabilities on the dashboard, which was helpful in communicating the impact. Regulations to equalise for McCloud remedy have been introduced since the last review in 2019 and, therefore, we make no further recommendations in this area. More broadly, the potential for inconsistency remains particularly where new issues emerge. Therefore, we are supportive of the SAB maintaining a watching brief and engaging with stakeholders in relation to current issues such as the recent working group on surpluses and the proposal to host a climate change working group. We also encourage the SAB and other stakeholders to consider the benefits of improving consistency across funds as part of the review of Funding Strategy Statement (FSS) guidance, which they are co-ordinating.

2019 Recommendation	Progress
2: We recommend the SAB consider how all funds ensure that the deficit recovery plan can be demonstrated to be a continuation of the previous plan, after allowing for actual fund experience.	The principles underlying a deficit recovery plan will be set out in each fund's FSS. The SAB is engaging with stakeholders to update the guidance on FSS and will consider the recommendation in these discussions.
3: We recommend fund actuaries provide additional information about total contributions, discount rates and reconciling deficit recovery plans in the dashboard.	We are grateful to the fund actuaries for providing this additional information, which we believe is helpful to stakeholders wishing to compare different LGPS funds.
4: We recommend the SAB review asset transfer arrangements from local authorities to ensure that appropriate governance is in place around any such transfers to achieve long term cost efficiency.	With improvements in funding positions, we understand that no new asset transfer arrangements have been put in place. Fund advisors have not reported any recent asset transfer arrangements in their data submission to GAD. The SAB intend to consider this point during their review of the guidance on FSS.

General risk comment	Progress
Local authorities have finite resources and in recent years, the size of pension funds has increased considerably more than local authority budgets. Given that pension funding levels change, it is not unlikely that a period of increased pension contributions may be required at some point in the future. If additional spending is required for pension contributions, this may lead to a strain on local authority budgets. We would expect that administering authorities are aware of this risk in relation to solvency and would monitor it over time. Administering authorities may wish to discuss the potential volatility of future contributions with employers in relation to overall affordability.	We understand from discussions with fund advisors that administering authorities are generally mindful of the risks of a future deterioration in funding levels requiring increased pension contributions, with this causing a strain on local authority budgets. In many cases, this has been an important consideration when setting contribution rates for funds in surplus. Specifically, we note the focus of employers on stability when setting their contribution rates, which may help funds manage future increases in contributions. In light of the widely reported pressures on council funding impacting local authorities and other employers within the LGPS, it is important that the consequences of volatility and the risk of any future significant requirement to increase employer contributions continue to be monitored.

4. Compliance

Key Compliance findings

- All reports checked contained a statement of compliance.
- The reports checked contained confirmation of all material requirements of regulation 62 of the Local Government Pension Scheme Regulations 2013.
- We concluded the aims of section 13 were achieved under the heading of Compliance, in terms of valuation reporting.

Statutory requirement and chapter content

4.1 Under section 13(4)(a) of the Act, the Government Actuary must report on whether the actuarial valuations of the funds have been completed in accordance with the scheme regulations.

4.2 In this Chapter we set out our approach to reviewing compliance and our conclusions from that review.

Review of compliance outcomes

4.3 Valuation reports complied with the required regulations.

4.4 There is a great deal of consistency in the actuarial methodologies and the presentation of the actuarial valuation reports for funds that are advised by the same firm of actuarial advisors (see Chapter 5 on Consistency). Accordingly, GAD has selected one fund as a representative example from each of the firms of actuarial advisors and has assessed whether these reports have been completed in accordance with Regulation 62 of the Local Government Pension Scheme Regulations 2013 (the statutory instrument governing actuarial valuations of the LGPS in England and Wales). Each actuarial firm confirmed that the selected fund valuation report was representative.

4.5 We found that the actuarial valuation reports have been completed in accordance with Regulation 62 and have therefore concluded that the compliance criteria of section 13 have been achieved. This is not a legal opinion.

4.6 We were pleased to note improvements in the clarity of references to the assumptions on which the Rates and Adjustment Certificate (the certificate setting out employer contributions) was based, following our comment in the previous section 13 report.

4.7 In line with the required actuarial standards, we noted that the four valuation reports reviewed contained confirmation that the required Technical Actuarial Standards had been met.

4.8 Our review of compliance is focused on the actuarial valuation reports produced under Regulation 62. We have not, for example, systematically reviewed Funding Strategy Statements prepared under Regulation 58.

4.9 The comments we make in subsequent chapters on consistency, solvency and long term cost efficiency do not imply that we believe that the valuations are not compliant with the regulations. These comments relate to whether the valuations appear to achieve the aims of section 13.

5. Consistency

Key Consistency findings

- Presentational consistency was evident in the 2022 valuations and the continued use of the dashboard greatly aids stakeholders' understanding. The additional information provided following the 2019 section 13 review has helped to improve presentational consistency.
- There is no indication of significant improvement in evidential consistency since the 2019 section 13 review. Local variations may merit different assumptions and the approaches and assumptions adopted appear compliant with the relevant requirements. However, these differences will lead to different outcomes, for example in ongoing contribution rates.
- We recognise the significant progress made by funds and actuarial advisers in the presentation of climate risk analysis as part of the 2022 fund valuations. Most funds have followed the broad climate risk principles paper agreed between MHCLG, fund actuaries and GAD. We recommend that the Scheme Advisory Board engage with stakeholders to continue to develop these principles with the aim of improving the analysis and ensuring consistency across funds for 2025 valuations, given the continued evolution across the industry.

Statutory requirement and chapter content

5.1 Under Section 13(4)(b) of the Act, the Government Actuary must report on whether each actuarial valuation has been carried out in a way which is not inconsistent with other valuations. This requires both presentational and evidential consistency.

5.2 In this chapter, we:

- Provide background on the legislative requirement and importance of consistency
- Consider recent changes to the dashboard and improved presentational consistency
- Consider the remaining differences in evidential consistency and the likely consequences of such differences
- Note the significant improvements in climate risk analysis by funds and propose actions to support further improvements

Types of Consistency

5.3 **Presentational Consistency** - Information may be presented in different ways in different reports, and sometimes information is contained in some reports but not others, so readers may have some difficulties in locating the information they wish to compare. We call this presentational inconsistency.

5.4 **Evidential Consistency** - When the reader has located the relevant information (e.g. funding levels), differences in the underlying methodology and assumptions mean that it is not possible to make a like for like comparison. We call this evidential inconsistency. We believe that local circumstances may merit different assumptions (e.g. financial assumptions are affected by the current and future planned investment strategy or different levels of prudence) but that wherever possible, information should be presented in a way that facilitates comparisons.

Importance of Consistency

5.5 LGPS is a pension scheme providing a common benefit structure which is locally administered by separate Administering Authorities. Section 13 requires valuations to be carried out in a way that is not inconsistent with other LGPS fund valuations. This is important to enable readers to draw comparisons between the results from two valuation reports and also has wider benefits.

5.6 Where members build up identical benefits, it can be hard to justify large variations in the apparent cost of these benefits. This is particularly pronounced where one employer participates in different LGPS funds and can be required to contribute differing amounts. In this situation, it is important to understand what is driving the difference and ensure that this is clear to employers. The greater the difference in cost between different funds, the more significant this issue.

5.7 A specific example of this has arisen in recent years regarding academy conversions. When a local authority school converts to an academy, the contribution rates payable by the academy reflect both the funding position and the approach used (for example how assets and liabilities are attributed to the academy and whether the academy is grouped together with other employers). Differences in approaches can lead to significantly different contribution requirements.

5.8 Furthermore, it is not unusual for members to transfer between funds. The greater the variation in funding bases, the greater the potential strain on a fund under such a transfer. In relation to bulk transfers of members, discussions on the appropriate transfer basis are not helped by differences in funding bases.

Reasons for local variation

5.9 Differences in approaches and assumptions across funds are to be expected under the valuation requirements and reflect:

- Differences in circumstances (for example, different investment strategies, types of employers, attitudes to risk or demographic experience)
- Differences in views of unknown future experience (for example, of future investment returns or longevity improvements)
- Different methodologies, where a single approach is not prescribed

5.10 Whilst differences in assumptions are justifiable, they should be evidence-based (where appropriate), clearly explained and the impact understood, to support evidential consistency.

Presentational Consistency

5.11 We noted a high degree of similarity between reports produced by each consultancy. Therefore, we have taken, at random, a report produced by each actuarial advisor to assess whether the information disclosed is consistent across all four advisors. We do not have any specific concerns about the selected funds and have confirmed with the actuaries that these funds are representative of a typical valuation report that they produce. None of these funds raise any amber or red flags. These funds are:

Powys County Council Pension Fund (Aon)	London Borough of Croydon Pension Fund (Hymans Robertson)
Buckinghamshire Pension Fund (Barnett Waddingham)	Clwyd Pension Fund (Mercer)

Information provided within valuation reports

5.12 We note that valuation reports contain detailed information on the financial position of a fund and what future contributions are required to meet their statutory obligations. We have reviewed the information contained in the sample funds' valuation reports to consider how consistently key information has been presented and hence the extent to which a reader can easily make comparisons.

Contribution rates

5.13 Contribution rates include the following components:

- Primary contribution rate (employer)
- Secondary contribution rate (employer)
- Member contribution rate

5.14 Regulations require contribution rates to be split into primary and secondary contribution rates for employers, and all valuation reports do note this. The primary and member contribution rates are easily found in valuation reports.

5.15 There are differences between the valuation reports on what information is provided regarding secondary contributions and how they have changed over time. This inconsistency in information is addressed, in part, by the revised dashboard which does provide a clear comparison (as discussed further below in the subsection on dashboards).

Change in position since the last actuarial valuation

5.16 Each valuation report contains a section that summarises the changes to the funding position since the previous valuation. These are presented in very similar ways, making for easy comparison.

5.17 Table 5.1 summarises the information provided in the sample valuation reports on the change in primary contribution rates since the previous valuation. Whilst two funds provide an analysis in a consistent manner to the analysis of the funding position, this is not the case for all funds. We would consider additional detail and consistency in approach here to be helpful.

Table 5.1 Comparison of primary rates with prior valuation

Fund	Comparison provided
Powys County Council Pension Fund	Analysis of the change in primary contribution rates
Buckinghamshire Pension Fund	Analysis of the change in primary contribution rates
London Borough of Croydon Pension Fund	Comparison of primary rate (as % of pay) and secondary rate (as fixed monetary amounts)
Clwyd Pension Fund	Breakdown of the primary contribution rate compared with the previous valuation

5.18 Table 5.2 sets out the information provided in the sample valuation reports on deficit and surplus strategies. Whilst we appreciate the information is complex, we did not find it easy to understand and compare funds' strategies for utilising any surplus or spreading deficit over the longer term. In all cases we note that additional information will be included in the fund's Funding Strategy Statement but that requires reference to a separate document.

Table 5.2: Information provided on spreading surplus/deficit

Fund	Information provided on spreading surplus / deficits
Powys County Council Pension Fund	Statement setting out spreading of deficit under 100% over 13 years, across the fund, and any surplus over 105% over 16 years
Buckinghamshire Pension Fund	Statement setting out spreading of deficit (maximum of 11 years)
London Borough of Croydon Pension Fund	Provide funding time horizon over which all future and past benefits are sought to be fully funded
Clwyd Pension Fund	Statement setting out spreading of deficit and surplus. Deficit recovery over average of 12 years.

Dashboards

5.19 All funds have provided information in the format of a standard dashboard following a 2016 section 13 recommendation. The format of the revised 2022 valuation dashboard was agreed by the SAB and actuarial advisors, and is shown in table B1 of Appendix B. This includes the key information that one might expect to find in an actuarial valuation report and is helpful to readers in comparing funding valuations.

5.20 We are aware that different actuarial advisors use different methodologies. While we would not wish a desire for consistency to stifle innovation, this can make comparisons difficult. We are grateful that Hymans Robertson have, for the 2022 valuations, provided information in the dashboard on how their future service discount rate is derived, although because their methodology does not base contributions on a single discount rate, comparisons with other funds remain difficult.

5.21 The 2022 valuation dashboard includes further information on primary and secondary employer contributions in a standard format at both the current and previous valuation. We found that the additional information provided, especially in relation to secondary contributions, is helpful as this clearly sets out how contributions have changed over time on an easily comparable basis.

5.22 We suggest that a review of the valuation dashboards is undertaken prior to the 2025 valuations, to consider if further information could be provided. In particular, to clarify the different approaches which funds adopt and to address inconsistencies in the description of the treatment of surpluses and deficits.

Evidential Consistency

5.23 We have considered whether the local fund valuations have been carried out in a way which is not inconsistent with each other, as required under regulations. We have found that inconsistencies in the methodologies and assumptions adopted remain, broadly in line with those observed at the 2019 section 13 review. This section describes these inconsistencies and the consequences of them, while also recognising there are valid reasons for local variations as noted above.

5.24 Primary contribution rates range between 15% and 24% of pay in 2022. This range is a function of differences in age profile as well as different assumptions adopted. It is a slightly wider range than that from the 2019 valuations. The range of secondary contributions reflects different levels of deficit and surplus across funds as well as differences in strategies to allow for deficit and surplus.

5.25 The value assigned to liabilities in each actuarial valuation report has been calculated using assumptions set locally. Differing levels of prudence are to be expected and may be reflective of local variations in risk appetite, but care needs be taken when comparing results.

Reported liabilities

5.26 Table 5.3 shows a comparison of the local basis liability values with liability values calculated using the SAB basis, for the four valuations chosen. Whilst there are reasons for local variations between bases, as described above, this does illustrate the difficulty in drawing conclusions based solely on liability values due to variation in assumptions (including factors such as the levels of prudence adopted). Charts B1 and B2 in Appendix B show the variation between the local basis and SAB basis funding levels for individual funds in more detail for all funds.

Table 5.3: Liability Values

Fund	Local Basis (£m)	SAB Standard Basis (£m)	Difference between Local and SAB Basis
Powys County Council Pension Fund	823	759	8%
Buckinghamshire Pension Fund	3,717	3,552	5%
London Borough of Croydon Pension Fund	1,790	1,576	14%
Clwyd Pension Fund	2,366	2,139	11%

5.27 The liability value on the local basis is higher than that calculated on the SAB standard basis for the sample funds. Across the four funds examined, the difference between the liabilities calculated on the two bases ranges between 5% and 14%. More widely across all funds the range is between -5% and 33%. As noted in paragraph 2.25, the SAB standard basis is not useful for assessing liabilities for funding purposes but is helpful as a standard comparative measure. This analysis illustrates the potential range of differences in liability values due to different bases.

5.28 The analysis above focuses on four funds chosen at random. It should not therefore be extrapolated to all funds advised by a particular advisor.

Assumptions

5.29 We compared the following key assumptions, used for the actuarial valuations, to consider whether variations in those assumptions are justified in terms of local conditions.

Discount Rate

5.30 The discount rate is the most significant assumption in terms of impact on the valuation results. We have therefore focused on the derivation of this assumption in this section. It is expected that different advisors will have different views on expected future investment returns, from which discount rates are derived.

5.31 We first consider the discount rate used to value past service liabilities. The pre-retirement discount rate is derived from the expected return on assets with a deduction for prudence. A way of measuring the level of prudence included is to consider the implied asset outperformance within the discount rate (see Appendix B for more details). The range of implied asset outperformance by actuarial advisor is set out in Chart 5.1 below.

Chart 5.1 Implied asset outperformance range

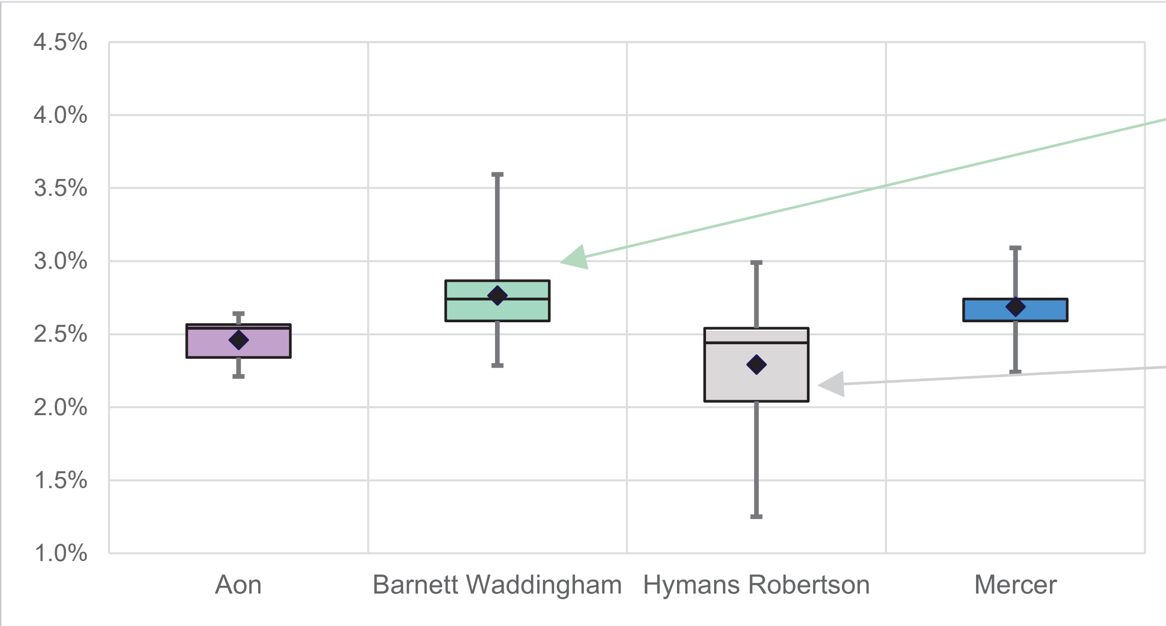

Chart 5.1 illustrates the range of implied asset outperformance by the four actuarial advisors (with the Environment Agency closed fund excluded).

In 2022, as at the 2019 review, some funds advised by Barnett Waddingham have the highest level of asset outperformance within the discount rate used for assessing past service liability values, while some funds advised by Hymans Robertson have the lowest level.

5.32 Chart 5.1 shows the variance in implied asset outperformance by actuarial advisor. We determine the implied asset outperformance as the discount rate less the implied market risk free rate (see Appendix B). The coloured box in the middle represents the range of asset outperformance in the discount rate for the middle 50% of advisors' funds i.e. the lower and upper lines for the shaded box represent the spread for the lower and upper 25% of funds. The end points represent the minimum and maximum discount values. The black diamonds represent the average asset outperformance.

5.33 The variation in assumptions is relatively narrow with a great deal of overlap, albeit the range from highest to lowest is over 2%. Chart B3 in Appendix B shows the breakdown for individual funds.

5.34 Whilst this might suggest consistency, we have investigated various factors that might be expected to influence the discount rates that funds choose to adopt. Our analysis showed that there was no clear influence due to the asset mix, prudence, funding level, type of employer or maturity in isolation on the discount rate adopted. For example, the impact of the asset allocation on the discount rate is illustrated in Chart B4 in Appendix B and shows little correlation. We conclude that there is variation both between fund advisors and within individual funds advised by each advisor, driven by a combination of factors including risk appetite and past practice (which may well be related).

5.35 The implied asset outperformance in Chart 5.1 relates to the discount rate for past service liabilities only. Whilst Aon and Barnett Waddingham adopt the same assumption for setting future contribution rates, Mercer have a different approach and Hymans Robertson use the same underlying model as part of a risk-based analysis.

5.36 Hymans Robertson use an asset liability model to set contribution rates by analysing a probability of success (“meeting the funding target by the funding time horizon”) over a projection period (such as, for example, twenty years). We appreciate that Hymans Robertson have provided commentary on their methodology in the dashboard, although comparisons with other funds remain difficult since they are unable to provide a suitable comparative discount rate for setting future contributions.

5.37 Mercer’s approach allows for contributions made after the valuation date receiving a future investment return that is not directly linked to market conditions at the valuation date. This resulted in a higher discount rate assumption for setting future contribution rates than used to value past service liabilities in the 2022 valuations.

5.38 Where discount rates reflect market conditions, all funds adopted a consistent approach in basing valuation outcomes on market conditions at the valuation date rather than reflecting subsequent market movements. Given changes in investment markets in the second half of 2022, particularly in relation to the gilt market, consideration of this aspect is especially relevant for this section 13 review.

5.39 Whilst we have been unable to identify any individual factor driving the differences, we acknowledge that different views of future investment returns, different asset strategies and different risk appetites (among other factors) would suggest different discount rates. Hence, we do not consider the fact that funds adopt different discount rates to be a particular cause for concern. Future asset returns are highly uncertain, and hence there is a wide range of reasonable assumptions that may be adopted.

Other assumptions

5.40 We have compared the following assumptions used by funds:

- Future mortality improvements (life expectancy)
- Commutation assumptions

5.41 We expect assumptions to vary between funds. To aid transparency, this variation should be justified in relation to local circumstances. Appendix B contains further information on the assumptions adopted.

Overall

5.42 Differences in approaches and assumptions across funds are to be expected under the valuation requirements. However, there continue to be benefits of greater consistency across the scheme and one of the aims in the Public Services Pensions Act 2013 is that fund valuations should be "carried out in a way which is not inconsistent with other valuations". The SAB are facilitating a review of the Funding Strategy Statement guidance. Therefore, as part of this review, we encourage stakeholders to consider potential benefits of greater presentational and evidential consistency among other relevant factors.

Recommendation 1:

We recommend that the Scheme Advisory Board consider whether greater consistency could and should be achieved to allow easier comparison between funds and better understanding of risks.

Academies

5.43 At the 2019 section 13 review, we engaged with the fund actuaries to understand if there had been a move to greater consistency for academy conversions over time and whether a move to greater consistency was likely to occur. Whilst fund actuaries noted there was generally consistency between funds advised by the same advisor the consensus view was there was unlikely to be any convergence in approach between advisors unless mandated by regulations.

5.44 A recommendation was made in the 2019 section 13 report that the SAB should consider the impact of inconsistency on the funds, participating employers and other stakeholders, and specifically whether a consistent approach needs to be adopted for conversions to academies.

5.45 The SAB subsequently convened a working group which included MHCLG, fund actuaries, the Department for Education, academy school representatives and GAD, which prepared SAB guidance on academy conversions. This sets out common nomenclature which should encourage presentational consistency and a common understanding amongst stakeholders. It also explained how differing methodologies work and their impacts.

5.46 The underlying differences in conversion methodologies have not been addressed and therefore the contribution rates paid by academies continue to be inconsistent.

Emerging Issues

Climate risk

5.47 The 2019 section 13 report highlighted climate risk as an emerging issue and noted a desire to encourage dialogue to aid consistency of approach across funds on the presentation of climate risk analysis. GAD subsequently engaged with the fund actuaries and MHCLG to agree broad principles on such analysis ahead of the 2022 valuations. These principles are included in Appendix B.

5.48 82 of the 87 funds carried out climate risk analysis in line with these broad principles with the results of the analyses included in the 2022 valuation reports. We are grateful to the fund actuaries and MHCLG for engaging on this issue to improve consistency across the scheme. We recognise the significant progress made by funds and actuarial advisors in the presentation of climate risk analysis as part of the actuarial valuation process.

5.49 The other five funds provided their reasons for adopting a different approach as follows:

Table 5.4: Commentary on climate change approach adopted (provided by each fund)

Fund	**Climate change approach commentary provided by the fund**
City of Westminster Pension Fund; London Borough of Hammersmith and Fulham Pension Fund; and Royal Borough of Kensington and Chelsea Pension Fund	The approach taken by the fund to evaluate the possible effect of climate change risk on the funding strategy was set in a proportionate manner commensurate with the Fund’s overall approach to risk management. Specifically, the analysis carried out highlighted the effect of a positive/delayed/neutral reaction to the climate challenge and whilst certain scenarios were shown to lead to a worsening of the funding position, the expected impact was deemed to be not material enough to affect the funding strategy set at the 2022 valuation. The Fund’s approach to evaluating the effect of climate change on the funding strategy will next be reviewed at the 2025 valuation.
Environment Agency Closed Fund	The Environment Agency (as the Administering Authority to the Environment Agency Closed Fund) recognise that climate change, specifically the transition and physical risks this poses, could have an impact on the ability of pension schemes to pay benefits in the future. The risk exposure was not quantified at the 2022 valuation, as the Closed Fund’s funding agreement with Defra means its exposure to climate risk is minimal. In effect, any future shortfall that may emerge due to climate change risks would be met via grant-in-aid payments from Defra, and so the impact of climate change risks on the funding position is neutral.

Fund	Climate change approach commentary provided by the fund
West Midlands Pension Fund	West Midlands Pension Fund is committed to undertaking and providing meaningful climate change analysis, extending to advocacy and engagement with key stakeholders to drive real change. The approach adopted by the West Midlands Pension Fund is based upon an integrated framework, which considers funding, employer covenant and investment risk. At the time that the broad principles document was agreed between the Fund actuaries and MHCLG our work on climate change, in respect of the 2022 valuations, was well advanced, supported by a range of analysis which has provided a foundation for engagement with stakeholders. Whilst our analysis aligned with the agreed climate change principles, we believe it extended beyond. We are seeking to achieve a consistent set of principles (including climate scenarios), across our assets, liabilities and employer covenant, to aid our risk-based decision making and enable meaningful onward engagement with key stakeholders which informs our assessment of risk. As such it was not appropriate to include partial and incomplete analysis in one area of reporting when a broader context is required to assess and manage climate change risk. West Midlands Pension Fund is supportive of the objective for consistency across the LGPS, as well as continuing to develop and enhance climate risk modelling to enable useful analysis which can drive real world change and will review the revised 2025 climate change principles document and expect to publish consistent analysis for the 2025 valuation.

5.50 Funds which carried out climate change analysis in line with the principles document considered between three and five climate change scenarios. We have summarised the results in Charts B7 and B8 in Appendix B. This has been provided for information only as a high-level summary of the analysis reported. It should not be used to comment on differences in impacts across funds. This is because, under the broad principles agreed, different funds can reasonably adopt a range of assumptions within scenarios and therefore differences can arise due to assumptions as well as modelled impacts. Further, the summary presented is a snapshot at one point in time and therefore might misrepresent a more considered comparison of projected trajectories over time.

5.51 MHCLG has consulted on proposals for new requirements for assessing and reporting on climate risks in line with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) but has not yet responded to the consultation. Climate risk analysis is evolving rapidly and we anticipate a maturing in analysis for the 2025 valuations. The importance of climate risk analysis, and in particular the appropriate communication of risks relative to scenarios presented, was highlighted in the recent (June 2024) Institute and Faculty of Actuaries (IFoA) risk alert on climate change scenario analysis . We strongly promote the further development of climate risk analysis and its integration in decision-making by funds. We recommend that the SAB continue to work with stakeholders to refine the climate risk analysis principles document prior to the 2025 valuations.

Recommendation 2:

We recommend that the Scheme Advisory Board continue to consider emerging issues and, where appropriate, whether guidance would be helpful to support greater consistency.

As part of greater consistency on climate risk, we recommend that work continues to refine the climate change principles document in advance of the 2025 fund valuations.

Other risks

5.52 There are a number of risks and issues which have the potential to affect the LGPS pension funds in future. In particular, the recent growth in the number of funds in surplus has the potential to affect risks and opportunities. These issues require consideration from the funds and their advisors as they emerge. We encourage continued dialogue with a view to recognising the benefits of consistency across the scheme in the 2025 valuation and beyond.

5.53 We would encourage consistency of approach to be a consideration for the SAB when discussing emerging issues, where appropriate and among other factors.

6. Solvency

Key Solvency findings

- Funding levels have continued to improve on local bases since 2019, primarily due to asset outperformance. In aggregate, the funds of the LGPS are 106% funded on their local funding bases. This reduces current solvency concerns, but we note future solvency risk remains an important consideration.
- Growth of funds' assets relative to the size of the underlying local authorities means that those funds that are in deficit are more likely to trigger our asset shock measure. Where this is the only concern raised, we have considered this a white flag.
- No other solvency flags have been raised. However, risks clearly remain particularly in the context of competing pressures on employer budgets and noting the sensitivity of funding levels to future experience (especially investment market conditions).
- We encourage funds to continue to review their risks and to respond to emerging issues, and to ensure they have appropriate governance structures in place in relation to any asset transfer arrangements.

Statutory requirement and chapter content

6.1 Under section 13(4)(c) of the Act, the Government Actuary must report on whether the rate of employer contributions to the pension fund is set at an appropriate level to ensure the solvency of the pension fund.

6.2 In this chapter we outline the results of our solvency analysis and consider more broadly how funds manage solvency risk.

Definition of Solvency

6.3 In line with the definition in CIPFA's Funding Strategy Statement Guidance, which we adopt for the purposes of section 13, we consider that the rate of employer contributions has been set at an appropriate level, to ensure the solvency of the pension fund, if:

- the rate of employer contributions is set to target a funding level for the whole fund of 100% over an appropriate time period and using appropriate actuarial assumptions

and either:

- employers collectively have the financial capacity to increase employer contributions, should future circumstances require, in order to continue to target a funding level of 100%

or

- there is an appropriate plan in place should there be an expectation of a future reduction in the number of fund employers, or a material reduction in the capacity of fund employers to increase contributions as might be needed

Funding position at March 2022

6.4 Over the period from 31 March 2019 to 31 March 2022, the aggregate funding position of LGPS funds has improved markedly, mainly driven by strong investment returns. At the date of writing, we are aware that many funds are likely to have seen further subsequent improvements in their funding position, although this will depend on individual fund circumstances. These improvements in funding reduce the immediate concerns around current solvency risks relative to previous section 13 reviews. However, the range of funding positions across the scheme, the sensitivity of funding levels to future experience and competing pressures on employers' budgets mean that solvency risks still exist.

6.5 To provide some context on the current position, following the 2022 valuations 78 funds (90%) were in surplus on GAD's best estimate basis, with the aggregate best estimate funding level being 119%. This compares to the position in 2019, where 62 funds were in surplus with an aggregate funding level of 109%. GAD's best estimate basis is the set of assumptions derived by GAD without allowance for prudence, hence with an intended 50:50 likelihood of actual future experience being higher or lower than the assumption adopted, in our opinion, across the LGPS. Where the funding level on such a basis is greater than 100%, we expect there is a greater than 50% likelihood that existing assets would be sufficient to cover benefits in respect of accrued service when they fall due. This basis is applied consistently across the LGPS and so does not reflect fund specific circumstances or experience.

6.6 Not all funds are above 100% funded on GAD's best estimate basis. Funding levels on this basis range from 83% to 164% (excluding the Environment Agency Closed fund, as benefits payable and costs of the fund are met by Grant-in-Aid funding by DEFRA).

6.7 The solvency definition above means those funds that are relatively poorly funded are not considered insolvent, but they do need to be taking adequate action to resolve that deficit (which is the subject of long term cost efficiency) and monitor the affordability of any additional future contributions that may be required.

SAB Funding Level Metric

6.8 Five funds have a “white” flag in relation to their SAB funding level as they are the poorest funded on the SAB basis, with the distance in percentage points below the average SAB funding level shown below:

Fund	SAB Funding Level Distance below average
Royal County of Berkshire Pension Fund	36%
London Borough of Waltham Forest Pension Fund	35%
London Borough of Brent Pension Fund	25%
Bedfordshire Pension Fund	22%
London Borough of Hillingdon Pension Fund	22%

6.9 This is a purely relative measure and we did not engage with funds that flag on this measure only. We consider this a “white” flag. However, the lowest two funds on this metric, London Borough of Waltham Forest Pension Fund and the Royal County of Berkshire Pension Fund, are both also raising a flag in relation to long term cost efficiency and are considered further in the next chapter of this report.

6.10 We encourage the funds shown above to monitor closely the risk that additional pension contributions may be required in the future to eliminate the deficit.

Non-statutory Members Metric

6.11 Different employers have different covenants. We consider taxpayer-backed employers to have a stronger covenant value than other employers and note that the majority of LGPS employers fall into this category.

6.12 The London Borough of Barnet Pension Fund has over a third of its members employed by non taxpayer-backed employers, for example private sector employers and higher education establishments. We are encouraged to note that Barnet actively considered the covenant of one of its larger such participating employers, Middlesex University, as part of its 2022 valuation. We understand that the fund undertook an extensive engagement exercise with Middlesex University in 2022 and agreed a funding strategy which reflects and manages the relevant risks. Given the clear consideration given to the risk and the fact that there are no other flags being raised for the fund, we consider this a “white” flag on this metric.

Asset Shock Metric

6.13 This is a stress test. It considers what may happen if there is a sustained reduction in the value of return-seeking assets for tax-raising employers (those employers whose income is covered by core spending and financing data). For example, a market correction in which asset values do not immediately recover and losses are not absorbed by changes in assumptions.

6.14 We model the additional contributions that would be required by tax-raising employers to meet the emerging deficit. This is different to considering the total contributions required following the shock – i.e. we are looking at where there is a risk of large changes to the contribution rate, rather than a risk of the total contribution rate exceeding some threshold.

6.15 Funds with a high level of return-seeking assets are more exposed to asset shocks and more likely to trigger this flag.

6.16 Fewer funds flag on the asset shock measure in 2022 than in 2019.

6.17 Funds have grown considerably, measured by the value of either their assets or liabilities, over recent years. The size of the employers, and particularly that of the relevant local authorities as measured by their core spending power and financing data, has not grown at the same pace as their pension assets. (Core spending power and financing data is used as a measure of the financial resource of the underlying tax-raising employers, as detailed in Appendix C).

6.18 We considered this situation carefully in 2019 and concluded that it would be difficult for funds to take specific action in response to individual fund flags which have been primarily driven by the increase in the size of funds relative to the possible resource available. We have adopted the same approach for this review and are noting these concerns as a “white” flag only in Appendix C. This is a “for information” flag that highlights a risk, but which may require monitoring rather than action.

6.19 This highlights an ongoing risk across the LGPS due to the nature of open but maturing funds. If a shock were to occur, that shock would be more significant now and in the future, as funds have grown relative to the size of the local authority. This also needs to be considered in the context of competing pressures on local authorities’ and other employers’ budgets.

6.20 The table of solvency measures by fund in Appendix C includes the funds with a white flag (5 funds in total).

6.21 The potential for future variations in contribution rates is discussed further in our Asset Liability Modelling (ALM) section in the long term cost efficiency chapter.

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Management of Risks

Funding

6.22 The general risk comment made in the 2019 section 13 report remains relevant. Local authorities and other employers have finite resources. In recent years, the size of pension funds has increased more than their budgets and there has been increased focus on competing pressures on budgets. Given the sensitivity of pension funding levels to changes in market conditions and other experience, it is possible that a period of increased pension contributions will be required in the future despite current strong funding positions.

6.23 If additional pension contributions are required, this may lead to a further strain on local authority and other employers' budgets at a future date.

6.24 We expect that administering authorities are aware of this risk in relation to solvency and factor this into funding decisions. Administering authorities should discuss the potential volatility of future contributions with employers in relation to overall affordability.

6.25 The risk of contribution rate increases and how stability mechanisms might influence contribution rates over time are discussed further in the Asset Liability Modelling (ALM) section included within Chapter 7.

Governance and other risks

6.26 Whilst the current positive funding position of funds in the LGPS reduces immediate solvency concerns, there are new challenges which could impact future solvency which are discussed further in this section.

6.27 In some circumstances, an employer can elect to leave the fund, at which point any debt (or surplus) in respect of some fund members may be crystallised. After such an agreement is reached, there is no further recall on the exiting employer for additional funds if the future funding position changes. Recent improvements in funding positions could affect employers' preferences. It is important that funds understand and manage the implications of any employer exits on the ongoing solvency of the fund.

6.28 Pension funding is long term in nature. We support the approach adopted by the actuarial advisors in relation to the 2022 valuation reports, which note the expected improved funding position between the valuation date and date of signature of the report but did not look to review the valuation results given the long term nature of pension funding. Improvements in funding positions could lead to requests from some employers for mid-cycle reviews of employer contributions based on particular market conditions. Mid-cycle reviews of employer contributions are only appropriate in limited circumstances and both statutory and SAB guidance should be carefully considered prior to carrying out such a review.

6.29 GAD does not comment on the investment strategy that LGPS funds should adopt or the types of investments which LGPS funds should invest in. Nevertheless, when choosing an investment strategy, we would expect funds to consider the ongoing cost of the benefits and their capacity to increase contributions if required, alongside the appropriateness of the investment for the fund.

6.30 Concerns were raised in the 2019 section 13 report in relation to contingent property transfers or other asset transfer arrangements from local authorities within the LGPS.

6.31 A contingent property transfer is where councils commit to transferring property they own, for example, a portfolio of social housing owned by the council, to the pension fund. The assets are not immediately transferred to the pension fund but at the end of the agreed management period often a large number of years into the future, the property portfolio is transferred to the pension fund, possibly on a contingent basis, on the expectation that the underlying properties will generate revenues and/or sales proceeds that will reduce or eliminate any deficit that remains in the pension fund at that time. In return, the council committing to the future transfer receives an immediate reduction in deficit contributions, calculated as a present value of the expected future revenue from the portfolio of properties.

6.32 While we are not aware of any new arrangements being put in place over the 3 years to March 2022, competing pressures on employer budgets could lead to such options being considered in the future, particularly if there is a market downturn. The risks, additional complexity and ongoing monitoring and governance requirements of such arrangements need to be balanced against the benefits they may provide. As a minimum we would expect the pension fund to receive specialist advice on the suitability of such assets as pension investments and to demonstrate that the conflict of interest between the fund and the council has been appropriately recognised and managed.

6.33 Whilst we are not commenting on the actions of any fund that already holds such an asset, potential concerns, that we expect would need to be addressed if any new arrangements were to be considered include:

- Funds need to carefully consider compliance aspects of such arrangements, including:
  - Compliance with local authority capital requirements, which specify that pension contributions should be met via revenue rather than capital accounts. At the point the transfer is realised, this could be considered a capital asset transfer arrangement
  - Compliance with restrictions on employer related investments in the Occupational Pension Schemes (Investment) Regulations 2005 (as amended)
  - Management of any conflicts of interest

- The assets may not be the form of asset which best meets a pension fund's long term objectives

- Due to complexity, such asset transfer arrangements are likely to be associated with high set-up and management costs

6.34 These arrangements are utilised in the private sector to act as a security for the risk of defaults by scheme sponsors. The difference in covenant strength between private sector employers and local authorities means that different considerations apply.

6.35 We recommend that the SAB consider if additional guidance on local authority asset transfers would be helpful as part of their Funding Strategy Statement guidance review (see Recommendation 3).

7. Long term cost efficiency

Key long term cost efficiency findings

- In 2022, we are flagging two funds in relation to deficit recovery periods. This is the same as the number of funds flagged in 2019.
- For a further fund, we are concerned that employer contribution rates are decreasing (reducing the burden on current taxpayers) at the same time as the deficit recovery is being extended further into the future (increasing the burden on future taxpayers).
- We acknowledge there are different approaches to the utilisation of surpluses and funds should consider relevant factors and the trade-off between competing priorities. We set out the approach we intend to use to assess how funds have utilised surpluses at future valuations.
- We propose that the Scheme Advisory Board consider the approach to surpluses in their review of the Funding Strategy Statement (FSS) guidance.
- We have undertaken an Asset Liability Modelling (ALM) exercise to illustrate two different surplus sharing options. The ALM also highlights the potential contribution volatility and funding risks even though an "average" fund may find itself in a strong funding position currently.

Statutory requirement and chapter content

7.1 Under section 13(4)(c) of the Act, the Government Actuary must report on whether the rate of employer contributions to the pension fund is set at an appropriate level to ensure the long term cost efficiency of the scheme, so far as relating to the pension fund.

7.2 This chapter sets out:

- A definition of long term cost efficiency
- The results of our analysis on long term cost efficiency.
- The outcome of our engagement with funds
- Future considerations in respect of fund surpluses
- Outcomes of our asset liability modelling

Definition of long term cost efficiency

7.3 In line with the definition in CIPFA's Funding Strategy Statement Guidance, which we adopt for the purposes of section 13, we consider that the rate of employer contributions has been set at an appropriate level to ensure long term cost efficiency if the rate of employer contributions is sufficient to make provision for the cost of current benefit accrual, with an appropriate adjustment to that rate for any surplus or deficit in the fund. We note the Funding Strategy Statement Guidance is currently under review.

Long term cost efficiency outcomes

7.4 Long term cost efficiency (LTCE) relates to making sufficient provision to meet the cost of benefit accruals with an appropriate adjustment to reflect the funding position of the fund. The LTCE part of the 2019 section 13 review focused on deficits, and not deferring deficit payments too far into the future so that they affect future generations of taxpayers disproportionately. This reflected the aggregate funding position of the scheme at that time. Whilst this remains a key consideration, as more funds have moved into surplus at the 2022 valuations, the use of surpluses has been given greater consideration at this review. Our focus is on intergenerational fairness, and whether the current generation of taxpayers is benefiting from any surplus appropriately relative to future taxpayers.

7.5 Two funds are flagged in relation to deficit recovery periods in the 2022 review, the same as the number of funds flagged in 2019.

7.6 For the two funds (Royal County of Berkshire Pension Fund and London Borough of Waltham Forest Pension Fund), we are concerned that flags are still being raised despite using the same flag thresholds as at the 2019 section 13 review. The average funding level of funds has increased by 8% since 2019, which has driven a reduction in the number of flags. Whilst we recognise funding plans are long term in nature and both these funds have improved their funding position, where a flag remains, despite the generally positive movements in economic conditions for the scheme, this identifies some risk.

7.7 We have also considered graphically the positioning of funds on a consistent basis. Chart 7.1 on the next page plots the funding level relative to the scheme average (normalised to the SAB basis) against total employer contributions (expressed as a percentage of pensionable earnings). The two funds identified above stand out as having relatively weak funding on the consistent basis. This combination of flag and relative positioning led us to engage with those funds.

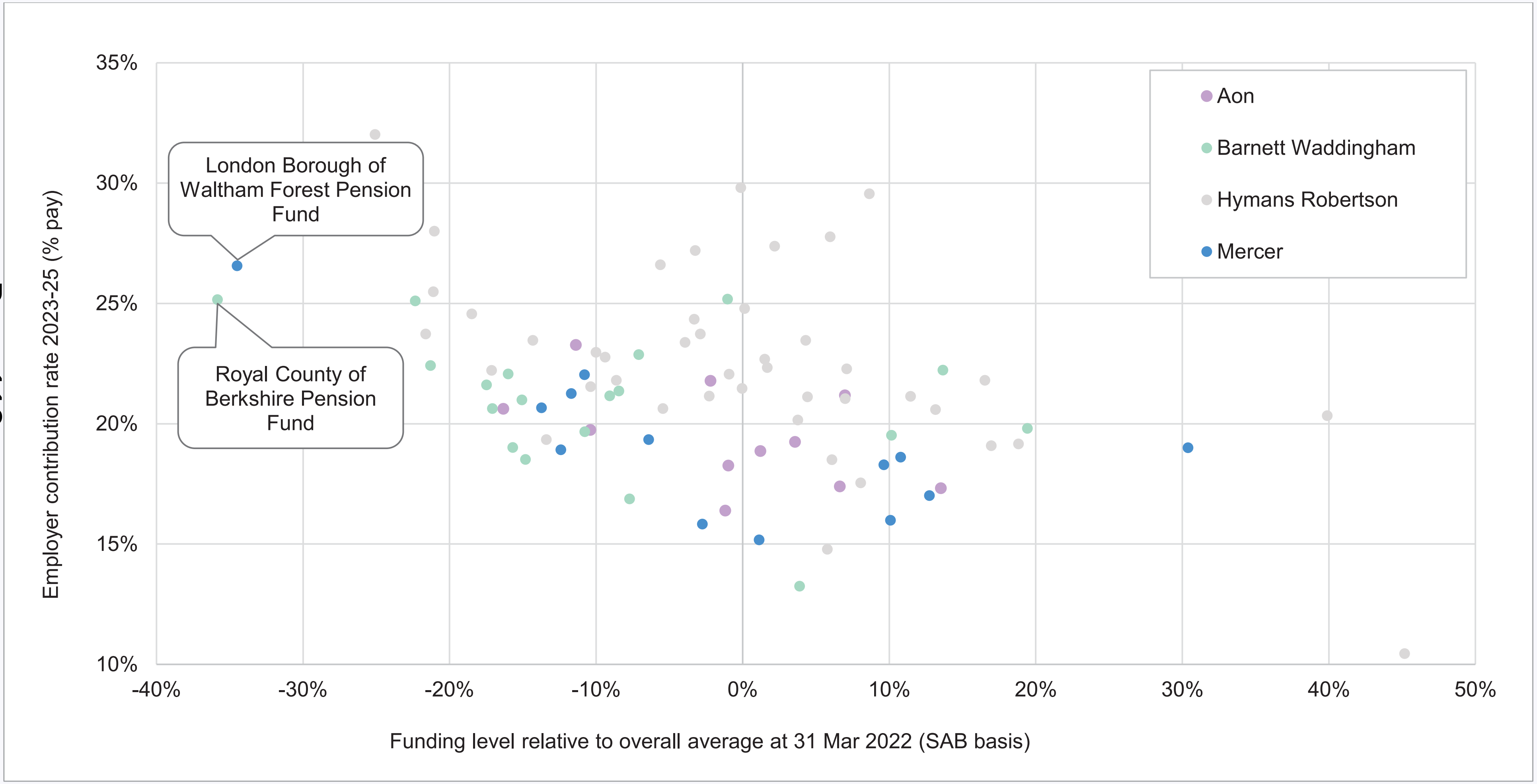
7.8 For a further fund, London Borough of Redbridge Pension Fund, we are concerned that employer contribution rates are decreasing (reducing the burden on current taxpayers) at the same time as the deficit recovery end point is being extended further into the future (increasing the burden on future taxpayers). This led to this fund raising a flag in relation to its deficit recovery plan.

7.9 Some other funds raised initial flags against LTCE measures, but on closer review most were not considered to be sufficiently wide outliers or present sufficient risk to warrant further investigation or engagement.

7.10 We have not flagged any funds on the utilisation of surplus at this review. We comment on the range of approaches adopted by funds in surplus and set out our approach to this issue for future valuations.

Deficit Metrics (Required period, required return and return scope)

Chart 7.1 SAB relative funding level vs Employer contribution rate



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Royal County of Berkshire Pension Fund

7.11 The Royal County of Berkshire Pension Fund is one of the least well-funded funds on a local basis, with a funding level of 86%. It is the lowest funded on the common SAB basis (excluding the Environment Agency Closed fund).

7.12 Chart 7.1 shows that, although the Royal County of Berkshire Pension Fund is ranked lowest on funding level, its employer contribution rate, whilst above average, is lower than around 10 funds, all of which have much higher funding levels on the common SAB basis.

7.13 Employer contributions are 25.2% of pensionable pay. This has increased from 24.0% of pay in 2019. However, this increase is driven by an increase in primary rates (up 1.5% to 16.9% of pay). Average secondary rates have decreased slightly as a percentage of pay.

7.14 The Royal County of Berkshire Pension Fund raised an amber flag in relation to deficit recovery period (12 years on GAD's best estimate basis). In other words, current contribution rates are not estimated to be sufficient to reach full funding on a best estimate basis within 10 years.

7.15 More generally it is positive to note the reduction in the number of amber flags on long term cost efficiency for Royal County of Berkshire Pension Fund (which have reduced from four in 2019 to one in 2022).

7.16 We were also pleased to observe that the Royal County of Berkshire Pension Fund has retained its deficit recovery end point, although this remains relatively long at 2040.

7.17 Following engagement with the Royal County of Berkshire Pension Fund, we were advised that employers participating in the fund have been continuing to increase their total contributions to reduce the deficit over the longer term. We were reassured by this long-term commitment.

7.18 The officers we engaged with appreciated that additional funding will be required over a long timeframe and reaffirmed their commitment to do so.

7.19 It was noted that committees have been put in place to assist with the management of the fund and it was noted that investment returns have been relatively strong in recent years.

7.20 Overall we were pleased to note the improvements made over the past three years, however given its relative funding position and relative to the contribution rates being paid into other funds, we consider that an amber flag for long term cost efficiency is appropriate.

London Borough of Waltham Forest Pension Fund

7.21 The London Borough of Waltham Forest Pension Fund has the second lowest funding level on a local basis at 81%. The funding level increased by 1% since the 2019 valuation, much less than most other funds which on average saw an 8% increase. It is the second lowest funded on the common SAB basis (excluding the Environment Agency Closed fund).

7.22 Chart 7.1 shows that, although the London Borough of Waltham Forest Pension Fund is ranked second lowest on funding level, around 7 funds, all of which have higher funding levels on the common SAB basis, are receiving greater contributions.

7.23 Employer contributions are 26.6% of pensionable pay. This has increased from 25.9% of pay in 2019. However, this increase is driven by an increase in primary rates (up 1.6% to 17.2% of pay). Average secondary rates have decreased as a percentage of pay.

7.24 The secondary contribution rate for one major employer in the fund incorporates a deduction to reflect the assumed value placed on the residual property investments currently held as a contingent asset transfer that will be transferred to the Fund in 36 years' time, if it is in deficit at that time. The value of the contingent asset is not allowed for in the asset values or used in our metric calculations.

7.25 The London Borough of Waltham Forest Pension Fund also raised an amber flag in relation to deficit recovery period (just over 10 years on GAD's best estimate basis). In other words, current contribution rates are not estimated to be sufficient to reach full funding on a best estimate basis within 10 years. However, we acknowledge that London Borough of Waltham Forest Pension Fund is just above the required threshold, and no allowance was made for the contingent asset in this assessment.

7.26 We were pleased to observe that the London Borough of Waltham Forest Pension Fund has retained its deficit recovery end point, although this remains relatively long at 2039.

7.27 Following engagement with the London Borough of Waltham Forest Pension Fund we were advised that employers have been adhering to their plan to remove the deficit by 2039. We were reassured by this long-term commitment to improving the funding position.

7.28 London Borough of Waltham Forest Pension Fund also referred to the modest increase in funding being the result of below expected returns. The fund is continuing to monitor asset performance and has already taken action to improve performance since 31 March 2022.

7.29 The London Borough of Waltham Forest Pension Fund also provided additional information on the contingent asset arrangement referred to in their 2022 valuation report. The allowance for this when setting contributions is dependent on the fund receiving satisfactory legal confirmation on the arrangement, with GAD's understanding being that this is now the case. GAD highlighted the points raised in the 2019 section 13 report, which London Borough of Waltham Forest Pension Fund were aware of. Through our engagement, we have been made aware by the London Borough of Waltham Forest Pension Fund that the governance structure in place, in relation to the contingent asset referred to above, was strengthened as part of the 2022 valuation and this includes a regular flow of information between the relevant parties and annual ratification of the arrangement's viability provided to the Pension Committee.

7.30 We acknowledge that the London Borough of Waltham Forest Pension Fund has increased contributions but given its relative funding position and relative to the contribution rates being paid into other funds, we consider that an amber flag for long term cost efficiency is appropriate.

Deficit Reconciliation

7.31 Where a fund is in deficit administering authorities should avoid continually extending the deficit recovery period end point at subsequent actuarial valuations as this will not meet the LTCE requirements. Over time and given stable, or better than expected market conditions, administering authorities should aim to:

- Maintain the levels of contributions and/or
- Reduce deficit recovery periods by maintaining the end point of the recovery period

7.32 We believe it is appropriate for funds to consider their plans for the duration of the deficit recovery period, so that future contributions are recognised and these form part of employers' budgeting process.

7.33 We would not normally expect to see employer contribution rates decreasing (reducing the burden on current taxpayers) at the same time as the deficit recovery end point is being extended further into the future (increasing the burden on future taxpayers). This expectation balances intergenerational fairness between current and future generations of taxpayers, which is required for LTCE.

7.34 We appreciate there may be circumstances where new deficit emerges between valuations, as a result of the fund's experience, where it may then be appropriate to extend the recovery period. For example, if a fund within the last three years of its deficit recovery period experienced a material reduction in its funding level, it would not be appropriate in the context of intergenerational fairness to repay that new deficit within three years also.

7.35 We consider that reconciliation of the deficit recovery plan is an essential component for all funds to demonstrate they meet LTCE requirements.

7.36 We note that most funds have maintained their deficit recovery end points in accordance with recommendation 2 from our 2019 section 13 report.

7.37 The 2019 section 13 review recommended the inclusion of additional information on total contributions, discount rates and reconciliation of the deficit recovery plans in the dashboard. We are grateful that funds have disclosed this additional information, which has aided our analysis on deficit reconciliation.

7.38 Hymans Robertson use stochastic techniques to set contribution rates, analysing the probability of success ("meeting the funding target by the funding time horizon") over a projection period (for example, twenty years). This makes reconciliation as outlined in 7.31 difficult, as additional information is required to illustrate a continuation of the plan. We are grateful to Hymans Robertson for providing information to facilitate reconciliation.

7.39 In relation to the funds advised by Hymans Robertson whose total employer contributions have reduced and their likelihood of success, at the previous valuation end point, has also decreased we note the following:

- In respect of two funds London Borough of Brent Pension Fund and London Borough of Croydon Pension Fund we did not think it was appropriate to retain an amber flag. Both funds had contributed above the minimum required in 2019 and had not reduced the minimum likelihood of success in 2022. Further we note a reasonable degree of prudence in the minimum likelihood of success probability. We therefore considered this to be a white flag.

- London Borough of Redbridge Pension Fund, where the funding level is 99%: total employer contributions have reduced by 2.7% of pay and the likelihood of success at the 2022 valuation on the 2019 time horizon has reduced. We recognise that contribution rates are set considering an analysis of future funding risk over a time horizon of 17 years, however we consider it appropriate to retain the amber flag.

7.40 We engaged with Durham Pension Fund that flagged initially on this measure where the funding level is 97%: there was a reduction in total employer contributions of 1.8% of pay and the end point increased by one year.

7.41 In the engagement with Durham Pension Fund, it was noted that the fund is close to being fully funded and the end point increased by only one year. This was part of a package of changes which included an increase in prudence within their funding basis; and an increase in the surplus buffer for those employers in surplus.

7.42 Aon provided evidence that total contributions payable following the valuation are greater than those which would have been required had the 2019 valuation basis been retained with a three year reduction in the deficit recovery end point. In effect, the one year increase in end point reflected the new deficit arising due to the increase in prudence. The fund demonstrated they had considered relevant options and issues when deciding on funding strategy and agreed with the importance of being able to reconcile deficit recovery plans between valuations.

7.43 In light of this evidence, we agreed that it would not be appropriate to maintain the amber flag under the deficit recovery plan metric for Durham Pension Fund, and agreed to adopt a white flag. We draw attention to the definition of white flags in Appendix D: an advisory flag that highlights a general issue but one which does not require an action in isolation. It may have been an amber flag if we had broader concerns.

7.44 We recommend that the SAB consider if additional guidance on deficits would be helpful, and in particular how funds ensure that the deficit recovery plan can be demonstrated to be a continuation of the previous plan (see Recommendation 3).

Surplus considerations

7.45 At the 2022 valuations, 61 funds (over 70% of funds by number) were in surplus on a local basis, an increase from 24 at the 2019 valuations.

7.46 There is a range of reasonable uses of fund surpluses, with strategies varying by fund to manage their specific risks and circumstances. Examples of surplus uses include (where the list below is not exhaustive):

- Reductions in contributions, which may be managed via a surplus buffer (i.e. only surplus above an agreed funding level is utilised) or stability mechanism (with restrictions on the extent to which contribution rates can change over an agreed time period)
- Review of investment strategy
- Reviewing the level of prudence within funding strategies, which changes the chance that future experience is better/worse than assumed

7.47 GAD does not comment on the investment strategy that LGPS funds should adopt, and it is proper that funds make decisions appropriate to their specific risks and circumstances. The statutory requirements for this review do require GAD to consider whether contributions have been set to ensure long term cost efficiency. Therefore, our focus is on contribution rate outcomes and intergenerational fairness, i.e. whether the current generation of taxpayers is benefiting from any surplus appropriately relative to future taxpayers.

7.48 Overall, there needs to be a balance between funds:

- Utilising surplus too quickly; and
- Retaining large surpluses

7.49 On this basis, we have reviewed the different approaches adopted by funds in surplus at the 2022 valuations. We are grateful to the actuarial advisors for providing general insights into the range of considerations taken into account by administering authorities. We also engaged with the SAB surplus working group on surpluses and have had regard to the SAB statement on surpluses issued in December 2023.

7.50 We are aware of recent commentary around competing pressures on local authority (and other employers') budgets, and whether current fund surpluses could help alleviate some of those pressures. Our approach to long term cost efficiency considers such points, in terms of whether the current generation of taxpayers is benefiting from surplus appropriately relative to future taxpayers. We consider it important that funds and employers take account of all relevant factors when making decisions on funding, considering risks and implications over an appropriate time horizon.

7.51 Outcomes from the 2022 valuations depend on the priorities given by funds to different uses of surpluses.

7.52 In our view, the uses outlined in 7.46 are consistent with current CIPFA and SAB guidance and SAB statements on scheme contributions. However, inconsistencies in outcomes across funds can arise where funds place different weights on the options for use of surplus. We support the SAB in facilitating a review of the guidance on Funding Strategy Statements with relevant stakeholders. We recommend that the treatment of surpluses and deficits, together with the governance on asset transfers, should be included as part of this review.

Recommendation 3:

We recommend that the Scheme Advisory Board consider the following:

- Where funds are in surplus, whether additional guidance can be provided to support funds in balancing different considerations.
- Where deficits exist, how can all funds ensure that the deficit recovery plan can be demonstrated to be a continuation of the previous plan.
- Whether additional guidance is required in relation to the treatment of asset transfers from local authorities.

7.53 GAD has not flagged any funds on the utilisation of surplus at this review. This is in part because, from the discussions we have had at a high level, funds appear to have made decisions on surplus at the 2022 valuations having considered relevant factors signposted in CIPFA and SAB guidance and SAB statements. Therefore, we instead set out our approach to this issue for future valuations.

Funds utilising surpluses too quickly

7.54 For future reviews, GAD will introduce a surplus retention metric to consider how quickly a surplus is being utilised on GAD's best estimate basis, if the total employer contribution rate being paid is less than GAD's best estimate contribution rate. The aim is to highlight any funds where contribution reductions in respect of surplus could lead to too great a funding risk in the short- to medium-term, measured on GAD's best estimate basis.

7.55 The rationale for this metric is to ensure intergenerational fairness. If surpluses are being realised too quickly, current taxpayers might be benefiting inappropriately relative to the risk being passed to future taxpayers.

7.56 If we had introduced such a metric in the 2022 section 13 review, all funds would have a green flag.

Funds retaining "large" surpluses

7.57 The counter risk to funds utilising surpluses too quickly is funds retaining too great a surplus and not recognising the strong funding position in the fund's contribution rates. In such a scenario the fund may be seen as being unfair to current taxpayers, with future taxpayers expecting to benefit disproportionately.

7.58 For future reviews, GAD will adopt a three-step approach:

1. Identify the highest funded funds, considering both the local bases and on a standard basis
2. Identify those funds which are relatively well funded, on the local and standard basis, and are also paying relatively high contributions
3. For those funds identified in steps one to two, we would undertake qualitative analysis, for example considering how contribution rates have evolved since the previous valuation and any stated rationale behind the approach adopted

7.59 Steps one to three aim to identify funds which are exceptionally well funded, or those which are relatively well funded and paying relatively high contributions. We propose considering results on two bases, initially using the SAB funding level to provide a consistent basis. However, as this is not a funding basis we will also consider the position on the local funding basis. The funds identified in steps one to three will not raise an immediate flag as we also wish to consider any other relevant circumstances and the decision-making process.

7.60 We would then engage with any funds identified from this process to discuss any concerns before deciding which funds to flag.

7.61 In order to aid comparison on the approaches to surpluses and to facilitate this process, we will discuss with the fund actuaries if further information could be provided in their dashboard as discussed in Chapter 5.

7.62 To illustrate the potential impacts of surpluses and the trade-offs between the considerations referred to above, we have undertaken an ALM analysis to illustrate the potential implications of different approaches and relationship to solvency risks.

Asset Liability Modelling (ALM)

Introduction

7.63 An Asset Liability Model (ALM) allows us to simultaneously project the assets and liabilities of the scheme under a range of simulations to investigate possible outcomes for key variables and metrics. Modelling the scheme in this way allows us to understand not only central, expected outcomes but also the wider range of possible outcomes and uncertainties. It also demonstrates the importance of considering the assets and liabilities together to understand how particular risks and relationships might manifest in simultaneous movements on both sides of the balance sheet.

7.64 The ALM exercise was undertaken to illustrate:

- Uncertainty of future employer contributions and funding position
- Impact of different surplus strategies

7.65 The contribution and funding analyses in the ALM section are for illustrative purposes and are based on a set of assumptions and methodology set by GAD. This type of analysis is particularly dependent on the assumptions and methodology adopted. Other models could produce different outcomes.

7.66 The ALM models the whole scheme rather than individual funds. Whilst the positions of funds will vary, with differing contributions and funding levels, the risks considered in the ALM are expected to be relevant for individual funds.

7.67 The methodology used for the ALM is set out in Appendix E.

Uncertainty of future employer contributions and funding position

7.68 Even though the overall scheme funding position has improved since 2019, with 61 funds in surplus on their local funding bases at March 2022, significant financial risks remain particularly over the longer term.

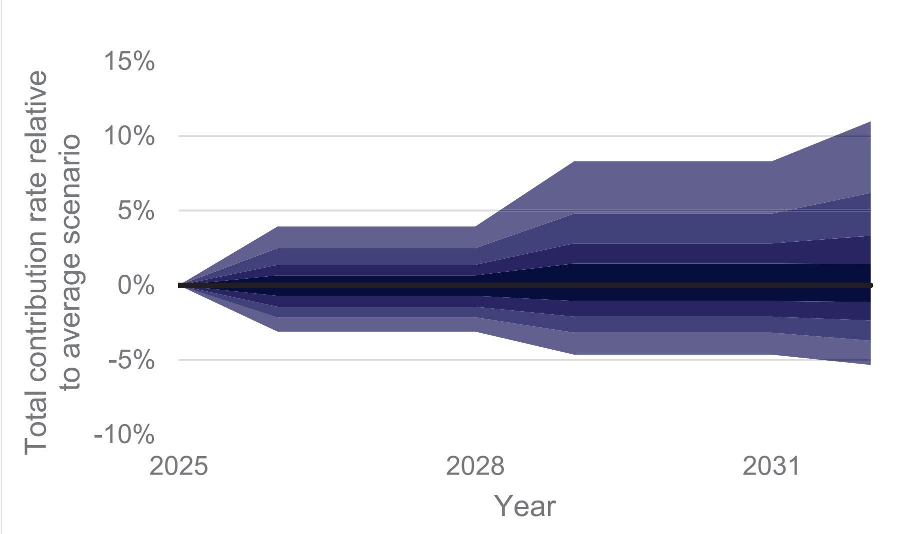
7.69 Charts 7.2 and 7.3 illustrate the variability of total employer contributions (primary and secondary rates combined) and funding levels projected at future valuations from a large number of simulations of future asset returns and economic conditions. The projections assume that any funding deficits are paid off over a 20-year period with no adjustment to contributions for any surplus.

7.70 In both charts:

- the thick black line represents the median simulation at each point in time (in other words, the scenario which falls exactly in the middle of the range of simulated values, with half of the simulations having higher outcomes than the median and half having lower)

- each shade of purple represents the range of outcomes for a decile (10%) of scenarios, with the subsequent lighter shade representing the next decile - we have not shown the most extreme deciles (0-10% and 90-100%)
- the limits of the shaded area illustrate the range of outcomes whereby 80% of the simulations lie within the shaded area and the most extreme 20% are outside (with 10% of outcomes being above the top of the shaded area, and 10% of outcomes being below the bottom of the shaded area)

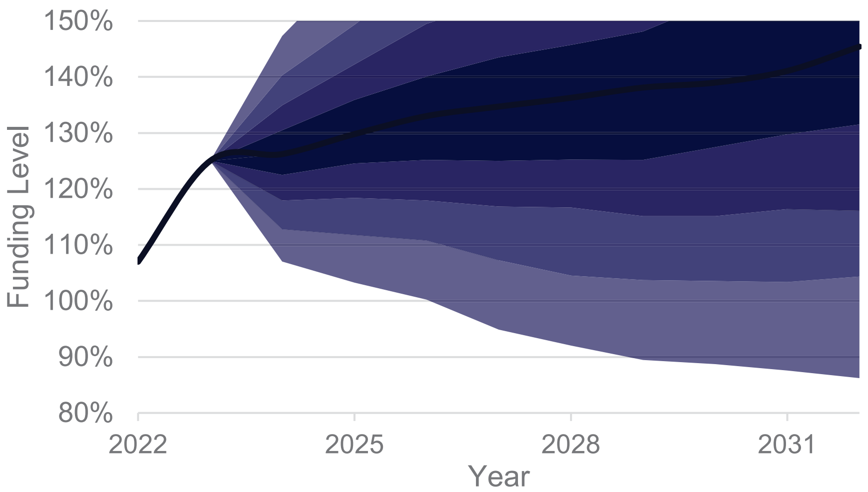
Chart 7.2 – Illustrations of the variability in total employer contributions relative to the median scenario (% of pay)



7.71 Chart 7.2 shows the uncertainty around future employer contributions. For example, Chart 7.2 shows that, relative to an expected (median) projected future employer contribution rate following the 2028 valuation, there is a 20% chance that the future employer contribution rate could be more than 5% of pay higher than this central expectation due to uncertainty in economic conditions. While the precise values shown in Chart 7.2 reflect the modelling assumptions used and a simplified approach to setting employer contribution rates, the feature being illustrated is the uncertainty in how future employer contribution rates might develop relative to current expectations.

7.72 Chart 7.3 illustrates the modelled range of future funding levels under the same set of scenarios as in Chart 7.2. Chart 7.3 shows that, even with an assumed increase in aggregate funding level from around 106% at March 2022 to 125% at March 2023, there remains a nearly one in ten chance of a funding deficit two years later at the March 2025 valuation. A material chance of valuation deficits remains in the longer-term despite the model assuming additional contributions are paid to meet deficits and any surplus is retained.

Chart 7.3 – Illustrations of funding level



7.73 Chart 7.3 also shows a high chance of very favourable outcomes. This reflects an expectation that, on average, future investment returns will exceed the prudent rates assumed in local funding bases; the modelling assumption that all surpluses are retained in the scheme; and a simplistic allowance for recent changes in economic conditions that might not be borne out in practice.

7.74 The model has limitations with high funding level outcomes. Chart 7.3 is intended to illustrate the significant downside risk that remains despite a favourable central scenario, rather than to provide detailed forecasts of such a central scenario or potential favourable outcomes. In particular, it does not allow for any actions taken to utilise surplus at each valuation. For this reason, the chart is curtailed at a funding level of 150%. Nevertheless, the very wide range of possible future outcomes is clear from the chart.

7.75 The output of the ALM should not be regarded as a prediction of future employer contribution rates or funding level but rather an illustration of the range of possible funding outcomes. Changes to employer contribution rates in the short term do not affect the long term cost of the scheme (which depends on the level of scheme benefits and scheme experience, including asset returns) but do affect the balance of costs between different generations of taxpayers.

Impact of different surplus strategies

7.76 The previous section in this Chapter outlined different approaches to surplus. We have considered the impacts on future employer contribution rates of two options adopted by funds, surplus buffers and stability mechanisms:

- "Surplus buffer" – For illustration, we have assumed:
    - Any valuation deficit is recovered over 20 years through additional contributions
    - Any valuation surplus up to 20% of the liability value (so where the funding level is between 100% and 120%) is retained in the scheme
    - Any valuation surplus in excess of 20% of the liability value (so a funding level above 120%) is spread over 20 years through reduced employer contributions
- "Stability mechanism" (or smoothing) – For illustration, we have assumed the same approach to setting contributions as the "Surplus buffer" scenario, but employer contribution rate changes are limited to 2% of pay each year (relative to the previous year)

7.77 Some funding strategies set by LGPS funds seek to maintain stability of contributions at least for local authority employers. Stability assists year-to-year budgetary management and helps to avoid frequent upward and downward changes in employer contributions as a result of short-term volatility. However, it can be difficult to know whether recent experience at a valuation is a result of short-term volatility or the start of a long-term trend. Any delay in changes in employer contributions to reflect such experience could lead to more extreme funding levels in the medium-long term.

7.78 While this discussion focuses on approaches to surplus, a stability mechanism also restricts contribution increases in response to a deficit which may delay a return to being fully funded.

7.79 For illustration, the analysis in this part assumes a starting funding level of 100% at March 2023.

7.80 Charts 7.4 and 7.5 illustrate the potential impacts of the two surplus scenarios on the changes in employer contribution rates at successive actuarial valuations. Each chart shows the distribution of increases (positive numbers) or decreases (negative numbers) in employer contribution rates at an actuarial valuation relative to the rates from the previous valuation. Chart 7.4 shows the "Surplus Buffer" scenario and Chart 7.5 shows the "Stability Mechanism" scenario.

Chart 7.4 – Illustrations of distribution of change in employer contributions (% of pay) between actuarial valuations for "Surplus Buffer" scenario

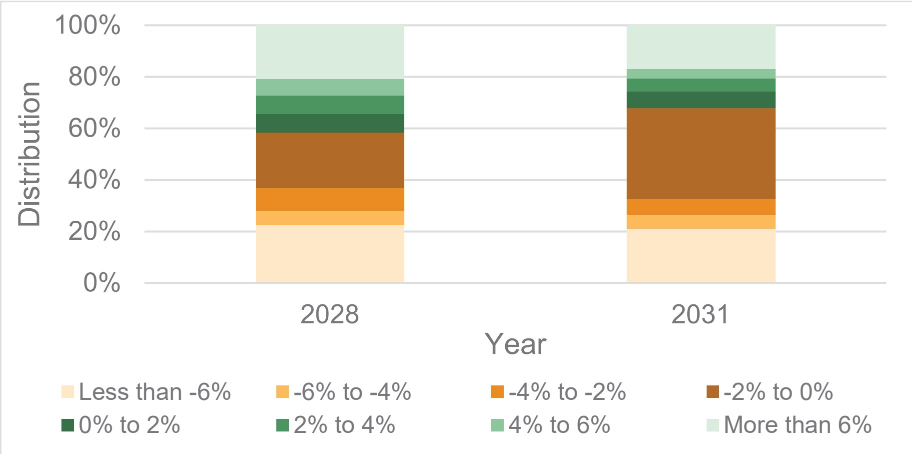
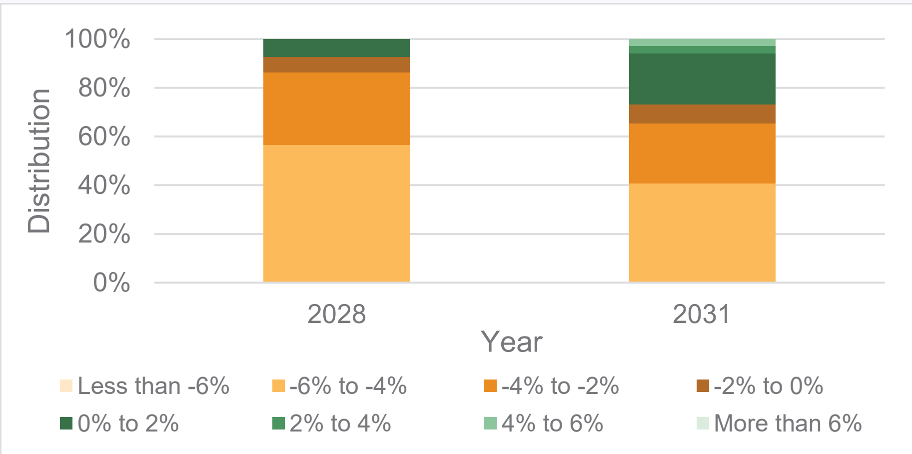


Chart 7.5 – Illustrations of distribution of change in employer contributions (% of pay) between actuarial valuations for "Stability Mechanism" scenario



7.81 These charts reflect the underlying scenario, with an increase in median funding level over time but significant volatility around this median position. The modelling adopted is a simplified approach to setting contribution rates, as it does not reflect all factors taken into account by funds in practice. In this case:

- The charts illustrate the impact of the stability mechanism limiting contribution rate changes. Chart 7.4 shows that, without a stability mechanism, there is a chance of relatively large contribution rate changes at valuations (for example, a combined chance of nearly 40% that contribution rates either increase or decrease by more than 6% of pay at the 2028 valuation relative to those from the previous valuation). The stability mechanism illustrated in Chart 7.5 limits such contribution rate changes to no more than 6% of pay (in either direction), equivalent to 2% a year over the 3 years between valuations.

- In the modelled scenario, the smallest contribution changes (increases or decreases of less than 2% of pay at a valuation) are more likely in the "Surplus Buffer" scenario in the 2028 and 2031 valuations. This is due to that scenario adjusting more quickly to any change in economic conditions whereas the stability mechanism spreads changes over a longer period of time.

7.82 As noted above, the impacts of a stability mechanism depend on whether recent experience at a valuation is a result of short-term volatility or the start of a long-term trend, which can only be known over time. The central economic scenario adopted for these illustrations assumes the latter. However, if the expectation is that this is short-term volatility, we would expect the "stability mechanism" approach to maintain a more stable contribution rate between valuations when compared to the "surplus buffer".

Asset Liability Modelling Limitations

7.83 None of the lines shown in the above charts represent a single simulated scenario – instead they are intended to represent the distribution of possible outcomes in the future and how the range of simulated scenarios changes over the projection period.

7.84 The scenarios considered are only two illustrative surplus approaches. Funds may reasonably adopt other parameters and approaches. Further, for modelling purposes we have adopted a simplified approach to calculating funding levels and setting contribution rates which does not reflect all factors taken into account by funds in practice.

7.85 The illustrations are based on one perspective of the future economic environment (using an economic scenario generator provided by Moody's Analytics based on the March 2023 outlook) and scheme experience. Alternative assumptions and models are reasonable and would lead to different results.

7.86 In particular, the projections reflect one view of the economic outlook at March 2023. This differs to the outlook three years ago, which explains in part why these illustrations are different from those shown in the 2019 section 13 review report.

7.87 Rather than placing too great a reliance on the precise values shown in this section, it is helpful to consider a range of measures of risk and the impacts of actions in response to future changes. For example, the solvency section illustrates a deterministic scenario, whereby there is an asset shock, with no immediate rebound, with the risk of higher employer contributions. The modelling in this section is not intended to illustrate likely future contribution rates since the modelling assumptions are too simplified for that purpose. Rather, the modelling is intended to illustrate the wide range of uncertainty in future outcomes and the importance of understanding this uncertainty.

Government
Actuary's
Department

Local Government Pension Scheme England and Wales

Review of LGPS fund valuations as at 31 March 2022 under Section 13

Appendices

Fiona Dunsire FIA and Aidan Smith FIA

14 August 2024

Contents

Appendix A: Compliance

A.1 In this appendix we set out the checks we conducted to determine whether the actuarial valuations of the 87 Local Government Pension Scheme (LGPS) funds have been completed in accordance with the scheme regulations.

Statement of Compliance

A.2 The Government Actuary's Department (GAD) selected one fund as a representative example from each of the firms of actuarial advisors. The following statements of compliance were contained within the chosen reports by each firm:

Table A1: Statement of Compliance

Fund	Statement of compliance
Powys County Council Pension Fund (Aon)	This report was commissioned by and is produced solely for the use of the Administering Authority. It is produced in compliance with: Regulation 62 of the Local Government Pension Scheme Regulations 2013.
Buckinghamshire Pension Fund (Barnett Waddingham)	The purpose of the valuation is to review the financial position of the Fund and to set appropriate contribution rates for each employer in the Fund for the period from 1 April 2023 to 31 March 2026 as required under Regulation 62 of the Regulations.
London Borough of Croydon Pension Fund (Hymans Robertson)	We have been commissioned by Croydon Council (the Administering Authority) to carry out a valuation of the London Borough of Croydon Pension Fund (the Fund) as at 31 March 2022. This fulfils Regulation 62 of the Local Government Pension Scheme Regulations 2013.
Clwyd Pension Fund (Mercer)	This report is addressed to the Administering Authority of the Clwyd Pension Fund ("the Administering Authority") and is provided to meet the requirements of Regulation 62 of the Local Government Pension Scheme Regulations 2013 (as amended) ("the Regulations").

Compliance with valuation regulations

Actuarial Valuation Reports Regulation 62 (1 - 2)

A.3 Regulation 62 (1) requires the administering authority to obtain an actuarial valuation report on the assets and liabilities of each of its pension funds, including a rates and adjustments certificate, as at 31st March 2016 and on 31st March in every subsequent valuation year (i.e. 31st March 2022). Regulation 62 (2) requires that the above documents be obtained by the first anniversary of the date at which the valuation is made, namely, 31 March 2023 in the case of the 2022 valuation.

Publication

A.4 Each chosen fund was published in accordance with the regulations. The following table sets out dates of publication of the actuarial report.

Table A2: Publication date

Fund	Date of publication
Powys County Council Pension Fund (Aon)	30 March 2023
Buckinghamshire Pension Fund (Barnett Waddingham)	31 March 2023
London Borough of Croydon Pension Fund (Hymans Robertson)	31 March 2023
Clwyd Pension Fund (Mercer)	30 March 2023

Demographic Assumptions

A.5 Regulation 62 (3) states that the actuarial valuation report must contain a statement of the demographic assumptions that have been used in making the valuation and must show how these assumptions reflect the experience that has occurred during the period since the last valuation. Each valuation report contains a section on demographic assumptions including all the assumptions that we would expect in an actuarial valuation report.

Table A3: Demographic Assumptions

Demographic	Powys County Council Pension Fund (Aon)	Buckinghamshire Pension Fund (Barnett Waddingham)	London Borough of Croydon Pension Fund (Hymans Robertson)	Clwyd Pension Fund (Mercer)
Pre-retirement mortality	✔	✔	✔	✔
Post-retirement mortality	✔	✔	✔	✔
Dependant mortality	✔	✔	✔	✔
Ill health retirement	✔	✔	✔	✔
Normal health retirements	✔	✔	✔	✔
Withdrawals	✔	✔	✔	✔
Promotional salary scale	✔	✔	✔	N/A
Family details (partners and dependants)	✔	✔	✔	✔
50:50 option take-up	✔	✔	✔	✔
Commutation	✔	✔	✔	✔

Mercer did not make a separate promotional salary scale assumption and therefore effectively this was combined in their general pay increase assumption.

Local Experience

A.6 The regulation requires that the reports "must *show how* the assumptions relate to the events which have actually occurred in relation to members of the Scheme since the last valuation" in respect of the demographic assumptions. For the four chosen funds:

> All have shown differences between expectations and experience for the inter-valuation period

Additional information on demographic experience and assumption setting may be contained in supporting (non-public) reports/advice.

Contribution Rates

A.7 Regulation 62 sets out that employer contributions are separated into two components:

> Primary rates which meet the cost of ongoing accrual for current active members; and

> Secondary rates, which are mainly established to meet deficit or eliminate surplus over a given period (the deficit/surplus recovery period).

A.8 Regulation 62 (6) states that when setting the contribution rates the actuary must have regard to:

> the existing and prospective liabilities arising from circumstances common to all those bodies

> the *desirability* of maintaining as nearly constant a primary rate as possible

> the current version of the administering authority's funding strategy mentioned in regulation 58 (funding strategy statements), and

> the *requirement* to secure the solvency of the pension fund and the long-term cost efficiency of the Scheme, so far as relating to the pension fund.

A.9 Regulation 62 (4) states that the rates and adjustments certificate must specify both the primary rate of the employer's contribution and the secondary rate of the employer's contribution, for each year of the period of three years beginning with 1st April in the year following that in which the valuation date falls.

A.10 Each valuation report must set out primary and secondary employer contribution rates.

Primary Rates

A.11 Regulation 62 (5) defines the primary rate of an employer's contribution as "the amount in respect of the cost of future accruals which, in the actuary's opinion, should be paid to a fund by all bodies whose employees contribute to it so as to secure its solvency", and specifies that this must be expressed as a percentage of the pay of their employees who are active members.

A.12 The following table shows the primary rate of employer contribution for the administering authorities' whole fund:

Table A4: Primary contribution rate

Fund	Primary contribution rate % of pay
Powys County Council Pension Fund (Aon)	21.4%
Buckinghamshire Pension Fund (Barnett Waddingham)	19.7%
London Borough of Croydon Pension Fund (Hymans Robertson)	20.4%
Clwyd Pension Fund (Mercer)	18.8%

A.13 Each primary rate of employer contribution has been calculated to cover the cost of future benefits accrued by their employees. Each valuation also provides a breakdown of the primary rate for each employer.

Secondary Rates

A.14 Regulation 62 (7) states that the secondary contribution rate may be expressed as either a percentage or a monetary amount.

A.15 Each valuation report provides a secondary rate for each employer (expressed as a cash amount and/or percentage of pay for each employer). The secondary rates of employer contributions for each valuation have been defined to be adjustments to the primary rate as required. In all cases, the secondary rates have been provided for the next three years for each employer.

Table A5: Whole fund Secondary Contribution Rates

Fund	2023/24	2024/25	2025/26
Powys County Council Pension Fund (Aon)	£2,194,000	£1,919,000	£1,619,000
Buckinghamshire Pension Fund (Barnett Waddingham)	£8,870,000	£8,360,000	£7,920,000
London Borough of Croydon Pension Fund (Hymans Robertson)	£5,385,000	£5,526,000	£5,464,000
Clwyd Pension Fund (Mercer)	-£4,500,000	-£12,700,000	-£12,900,000

Rates and Adjustments Certificate (Regulation 62 (8))

A.16 Regulation 62 (8) states that the rates and adjustments certificate must contain a statement of the assumptions on which the certificate is given as respects:

(a) the number of members who will become entitled to payment of pensions under the provisions of the Scheme; and

(b) the amount of the liabilities arising in respect of such members

during the period covered by the certificate.

A.17 In the following table we set out where the assumptions for each valuation can be found.

Table A6: Location of assumptions

Fund	Statement in rates and adjustments certificate	Location of assumptions in valuation report
Powys County Council Pension Fund (Aon)	✔	Further information - Assumptions
Buckinghamshire Pension Fund (Barnett Waddingham)	✔	Appendix 2
London Borough of Croydon Pension Fund (Hymans Robertson)	✔	Appendix 2
Clwyd Pension Fund (Mercer)	✔	Appendix A

Regulation 62 (9)

A.18 Regulation 62 (9) states that the administering authority must provide the actuary preparing a valuation or a rates and adjustments certificate with the consolidated revenue account of the fund and such other information as the actuary requests.

A.19 For each of the four valuation reports examined we have seen evidence of having received relevant data from the administering authority.

Appendix B: Consistency

B.1 In this appendix we set out analysis we undertook in relation to whether the actuarial valuations were carried out in a way which is not inconsistent with other valuations completed under the scheme regulations. This appendix contains comments and a number of charts referring to the following aspects:

- Key information
- Funding levels
- Discount rates
- Demographic assumptions
- Climate risk

Key Information

B.2 All funds provided a standardised dashboard of results, which was originally recommended in the 2016 section 13 review and subsequently refined following the 2019 review. The agreed format of the dashboard for the 2022 valuations is as follows:

Table B1: Dashboard

Item requested	Format
Past service funding position – local funding basis	
Funding level (assets/liabilities)	*%*
Funding level (change since last valuation)	*%*
Asset value used at the valuation	*£m*
Value of liabilities (including McCloud liability)	*£m*
Surplus (deficit)	*£m*
Discount rate – past service	*% pa*
Discount rate – future service used for contribution rate setting	*% pa*
Assumed pension increases (CPI)	*% pa*
Method of derivation of discount rate, plus any changes since the previous valuation	*Freeform text*

Assumed life expectancies at age 65		
Life expectancy for current pensioners – men currently age 65	*years*	
Life expectancy for current pensioners – women currently age 65	*years*	
Life expectancy for future pensioners – men currently age 45	*years*	
Life expectancy for future pensioners – women currently age 45	*years*	
Past service funding position – SAB basis (for comparison purposes only)		
Market value of assets	*£m*	
Value of liabilities	*£m*	
Funding level on SAB basis (assets/liabilities)	*%*	
Funding level on SAB basis (change since last valuation)	*%*	
Contribution rates payable	*2022 Valuation*	*2019 Valuation*
Primary contribution rate	*% of pay*	*% of pay*
Secondary contribution - 1st year of rates and adjustment certificate	*£m*	*£m*
Secondary contribution - 2nd year of rates and adjustment certificate	*£m*	*£m*
Secondary contribution - 3rd year of rates and adjustment certificate	*£m*	*£m*
Total expected contributions - 1st year of rates and adjustment certificate (£ figure based on assumed payroll)	*£m*	*£m*
Total expected contributions – 2nd year of rates and adjustment certificate (£ figure based on assumed payroll)	*£m*	*£m*
Total expected contributions – 3rd year of rates and adjustment certificate (£ figure based on assumed payroll)	*£m*	*£m*
Assumed payroll - 1st year of rates and adjustment certificate	*£m*	*£m*
Assumed payroll – 2nd year of rates and adjustment certificate	*£m*	*£m*
Assumed payroll – 3rd year of rates and adjustment certificate	*£m*	*£m*
3-year average total employer contribution rate	*% of pay*	*% of pay*
Average employee contribution rate (% of pay)	*% of pay*	*% of pay*
Employee contributions (£ figure based on assumed payroll of £m)	*£m pa*	*£m pa*

Deficit recovery plan	*2022 Valuation*	*2019 Valuation*
Latest deficit recovery period end date, where this methodology is used by the fund's actuarial advisor	*Year*	*Year*
Earliest surplus spreading period end date, where this methodology is used by the fund's actuarial advisor	*Year*	*Year*
The time horizon end date, where this methodology is used by the fund's actuarial advisor	*Year*	*Year*
The funding plan's likelihood of success, where this methodology is used by the fund's actuarial advisor	*%*	*%*
Percentage of liabilities relating to employers with deficit recovery periods of longer than 20 years	*%*	*%*
Additional information:		
Percentage of total liabilities that are in respect of Tier 3 employers	*%*	
Included climate change analysis/comments in the 2022 valuation report	*Yes/No*	
Value of McCloud liability in the 2022 valuation report (on local funding basis)	*£m*	

B.3 All information was included for the sample fund reports we considered in more detail, as listed below:

Powys County Council Pension Fund (Aon)
Buckinghamshire Pension Fund (Barnett Waddingham)
London Borough of Croydon Pension Fund (Hymans Robertson)
Clwyd Pension Fund (Mercer)

Funding Levels

B.4 Chart B1 shows a plot of SAB funding level against the fund's local basis funding level, with different firms of actuarial advisor plotted in different colours. If there was no difference in funding on the SAB standard basis and that on the local funding basis all funds would sit on the dotted line. If differences in bases were consistent across funds, all funds would sit along a different line. There is considerable variation, with most funds having a higher SAB funding level than that on the local basis (which means that the liability value is lower on the SAB standard basis than on the local funding basis), but to different extents (evidenced by variations in the distance from the dotted line). Some funds lie below the dotted line (i.e. the funding level on the SAB basis is less than on the local funding basis). Note in this chart and throughout this chapter we have used shortened fund names in some charts for presentation ease.

B.5 Chart B2 shows the same information in a different format by illustrating the difference between the SAB funding level and the local funding level for individual funds. There is a considerable range of differences both across the funds as a whole, the range is -4.5% to +35%, and between funds advised by the same advisors.

B.6 The SAB standard basis is a helpful comparator but it is not useful for assessing liabilities for funding purposes. The standard nature of this basis assists in analysis of the difference in prudence adopted in the local funding bases; i.e. it is the relative differences that are of interest rather than the absolute difference. We do not suggest the SAB standard basis as an appropriate or target local funding basis.

Chart B1: Standardising Local Valuation results

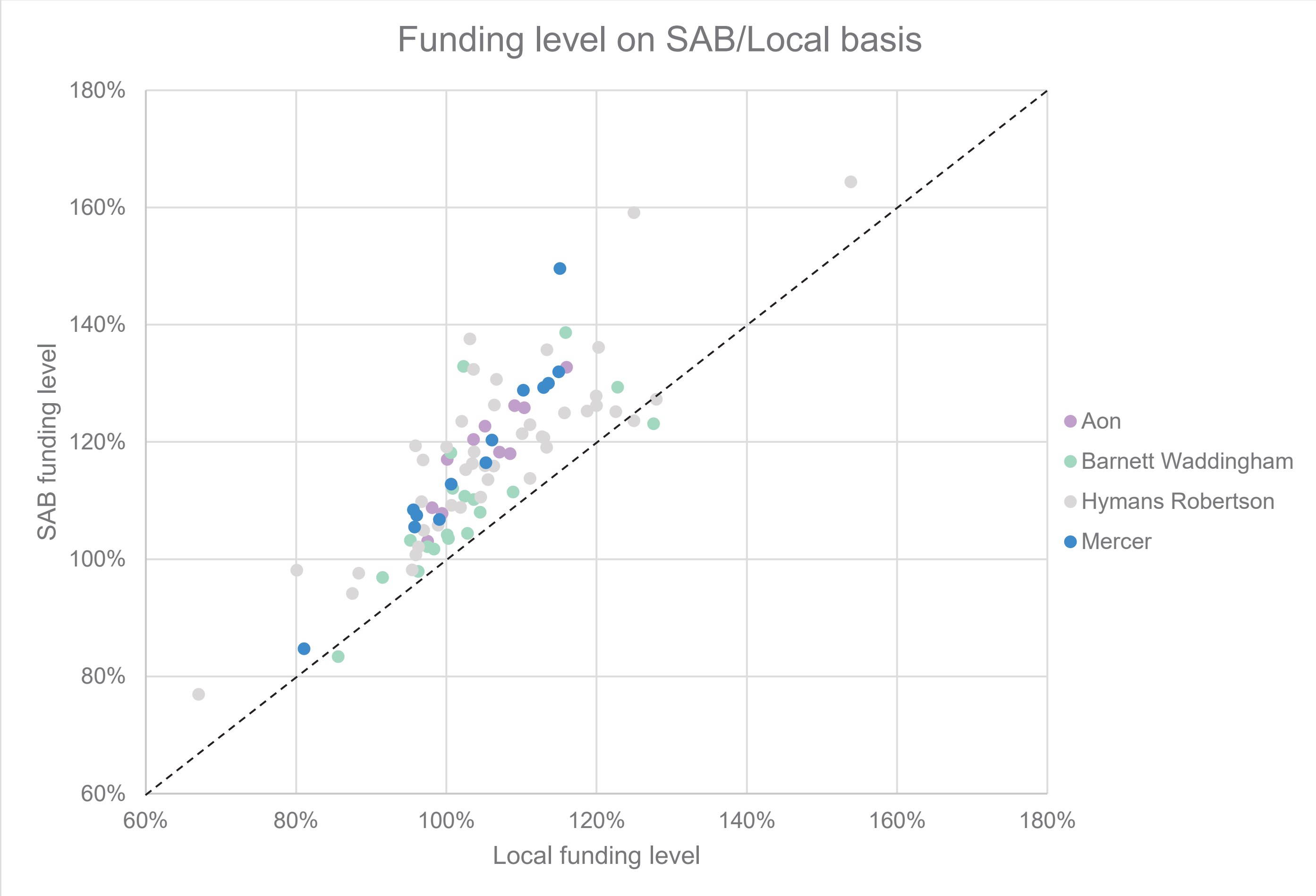
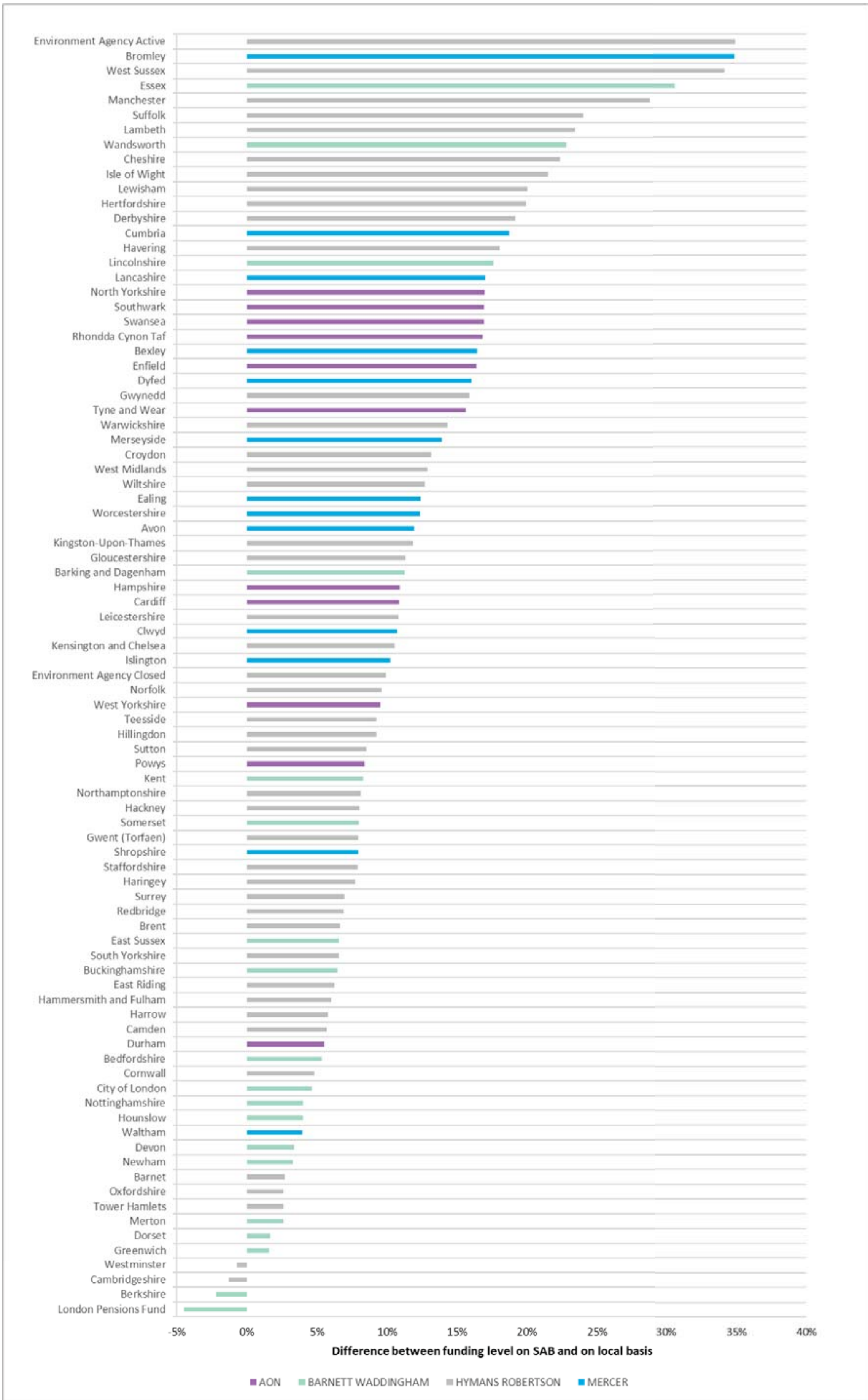


Chart B2: Difference Between Funding Level on SAB Standardised Basis and Funding Level on Local Basis



Discount Rates

B.7 Each firm of actuarial advisors applies a specific method for calculating discount rates as shown in the table below.

Table B2: Discount Rate Methodology

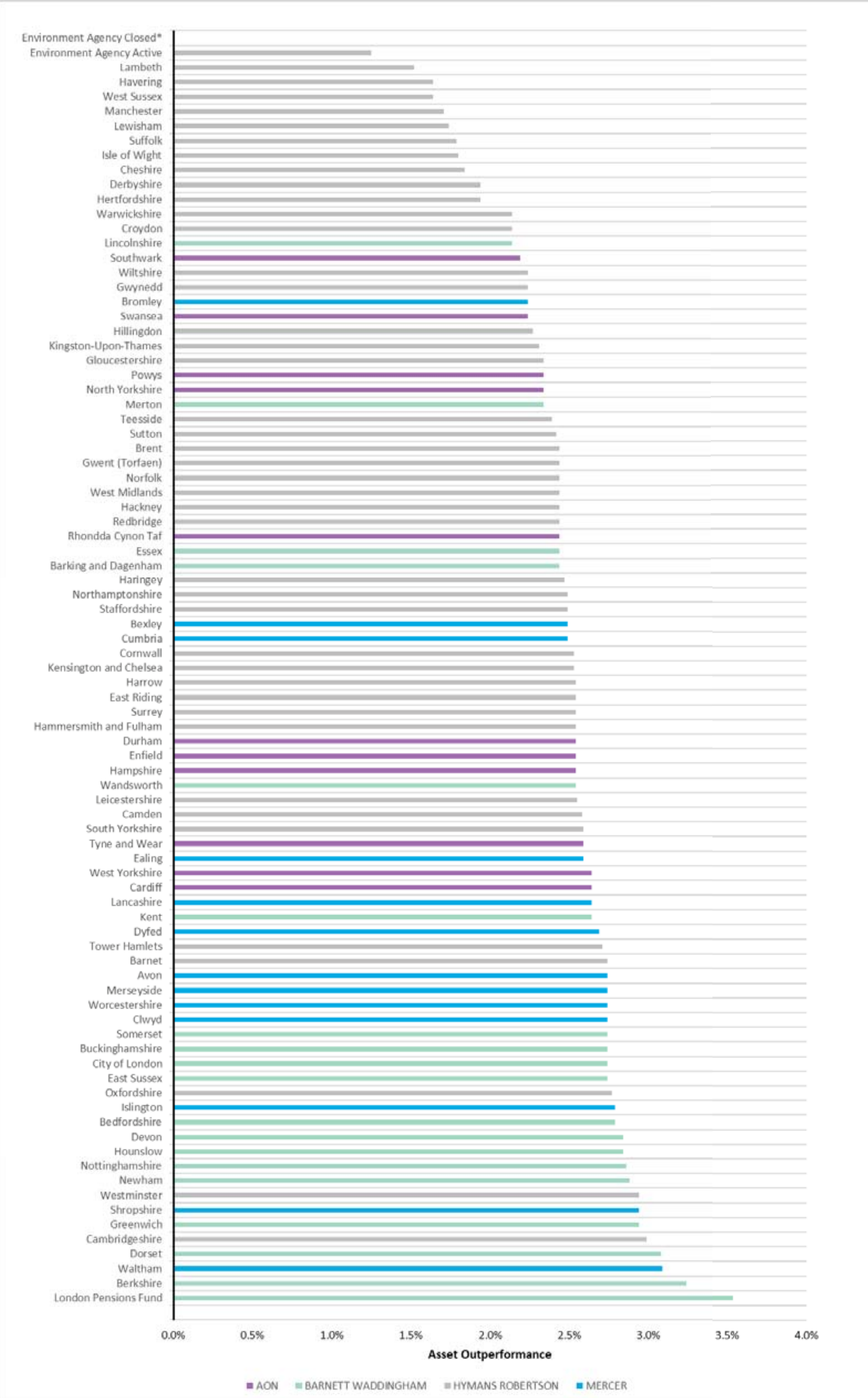
Fund	Discount rate methodology
Powys County Council Pension Fund (Aon)	Stochastic modelling
Buckinghamshire Pension Fund (Barnett Waddingham)	Weighted average prudent estimated return on long term asset classes
London Borough of Croydon Pension Fund (Hymans Robertson)	Stochastic modelling
Clwyd Pension Fund (Mercer)	Stochastic modelling

B.8 Some funds (advised by Mercer) used different discount rates to assess past service liabilities and future service contribution rates, we consider only the former here.

B.9 The discount rates set by each fund are likely to be linked to the mix of assets held by the fund, and we would therefore expect to see differences in discount rate from fund to fund. These differences are clear in Chart B3 overleaf (all discount rates in this chart have been reduced by a constant risk free rate, however the relative differences remain).

B.10 We assess implied asset outperformance as the discount rate less the risk-free rate, where the risk-free rate is assumed to be the Bank of England UK nominal 20 year spot rate as at 31 March 2022 (1.86%).

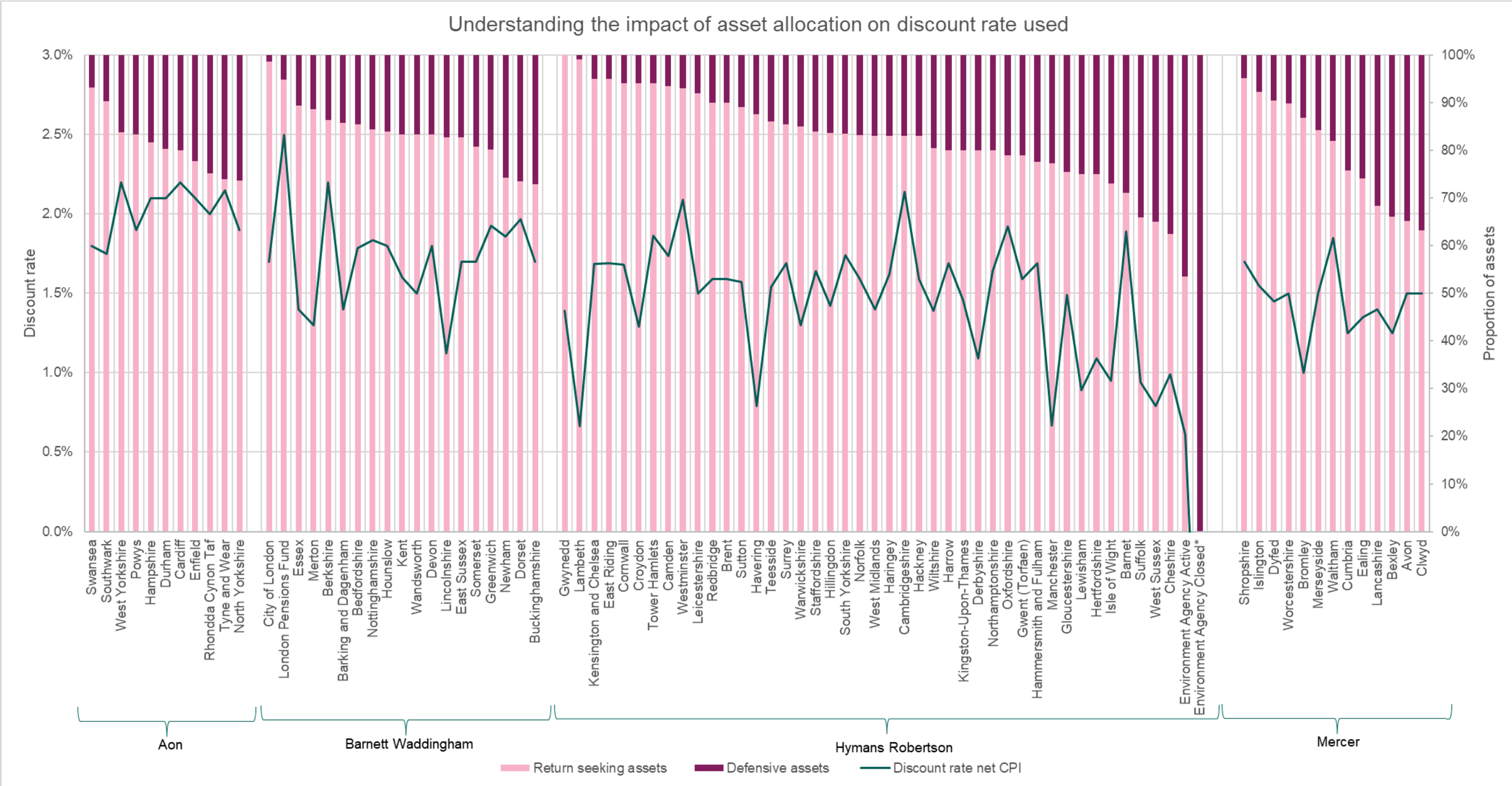
Chart B3: Implied Asset Outperformance within Discount Rate



*The implied asset outperformance for the Environment Agency closed fund is -0.1% (not shown in chart)

B.11 Assets can be considered in two broad categories, assets which are return seeking (for example equities) and those which are defensive (for example UK government bonds). Chart B4 below orders funds by their proportion of return seeking assets in the bar chart (right hand axis) and shows the corresponding discount rate net of CPI inflation as a green line (left hand axis), split by actuarial firm. There is no clear correlation between the proportion of return seeking assets and the discount rate adopted, suggesting that other factors (such as risk appetite) influence discount rates.

Chart B4: Link between the asset allocation of funds and the discount rate

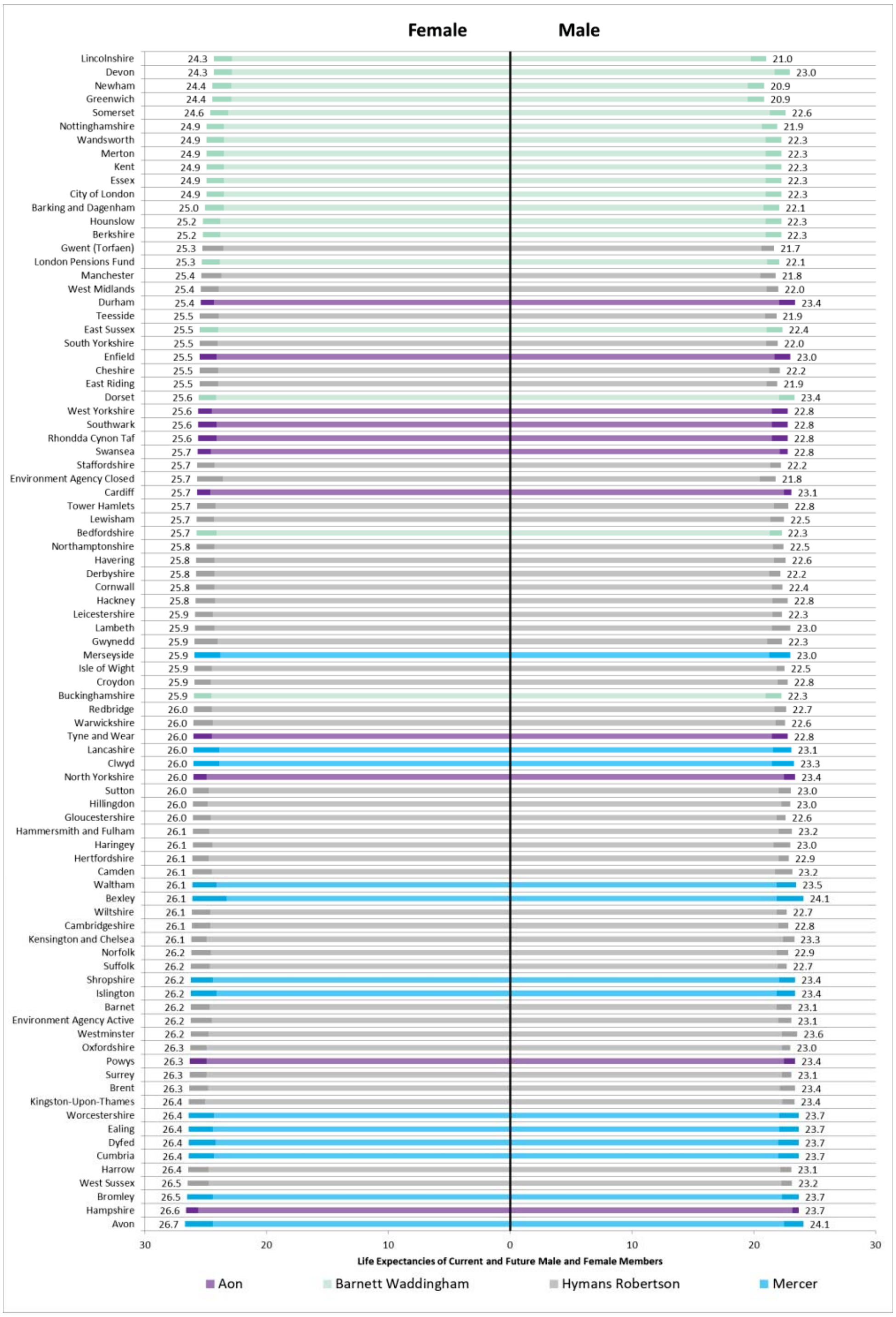


*The discount rate net of CPI for the Environment Agency closed fund is -1.4% (not shown in chart)

Demographic assumptions

B.12 Mortality assumptions determine how long members of a fund are expected to live and hence the amount of pension benefits they will receive. The longer a member's life expectancy the more pension they will receive. Chart B5 shows the life expectancy for current pensioners, female and male, at age 65, and the life expectancy for future pensioners (active and deferred member currently aged 45) at age 65. The funds are ordered by increasing future life expectancy for females. We note these assumptions will be dependent on local variation.

Chart B5: Life expectancy for pensioners and future pensioners at age 65



The paler shade in the middle of the bar represents the life expectancy of current pensioners whilst the total bar including the darker shade represents the life expectancy of future pensioners.

B.13 Chart B5 shows that overall members of funds advised by Barnett Waddingham are assumed to have a lower life expectancy when compared to other advisors. For funds advised by Mercer, future pensioners generally have higher life expectancy than average, but this does not appear to be the case for current pensioners. There is more variation in the ranking of life expectancy for funds advised by Aon and Hymans Robertson.

B.14 Commutation assumptions (the extent to which members on average exchange pension in favour of a tax free cash benefit) are set as the percentage of the maximum commutable amount that a member can take on retirement. Chart B6 shows the assumed percentages for both pre 2008 and post 2008 pensions, which may be set separately.

Chart B6: Commutation Assumptions for Pre and Post 2008 Pensions

B.15 Other things being equal, it is more prudent to assume a lower rate of commutation, because the cost of providing a pension benefit is higher than the commutation factor. Some cash lump sum was provided as of right in the LGPS prior to 2008 whereas for benefits accrued after that date, cash was available only by commutation of pension.

B.16 Chart B6 shows that the funds advised by Barnett Waddingham assume that members commute 50% of the maximum allowable cash amount for both pre-2008 and post-2008 pension. Funds advised by Mercer assume that members take 43% of the maximum allowable cash amount for pre-2008 pension and 75% of the maximum allowable cash amount for post-2008 pension. There is more variation in the commutation assumptions made by funds advised by Aon and Hymans Robertson.

Climate risk

B.17 Most funds completed climate risk analysis in accordance with an agreed broad principles document agreed between MHCLG, fund actuaries and GAD, with the results of the analyses included in the 2022 valuation reports. The broad principles agreed for the 31 March 2022 valuations are shown in B.19. Where the data has been provided, we have summarised the information provided on the impact of two scenarios on funding positions at a single point in time, 31 March 2042. Results are relative to the disclosed funding positions, the base case. The two scenarios are:

a. Paris aligned

b. High temperature scenario

B.18 Chart B7 shows the projected funding levels under each of these two scenarios at 31 March 2042 relative to the base case funding level, for Aon, Barnett Waddingham and Mercer funds who have disclosed a funding level for each scenario. Hymans Robertson funds disclosed a success probability and, as this is not directly comparable to funding level, we have shown this information separately in Chart B8. Whilst we note Hymans Robertson have not given a funding level, the approach of considering the impact on success probability is consistent with their underlying valuation methodology. These charts are included for information only in order to illustrate the analyses set out in funds' valuation reports. The values shown are at a single future point in time and looking at a different time could produce very different results. Further we acknowledge that this summary relates to two specific scenarios and therefore does not in any way represent the full range of possible future outcomes. A full comparison and understanding of these results must take into account differences in assumptions and methodology as well as the projected impacts.

Chart B7: Ratio of funding level under climate change scenarios to base funding level, as at March 2042 (for funds reporting projected funding level)

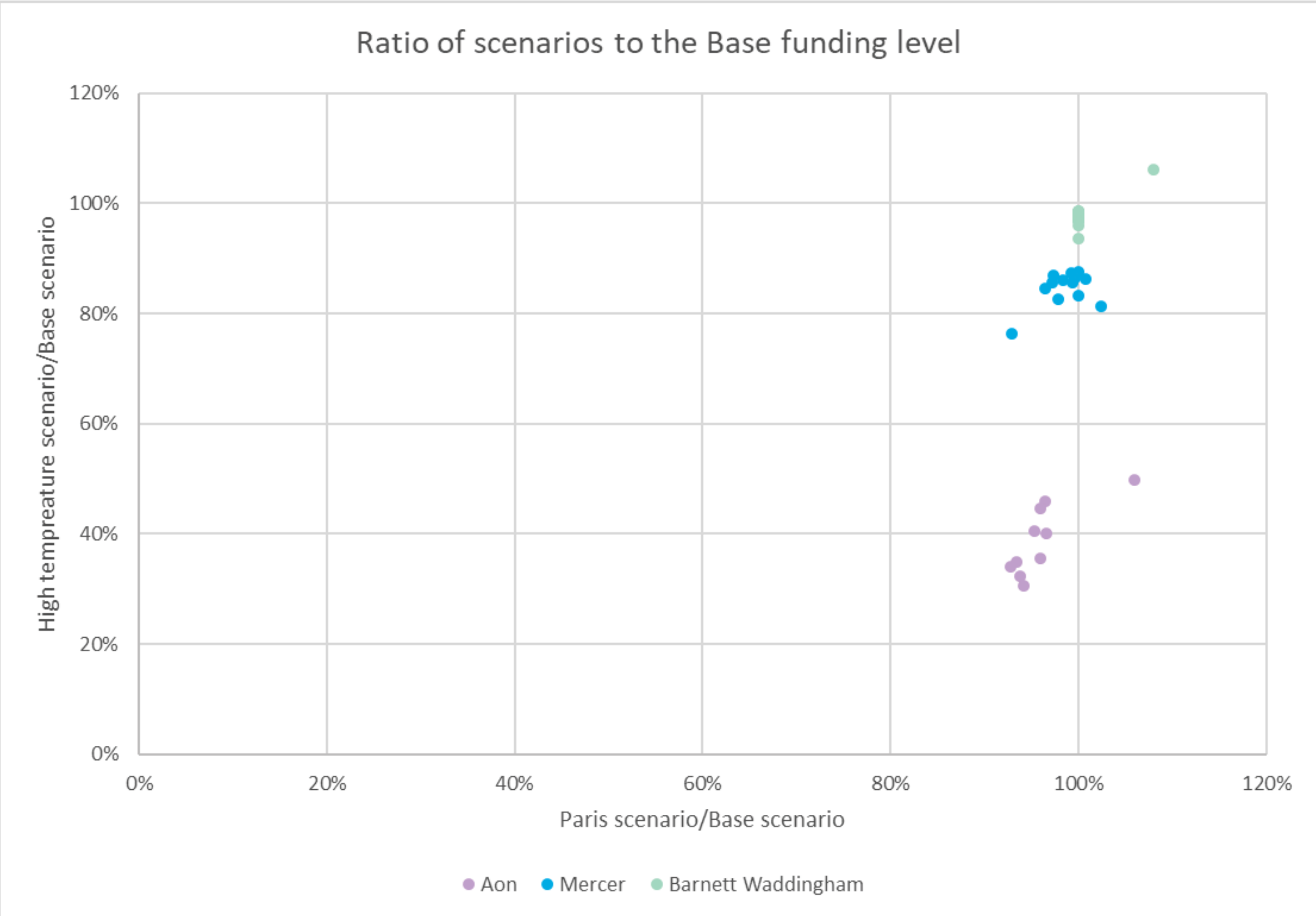
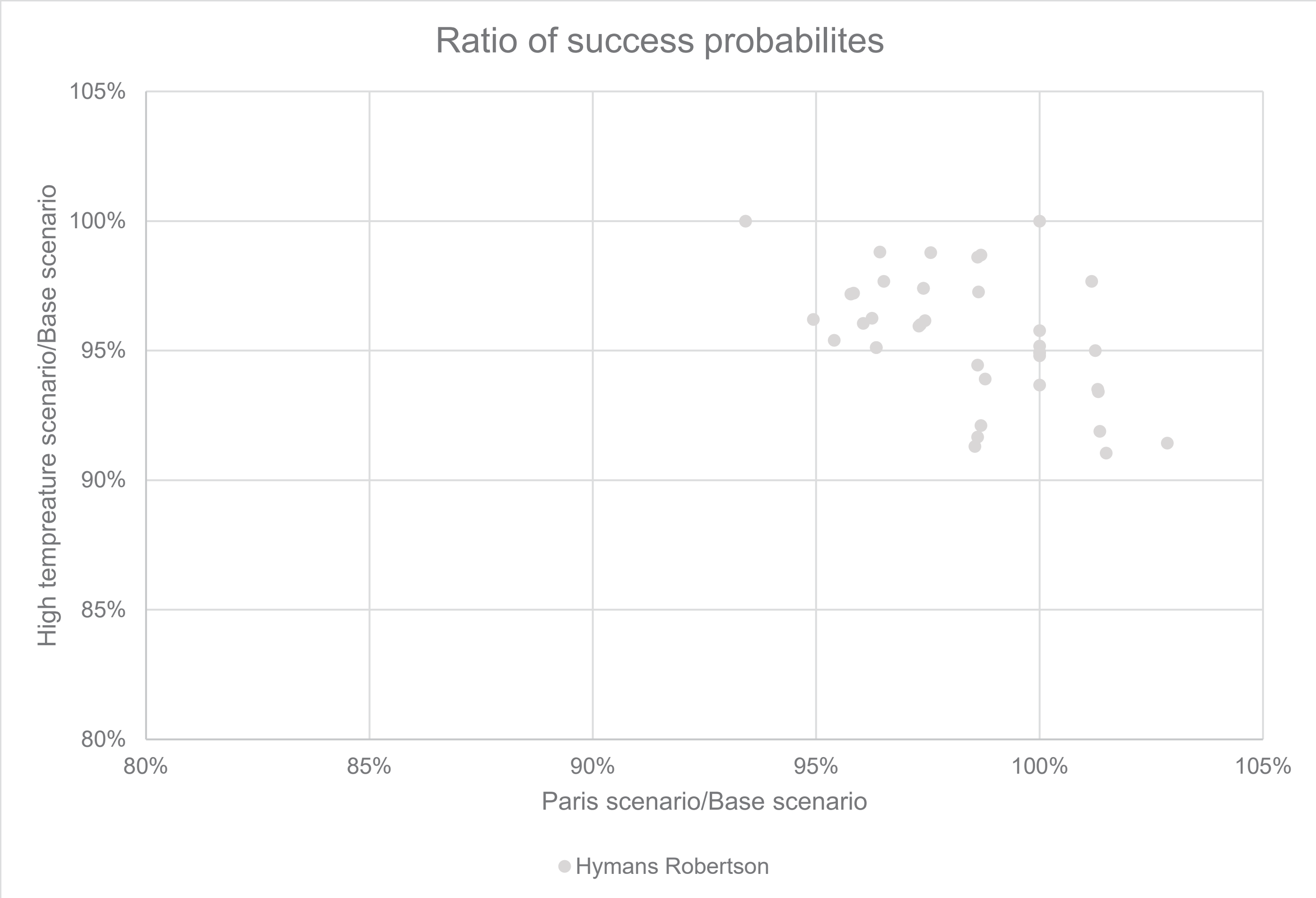


Chart B8: Ratio of success probabilities under climate change scenarios to base scenario, as at March 2042 (for funds reporting success probabilities)



B.19 The broad principles agreed for the 31 March 2022 valuation are shown below. These principles were agreed between the four actuarial firms, MHCLG and GAD.

Climate Change Valuation Reporting Principles

1. Scope of the analysis

An important part of any analysis for the valuations will be to identify the impact of transition risk (shorter term) and physical risks (longer term) on the potential funding outcomes. It is therefore critical that any analysis covers an appropriate spectrum of outcomes e.g. degree of warming/rate of transition to low carbon state and also timeframe of analysis. This is the fundamental principle of how the core analysis should be considered.

Funds will consider at the outset the scope of the analysis to be undertaken and the scenarios to be considered at the Whole Fund level, comprising at least two alternate scenarios covering differing rates of transition. These may be considered relative to a base scenario with only implicit adjustment to assumptions for scenarios, which include varying degrees of climate change transition, consistent with the funding assumptions. This might be used, for example, to test whether the funding strategy is sufficiently robust in the context of the scenario analysis considered and therefore any potential contribution impacts.

This also should be supported by qualitative commentary on what potential actions are being taken to improve resilience to climate change and the potential implications. For example the path to net zero and any interim targets, and how they correspond to the scenarios modelled. Where action has already been taken, Funds may request some analysis to quantify the impact retrospectively if they wish (although we would expect this work to be done by the investment consultant or custodian).

2. Scenarios to be considered
   - One of the scenarios will be Paris aligned scenario and there will be at least one other scenario consistent with a higher temperature outcome.
   - Funds should consider both the projected potential global average temperature rise, and the nature of the transition to that temperature rise (e.g. timing and level of disruption).
   - Ultimately Funds will take advice from their Fund Actuary (and other advisers as appropriate) on the analysis to be undertaken as part of the valuation.
   - The detailed method and assumptions underpinning the climate change scenarios is not prescribed and will be determined by Funds working with their advisers based on their own plans to address climate change. However, as an example, the following impacts may be considered:
     - the potential impact on the future investment return outlook (and therefore discount rate) and inflation (and therefore inflation-linked assumptions), for the purpose of projecting liability values; and
     - the impact on the investment returns delivered by the Fund's investment strategy for the purpose of projecting asset values
   - Funds could also consider with their advisers the extent to which the scenarios will consider additional elements such as the potential impact on life expectancy changes and employer covenant.
   - As well as Funds having different approaches to dealing with climate change in their portfolio construction, it is recognised that different actuarial firms/GAD will legitimately have differing views on the methodology and assumptions underpinning different climate change scenarios although we would expect some commonality here.

3. **Time horizon and output**

The output from the scenarios will include consideration of the results (which will include the funding level on each scenario modelled) over a period of at least 20 years to ensure there is sufficient recognition of the transition and physical risks of climate change.

To ensure consistency with other reporting requirements, if a Fund chooses to do so then separate analysis could be undertaken to be consistent with the expected TCFD requirements i.e. giving consideration to the short, medium and long term impacts, but this would be subject to the final TCFD requirements for the LGPS.

4. **Reporting**

- The Fund Actuary will summarise the analysis/commentary in the final valuation report, including the headline assumptions underpinning the analysis, in line with the profession's expectations. Limited reporting in an agreed format could be included in the dashboard for consideration by GAD for Section 13 reporting requirements, though given the different possible approaches and scenarios the results may not be directly comparable.
- We recommend that Funds include in their Funding Strategy Statement a statement that the Fund has undertaken scenario analysis to assess the resilience of the strategy against climate change risk over the agreed period.

Appendix C: Solvency

C.1 In this appendix we set out the analysis we undertook in relation to whether the rate of employer contributions to the LGPS pension fund is set at an appropriate level to ensure the solvency of the pension fund. This appendix contains a description of:

- Solvency considerations
- Core Spending Power
- Mapping of solvency considerations to measures adopted
- Methodology used for solvency measures
- Table of outcomes for each fund

Potential for default

C.2 In the context of the LGPS:

- Our understanding based on confirmation from the Ministry of Housing, Communities and Local Government (MHCLG) is that, in contrast to employers in the private sector, there is no insolvency regime for local authorities
- Therefore, for the purposes of our analysis we assume that local authority sponsors cannot default on their pension liabilities through failure
- Members' benefits are therefore dependent on the assets of the scheme and future contributions from employers including local authorities

Solvency considerations

C.3 In assessing whether the conditions for solvency are met, we will have regard to:

Risks already present:

- funding level on the SAB standard basis
- whether or not the fund continues to be open to new members. If the fund is closed to new members or is highly mature and without any guarantee in place, we will focus on the ability to meet additional cash contributions.
- the ability of tax raising authorities to meet employer contributions

Emerging risks:

- the risks posed by changes to the value of scheme assets (to the extent that these are not matched by changes to the scheme liabilities)
- the proportion of scheme employers without tax raising powers or without statutory backing

C.4 We express the emerging risks in the context of Core Spending Power (for English local authorities, described below) or financing data (for Welsh local authorities). For funds which have no or limited Core Spending Power we have followed the same approach used in 2019 and previous reviews.

Core Spending Power

C.5 GAD's stress tests are designed to test the ability of the underlying tax raising employers to meet a shock to the fund; one that results in a sustained reduction to the funding position, requiring remedial action from those employers in the form of long term additional contributions.

C.6 The intention is to put this in the context of the financial resources available to those tax raising employers. In order to do that, MHCLG has pointed to an objective, well used and publicly available measure referred to as Core Spending Power. This applies for all local authorities across England and is published here.

C.7 Core Spending Power has the following components:

> Settlement Funding Assessment
> Compensation for under-indexing the business rates multiplier
> Council Tax Requirement excluding parish precepts
> Improved Better Care Fund
> New Homes Bonus
> New Homes Bonus returned funding
> Rural Services Delivery Grant
> Transition Grant
> Adult Social Care Support Grant
> Winter Pressures Grant
> Social Care Support Grant
> Social Care Grant
> Market Sustainability and Fair Cost of Care Fund
> Lower tier services grant
> 2022/23 Services Grant

C.8 GAD have referenced Core Spending Power for 2022-23 (to be consistent with the effective date of the data provided for section 13) as the measure of financial resource of the underlying (tax raising) employers, and amalgamated these up to the fund level, in order to compare like with like. After the date of the calculations, the Core Spending Power 2022-23 data was subsequently revised, however the results were not revised as this would not have materially changed the results of the solvency metrics.

C.9 Core Spending Power is not a measure of total local authority income. It does not include commercial income, sales fees and charges, or ring-fenced grants (except improved Better Care Fund). Core Spending Power includes an assumed modelled amount of locally retained business rates and as such does not include growth (or falls) in actual retained business rates. In some authorities, non-uniformed police employees participate in the LGPS, but their funding comes from Home Office. On the basis that the majority of this applies to uniformed police officers, no adjustment is made for it. Similarly, DfE funding for academies is not included.

C.10 Core Spending Power is publicly available and objective, therefore MHCLG have advised it is the best such measure available currently.

C.11 Core Spending Power does not apply to Welsh local authorities. For Welsh funds GAD have used "financing of gross revenue expenditure" ("financing data"), which is broadly comparable with Core Spending Power, following discussions with Welsh Government in 2016. This applies for all local authorities in Wales and is published here. The 2022-23 "financing of gross revenue expenditure" data was also subsequently revised after these calculations were completed, however the results were not revised as this would not have materially changed the results of the solvency metrics.

C.12 Financing data has the following components which GAD have included for the purpose of section 13 analysis:

> Adjustments (including amending reports)
> Council tax reduction scheme (including RSG element)
> Discretionary non-domestic rate relief
> General government grants
> Share of re-distributed non-domestic rates
> Amount to be collected from council tax

C.13 Financing data also has the following components which we have not included for the purpose of section 13 analysis:

> Specific grants
> Appropriations from(+) / to(-) reserves ie increasing reserves (+) / decreasing reserves (-)

C.14 Similarly to Core Spending Power, financing data excludes income from sales, fees, and charges and we have excluded police funding from the analysis.

Funds with no or low core spending

C.15 There were four funds with no or low core spending:

> City of London Corporation Pension Fund
> Environmental Agency Active Fund
> Environmental Agency Closed Fund
> London Pension Fund Authority Pension Fund

C.16 For each of these funds, we have reverted to the methodology used in previous reviews for asset shock and employer default, which expressed the resulting additional contributions to meet the emerging deficit as a percentage of pensionable pay.

Mapping of solvency considerations

C.17 The five solvency metrics adopted in the 2019 exercise have been retained for the 2022 exercise. We developed and considered other measures but have excluded, for example the liability shock used previously as it did not add value under current circumstances beyond what was already measured under the asset shock.

Table C1: 2022 solvency measures

Consideration	Measure Used
Risks already present:	
The relative ability of the fund to meet its accrued liabilities	**SAB funding level:** A fund's funding level using the SAB standard basis, as set out in Appendix G
The extent to which the fund continues to be open to new members. If a fund is closed to new members or is highly mature, we will focus on the ability to meet additional cash contributions	**Open fund:** Whether the fund is open to new members
The proportion of scheme employers without tax raising powers or without statutory backing	**Non-statutory members:** The proportion of members within the fund who are/were employed by an employer without tax raising powers or statutory backing
Emerging risks:	
The cost risks posed by changes to the value of scheme assets (to the extent that these are not matched by changes to the scheme liabilities)	**Asset shock:** The change in average employer contribution rates expressed as a percentage of Core Spending Power (or financing data) after a 15% fall in value of return-seeking assets
The impact that non-statutory employers defaulting on contributions would have on the income of sponsoring employers as a whole	**Employer default:** The change in average employer contribution rates as a percentage of Core Spending Power (or financing data) if all employers without tax raising powers or statutory backing default on their existing deficits

C.18 Emerging risk measures require assumptions. We used best estimate assumptions for this purpose, details of which can be found in Appendix G. Details of the methods used to calculate scores under each measure and the criteria used to assign a colour code can be found in this Appendix.

Solvency measures – methodology

C.19 We detail the methodology behind the measures used to assess a fund's solvency position. The analysis is carried out a fund level, except where stated, but individual employers within any fund may be in a different position. Some of the measures listed below were calculated using a market consistent set of assumptions. For more information on this best estimate basis please see Appendix G.

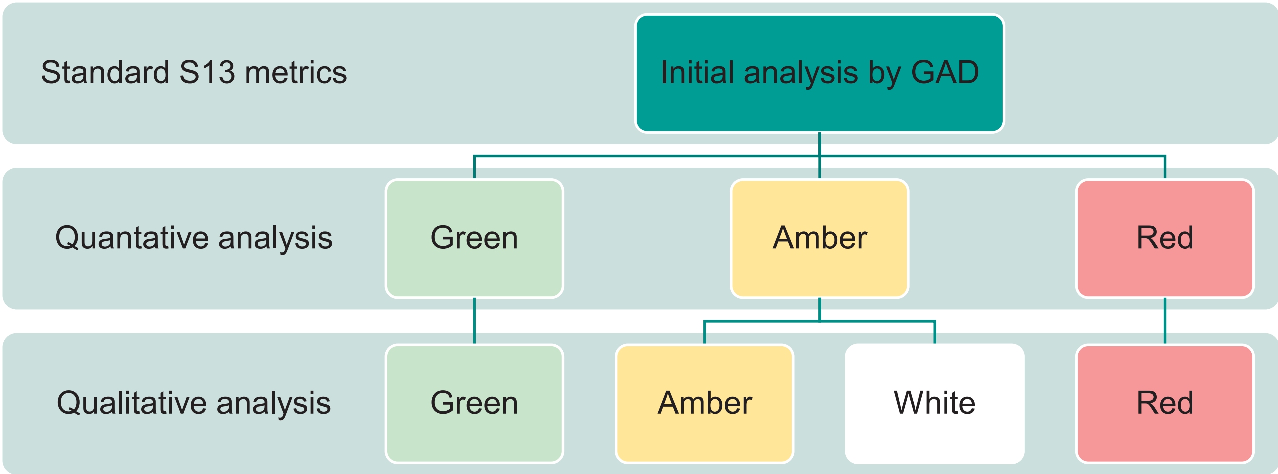
C.20 The 2016 section 13 exercise developed the approach of setting red, amber and green ('RAG') flags for the solvency measure, where amber and red flags were raised when a fund breached thresholds set by GAD. For the 2019 and 2022 exercises, GAD has adopted the same RAG approach, however the flag allocations have been revised since 2016 taking into account the following:

> The scheme funding position has improved significantly since 2016 when the metrics were introduced;

> The size of funds has grown considerably since 2016 but the ability of tax backed employers to increase contributions if required (as measured by core spending power and financing data) has not kept pace. This could pose a risk to the LGPS, for example if there is a severe shock to return seeking asset classes.

C.21 Following discussions with MHCLG, GAD agreed that it is not helpful to raise individual fund flags which have been primarily driven by the relatively larger increase in the scale of liabilities relative to the possible contributions available, and introduced the “white” flag. The white flag is an advisory flag that highlights a general risk but does not require action in isolation.

C.22 The chart below illustrates the steps taken by GAD in determining the flag colours for the metrics.



C.23 The text box below defines each flag colour.

Key

RED indicates a material issue that may result in the aims of section 13 not being met. In such circumstances remedial action to ensure solvency may be considered.

AMBER indicates a potential material issue that we would expect funds’ to be aware of. In isolation this would not usually contribute to a recommendation for remedial action in order to ensure solvency.

WHITE is an advisory flag that highlights a general issue but one which does not require an action in isolation. It may have been an amber flag if we had broader concerns.

GREEN indicates that there are no material issues that may contribute to a recommendation for remedial action in order to ensure solvency.

C.24 GAD will assess the position again at the time of the 2025 section 13 report and will decide whether to retain the white flag, return to the RAG approach or use other metrics/thresholds that are appropriate for the circumstances of the LGPS at that point in time.

SAB funding level: A fund’s funding level using the SAB standard basis

C.25 This measure highlights possible risks to a fund as a result of assets being significantly lower than liabilities, where liabilities are those estimated on the SAB standard basis detailed in Appendix G.

C.26 A fund in deficit will need to pay additional contributions in order to meet the liabilities that have already been accrued.

C.27 This measure assesses the relative funding levels of individual funds. All funds have been ordered by this measure (highest funding level first) and the five funds ranked 82 to 86 out of 86 (i.e. not including the Environment Agency Closed Fund) are assigned an initial amber code. All other funds are assigned a green colour code.

C.28 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Open fund: Whether the fund is open to new members

C.29 A scheme that is closed to new members will be closer to maturity than a scheme which is still open. This creates a possible risk to sponsoring employers as there is less scope to make regular contributions and receive investment returns on those contributions. Additionally, if problems do occur with the scheme funding level, the reduced time to maturity of the scheme means that additional contributions must be spread over a shorter timeframe and could be more volatile as a result.

C.30 This measure is a 'Yes' when a fund is still open to new members and a 'No' otherwise. A 'Yes' results in a green colour code, while a 'No' results in a red colour code. As at 31 March 2022, the Environment Agency Closed Fund is the only closed fund. However, given that this fund has a DEFRA guarantee we consider it appropriate to set the flag to green in this circumstance.

Non-statutory members: The proportion of members within the fund who are employed by an employer without tax raising powers or statutory backing

C.31 We have considered taxpayer-backed employers of stronger covenant value than other employers. It is important, in this context, that administering authorities and other employers understand the potential cost that may fall on taxpayers in the future if employers without statutory backing or tax raising powers are unable to meet their required contributions and those with such powers become responsible for the accrued costs.

C.32 Data for this measure has been taken from the publicly available 'Local government pension scheme funds local authority data: 2022 to 2023' published by MHCLG here. The data contains the number of employees within each fund by employer group, where:

- Group 1 refers to local authorities and connected bodies
- Group 2 refers to centrally funded public sector bodies
- Group 3 refers to other public sector bodies and
- Group 4 refers to private sector, voluntary sector and other bodies

C.33 For the purposes of this measure, and unless information has been provided to the contrary, it has been assumed that employers listed under groups 1 and 2 are those with tax raising powers or statutory backing and that employers listed under groups 3 and 4 are those without tax raising powers or statutory backing.

C.34 The measure therefore gives the proportion of members within the fund that are/were employed by group 1 and 2 employers as a proportion of all members within the fund.

C.35 Under this measure a fund has been allocated an amber colour code if its proportion of members who are employed by an employer without tax raising powers or statutory backing is between 25% and 50%, a red colour code would be allocated if the proportion is more than 50% and a green colour code is allocated in all other cases. It is not applicable to consider this metric in relation to the Environmental Agency funds.

C.36 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Asset shock: The change in average employer contribution rates expressed as a percentage of Core Spending Power or financing data after a 15% fall in value of return-seeking assets

C.37 This measure shows the effect on total employer contribution rates of a one-off decrease in the value of a fund's return seeking assets equal to 15% of the value of those assets expressed as a percentage of Core Spending Power or financing data. Defensive assets are assumed to be unaffected.

C.38 For the purposes of this measure liabilities have been restated on the standardised best estimate basis and deficit recovery periods have been standardised using a period of 20 years to ensure that results are comparable.

C.39 For the scenario where a fund is in deficit on the standardised best estimate basis after the asset shock (the funding level is less than 100% after the shock) and the relevant threshold has been breached (over 3%) as described below, then an initial amber flag is raised. However, where the fund is in surplus after the shock, the fund will not raise a flag even if it had breached the threshold but the risk remains that such an event could bring forward the need to increase contributions.

C.40 Return-seeking asset classes are assumed to be:

- Equities (UK, Overseas and Unquoted or private equities)
- Property
- Infrastructure investments which are equity type
- "Multi asset" funds (examples include diversified growth funds, managed funds, balanced funds, multi asset credit or absolute returns)
- "Other" return seeking investments

Defensive asset classes, which are less volatile but may still generate a return, are assumed to be:

- Cash
- Bonds (Gilts, Corporate Bonds or index linked)
- "Other" defensive investments

C.41 We calculated the emerging deficit from the shock following a 15% fall in return seeking assets which would be attributed to the employers covered by core spending or financing data (which we refer to as "% tax raising employers" below):

$$\text{New Deficit} = (\text{Pre stress asset value} - \text{post stress asset value}) \times \% \text{ Tax raising employers}$$

We spread this over 20 years of annual payments and express as a percentage of Core Spending Power (or financing data for Welsh funds)

$$\frac{\text{New Deficit}}{\bar{a}_{20} \times \text{Core Spending Power}}$$

Where:

- new deficit is calculated on the standardised best estimate basis as at 31 March 2022
- $\bar{a}_{20}$ is a continuous annuity over the 20-year deficit recovery period at the rate of interest equal to $\frac{(1+i)}{(1+e)} - 1$.
- i is the nominal discount rate assumption on the standardised best estimate basis.
- e is the general earnings inflation assumption on the standardised best estimate basis

C.42 A fund is allocated an initial amber colour code if its result is above 3% and a green colour code otherwise.

C.43 For those funds with no/low core spending the measure was expressed as a percentage of pensionable pay, with an amber flag raised if that was greater than 5% and is in deficit after the asset shock. Where such funds remain in surplus after the asset shock, we show a theoretical change in contributions. This is an illustration of sensitivity and there is no restriction on the theoretical contribution rate either pre or post asset shock. No results are available for the Environment Agency Closed Fund as there are no remaining active members within the fund with which to calculate a revised contribution rate.

C.44 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis to consider whether it was felt that the risk identified was potentially material to the fund, and hence whether the initial amber flag should be maintained.

Employer default: The change in average employer contribution rates as a percentage of payroll if all employers without tax raising powers or statutory backing default on their existing deficits

C.45 LGPS regulations require employers to pay the contributions set in the valuation. MHCLG has confirmed that:

- there is a guarantee of LGPS pension liabilities by a public body
- that public body is incapable of becoming insolvent, and
- the governing legislation is designed to ensure the solvency and long term economic efficiency of the Scheme.

C.46 It is important, in this context, that administering authorities and other employers understand the potential cost that may fall on taxpayers in the future if employers without statutory backing or tax raising powers are unable to meet their required contributions and those with such powers become responsible for the accrued costs.

C.47 A fund's deficit will not change as a result of the default, but as the deficit is spread over a smaller number of employers, the contribution rate for each of the remaining employers will increase.

C.48 For the purposes of this measure liabilities have been restated on the standardised best estimate basis and deficit recovery periods have been standardised using a period of 20 years to ensure that results are comparable.

C.49 For funds in surplus under the standardised best estimate basis, the flag colour for a fund is green, as there would be no deficits attributed to non-taxed backed employers. The measure therefore solely considers those funds in deficit on the standardised best estimate basis.

C.50 We calculated the amount of deficit attributed to tax raising authorities if other public sector bodies & private sector, voluntary sector and other bodies were to default:

$$\text{Share of Deficit} = \text{Deficit} \times \% \text{ non} - \text{tax raising employers}$$

C.51 We spread this over 20 years of annual payments and express as a percentage of Core Spending Power for most funds (Welsh funds use financing data and funds with no/low Core Spending use pensionable pay, as set out in C.53 below).

$$\frac{(\text{Share of Deficit})}{(\bar{a}_{20} \times \text{Core Spending Power})}$$

Where:

- Share of deficit is calculated on the standardised best estimate basis as at 31 March 2022
- $\bar{a}_{20}$ is a continuous annuity over the 20 year deficit recovery period at the rate of interest equal to $\frac{(1+i)}{(1+e)} - 1$.
- i is the nominal discount rate assumption on the standardised best estimate basis.
- e is the general earnings inflation assumption on the standardised best estimate basis

C.52 A fund is allocated an initial amber colour code if its result is greater than 3% and a green colour code otherwise.

C.53 For those funds with no/low core spending the change of contribution rate was expressed as a percentage of pensionable pay, with an amber flag raised if that was greater than 2% and is in deficit after the asset shock. It is not applicable to consider this metric in relation to the Environmental Agency funds.

C.54 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial flag colours should be revised.

Solvency measures – by fund

Table C2: Solvency measures by fund

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock		Employer default	
				Deficit or surplus post shock	Impact on core spending	Deficit or surplus	Impact on core spending
Avon Pension Fund	Yes	107.5%	4.9%	Deficit	1.9%	Surplus	N/A
Bedfordshire Pension Fund	Yes	96.9%	6.8%	Deficit	2.5%	Deficit	0.1%
Buckinghamshire Pension Fund	Yes	110.1%	3.9%	Deficit	2.8%	Surplus	N/A
Cambridgeshire Pension Fund	Yes	123.6%	7.2%	Surplus	2.7%	Surplus	N/A
Cardiff and Vale of Glamorgan Pension Fund	Yes	108.8%	9.1%	Deficit	1.6%	Surplus	N/A
Cheshire Pension Fund	Yes	135.7%	7.0%	Surplus	2.8%	Surplus	N/A
City and County of Swansea Pension Fund	Yes	117.0%	3.4%	Surplus	2.5%	Surplus	N/A
City of Westminster Pension Fund	Yes	127.3%	2.2%	Surplus	3.5%	Surplus	N/A
Clwyd Pension Fund	Yes	116.5%	5.3%	Surplus	2.0%	Surplus	N/A
Cornwall Pension Fund	Yes	100.7%	3.6%	Deficit	2.2%	Surplus	N/A
Cumbria Local Government Pension Scheme	Yes	128.9%	6.4%	Surplus	3.3%	Surplus	N/A
Derbyshire Pension Fund	Yes	119.2%	5.5%	Surplus	3.4%	Surplus	N/A
Devon Pension Fund	Yes	101.7%	4.7%	Deficit	2.1%	Surplus	N/A
Dorset County Pension Fund	Yes	97.9%	3.9%	Deficit	2.1%	Deficit	0.0%
Durham County Council Pension Fund	Yes	102.9%	4.2%	Deficit	3.0%	Surplus	N/A
Dyfed Pension Fund	Yes	129.3%	3.6%	Surplus	2.8%	Surplus	N/A
East Riding Pension Fund	Yes	126.2%	2.6%	Surplus	4.1%	Surplus	N/A
East Sussex Pension Fund	Yes	129.4%	1.8%	Surplus	3.0%	Surplus	N/A

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock: Deficit or surplus post shock	Asset shock: Impact on core spending	Employer default: Deficit or surplus	Employer default: Impact on core spending
Essex Pension Fund	Yes	132.9%	15.0%	Surplus	2.9%	Surplus	N/A
Gloucestershire Pension Fund	Yes	121.4%	9.2%	Surplus	2.5%	Surplus	N/A
Greater Gwent (Torfaen) Pension Fund	Yes	104.9%	7.9%	Deficit	1.8%	Surplus	N/A
Greater Manchester Pension Fund	Yes	132.4%	22.4%	Surplus	5.3%	Surplus	N/A
Gwynedd Pension Fund	Yes	136.2%	3.4%	Surplus	3.2%	Surplus	N/A
Hampshire County Council Pension Fund	Yes	118.2%	3.5%	Surplus	3.3%	Surplus	N/A
Hertfordshire County Council Pension Fund	Yes	126.3%	4.8%	Surplus	2.7%	Surplus	N/A
Isle of Wight Council Pension Fund	Yes	123.5%	2.5%	Surplus	2.6%	Surplus	N/A
Islington Council Pension Fund	Yes	105.5%	5.8%	Deficit	3.6%	Surplus	N/A
Kent Pension Fund	Yes	110.8%	8.1%	Deficit	2.4%	Surplus	N/A
Lancashire County Pension Fund	Yes	132.0%	8.7%	Surplus	3.1%	Surplus	N/A
Leicestershire County Council Pension Fund	Yes	116.0%	1.3%	Deficit	3.1%	Surplus	N/A
Lincolnshire Pension Fund	Yes	118.2%	6.2%	Surplus	2.2%	Surplus	N/A
London Borough of Barking and Dagenham Pension Fund	Yes	112.1%	5.1%	Deficit	3.0%	Surplus	N/A
London Borough of Barnet Pension Fund	Yes	98.2%	35.5%	Deficit	1.4%	Deficit	0.1%
London Borough of Bexley Pension Fund	Yes	130.0%	5.2%	Surplus	1.4%	Surplus	N/A
London Borough of Brent Pension Fund	Yes	94.1%	17.9%	Deficit	1.8%	Deficit	0.2%

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock		Employer default	
				Deficit or surplus post shock	Impact on core spending	Deficit or surplus	Impact on core spending
London Borough of Bromley Pension Fund	Yes	149.6%	2.9%	Surplus	1.4%	Surplus	N/A
London Borough of Camden Pension Fund	Yes	119.1%	4.3%	Surplus	4.0%	Surplus	N/A
London Borough of Croydon Pension Fund	Yes	109.8%	4.5%	Deficit	2.0%	Surplus	N/A
London Borough of Ealing Pension Fund	Yes	108.4%	1.0%	Deficit	1.9%	Surplus	N/A
London Borough of Enfield Pension Fund	Yes	120.4%	1.7%	Surplus	2.1%	Surplus	N/A
London Borough of Hackney Pension Fund	Yes	113.6%	10.5%	Deficit	3.0%	Surplus	N/A
London Borough of Hammersmith and Fulham Pension Fund	Yes	110.6%	16.6%	Deficit	2.9%	Surplus	N/A
London Borough of Haringey Pension Fund	Yes	120.7%	2.6%	Surplus	3.6%	Surplus	N/A
London Borough of Harrow Pension Fund	Yes	102.1%	1.9%	Deficit	2.0%	Surplus	N/A
London Borough of Havering Pension Fund	Yes	98.1%	0.8%	Deficit	2.0%	Deficit	0.0%
London Borough of Hillingdon Pension Fund	Yes	97.6%	1.0%	Deficit	2.3%	Deficit	0.0%
London Borough of Hounslow Pension Fund	Yes	108.4%	12.6%	Deficit	2.5%	Surplus	N/A
London Borough of Lambeth Pension Fund	Yes	119.3%	0.3%	Surplus	3.3%	Surplus	N/A
London Borough of Lewisham Pension Fund	Yes	116.9%	3.8%	Surplus	2.5%	Surplus	N/A
London Borough of Merton Pension Fund	Yes	111.5%	3.3%	Deficit	2.8%	Surplus	N/A
London Borough of Newham Pension Fund	Yes	103.5%	22.9%	Deficit	2.5%	Surplus	N/A

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock		Employer default	
				Deficit or surplus post shock	Impact on core spending	Deficit or surplus	Impact on core spending
London Borough of Redbridge Pension Fund	Yes	105.8%	1.6%	Deficit	2.2%	Surplus	N/A
London Borough of Southwark	Yes	126.2%	0.0%	Surplus	3.6%	Surplus	N/A
London Borough of Tower Hamlets Pension Fund	Yes	125.2%	5.8%	Surplus	3.4%	Surplus	N/A
London Borough of Waltham Forest Pension Fund	Yes	84.7%	3.1%	Deficit	1.7%	Deficit	0.1%
Merseyside Pension Fund	Yes	120.3%	10.7%	Surplus	3.7%	Surplus	N/A
Norfolk Pension Fund	Yes	115.9%	8.2%	Surplus	2.7%	Surplus	N/A
North Yorkshire Pension Fund	Yes	132.7%	5.0%	Surplus	3.0%	Surplus	N/A
Northamptonshire Pension Fund	Yes	120.9%	4.0%	Surplus	2.3%	Surplus	N/A
Nottinghamshire County Council Pension Fund	Yes	104.2%	5.7%	Deficit	3.1%	Surplus	N/A
Oxfordshire County Council Pension Fund	Yes	113.8%	5.1%	Surplus	3.2%	Surplus	N/A
Powys County Council Pension Fund	Yes	107.8%	6.3%	Deficit	1.6%	Surplus	N/A
Rhondda Cynon Taf County Borough Council Pension Fund	Yes	122.8%	5.8%	Surplus	2.6%	Surplus	N/A
Royal Borough of Greenwich Pension Fund	Yes	104.4%	4.1%	Deficit	2.5%	Surplus	N/A
Royal Borough of Kensington and Chelsea Pension Fund	Yes	164.4%	3.7%	Surplus	4.4%	Surplus	N/A
Royal Borough of Kingston-Upon-Thames Pension Fund	Yes	123.0%	7.7%	Surplus	2.3%	Surplus	N/A
Royal County of Berkshire Pension Fund	Yes	83.4%	6.6%	Deficit	1.8%	Deficit	0.2%

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock		Employer default	
				Deficit or surplus post shock	Impact on core spending	Deficit or surplus	Impact on core spending
Shropshire County Pension Fund	Yes	106.8%	8.8%	Deficit	2.8%	Surplus	N/A
Somerset County Council Pension Fund	Yes	103.2%	8.3%	Deficit	2.7%	Surplus	N/A
South Yorkshire Pension Fund	Yes	125.3%	8.4%	Surplus	3.9%	Surplus	N/A
Staffordshire Pension Fund	Yes	127.9%	5.7%	Surplus	3.4%	Surplus	N/A
Suffolk Pension Fund	Yes	130.7%	4.4%	Surplus	2.1%	Surplus	N/A
Surrey Pension Fund	Yes	108.8%	4.3%	Deficit	2.4%	Surplus	N/A
Sutton Pension Fund	Yes	109.2%	4.5%	Deficit	1.9%	Surplus	N/A
Teesside Pension Fund	Yes	125.0%	4.4%	Surplus	3.2%	Surplus	N/A
Tyne and Wear Pension Fund	Yes	125.9%	9.9%	Surplus	3.7%	Surplus	N/A
Wandsworth Council Pension Fund	Yes	138.7%	5.0%	Surplus	2.8%	Surplus	N/A
Warwickshire Pension Fund	Yes	118.3%	7.3%	Surplus	2.7%	Surplus	N/A
West Midlands Pension Fund	Yes	116.3%	8.9%	Surplus	3.3%	Surplus	N/A
West Sussex County Council Pension Fund	Yes	159.1%	4.0%	Surplus	2.9%	Surplus	N/A
West Yorkshire Pension Fund	Yes	118.0%	19.8%	Surplus	4.4%	Surplus	N/A
Wiltshire Pension Fund	Yes	115.3%	4.0%	Surplus	2.4%	Surplus	N/A
Worcestershire County Council Pension Fund	Yes	112.8%	7.1%	Deficit	2.8%	Surplus	N/A
City of London Corporation Pension Fund*	Yes	102.1%	10.5%	Deficit	7.2%	Surplus	N/A
London Pensions Fund Authority Pension Fund*	Yes	123.1%	0.0%	Surplus	10.2%	Surplus	N/A
Environment Agency Active Fund*	Yes	138.0%	N/A	Surplus	4.9%	N/A	N/A

Pension fund	Open fund	SAB funding level	Non-Statutory employees	Asset shock		Employer default	
				Deficit or surplus post shock	Impact on core spending	Deficit or surplus	Impact on core spending
Environment Agency Closed Fund	No	76.9%	N/A	N/A	N/A	N/A	N/A

Notes:
1. Funding levels are on the 2022 SAB standard basis.
2. For funds marked * the asset and employer default shocks are assessed as a percentage of pensionable pay (as we did in the previous exercises).

Appendix D: Long term cost efficiency

D.1 We developed a series of relative and absolute considerations to help assess whether the contributions met the aims of section 13 under long term cost efficiency. This appendix contains a description of:

- Mapping of long term cost efficiency considerations to measures adopted
- Methodology used for long term cost efficiency measures
- Table of outcomes for each fund
- Proposed future long term cost efficiency measures

Long term cost efficiency – considerations and methodology

Table D1: Long term cost efficiency considerations and measures

Consideration	Measure Used
Relative considerations:	
The implied deficit recovery period	**Deficit Period:** Implied deficit recovery period calculated on a standardised best estimate basis
The investment return required to achieve full funding	**Required Return:** The required investment return rates to achieve full funding in 20 years' time on a standardised best estimate basis
The pace at which the deficit is expected to be paid off	**Repayment Shortfall:** The difference between: actual contributions in excess of GAD's best estimate of future service cost and the annual deficit recovery contributions required as a percentage of payroll to pay off the deficit in 20 years, where the deficit is calculated on a standardised best estimate basis
Absolute Considerations:	
The extent to which the required investment return set out above is less than the estimated future return being targeted by a fund's investment strategy	**Return Scope:** The required investment return rates as calculated in required return, compared with the fund's expected best estimate future returns assuming current asset mix maintained
The extent to which any deficit recovery plan can be reconciled with, and can be demonstrated to be a continuation of, the previous deficit recovery plan, after allowing for actual fund experience	**Deficit Reconciliation:** Confirmation that the deficit period can be demonstrated to be a continuation of the previous deficit recovery plan, after allowing for actual fund experience

D.2 For the 2022 section 13 report, GAD has adopted the same measures as those in 2019. As in 2019 a qualitative step was introduced to consider whether it was felt that the risk identified was potentially material to the fund.

D.3 The analyses and calculations carried out under these long term cost efficiency measures are approximate. They rely on the accuracy of the data provided by the respective local firms of actuarial advisors.

D.4 Although the calculations are approximate, we consider they are sufficient for the purposes of identifying which funds are a potential cause for concern. While the measures should not represent targets, these measures help us determine whether a more detailed review is required; for example, we would have greater concern where multiple measures triggered amber for a given fund.

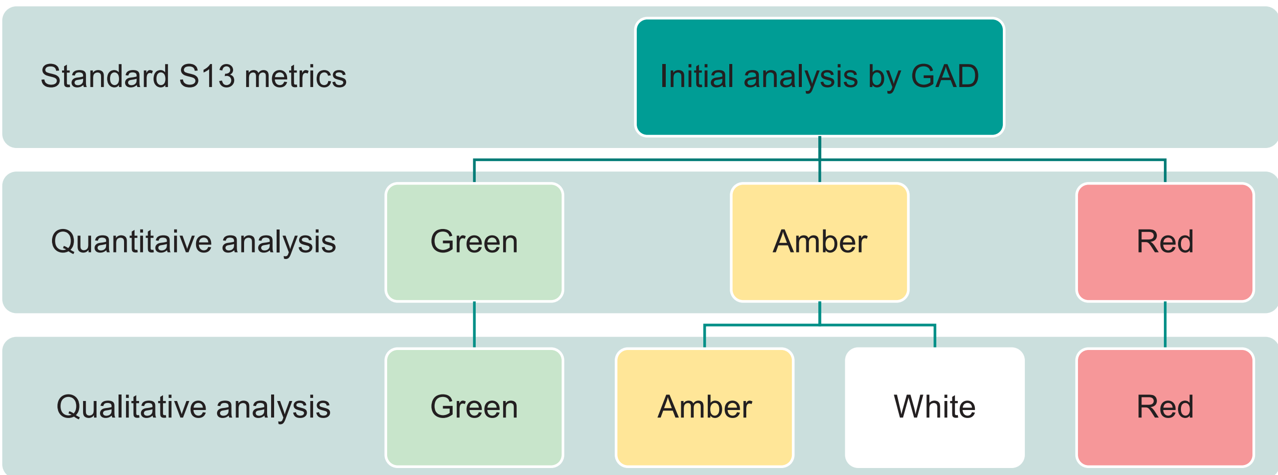
Long term cost efficiency measures – methodology

D.5 We detail the methodology behind the measures used to assess a fund's long term cost efficiency position below. The analysis is carried out a fund level, except where stated, but individual employers within any fund may be in a different position. Some of the measures listed below were calculated using a market consistent set of assumptions. For more information on this best estimate basis please see Appendix G.

D.6 The 2016 section 13 exercise developed the approach of setting Red, Amber or Green ('RAG') flags for the long term cost efficiency measure, where amber and red flags were raised when a fund breached thresholds set by GAD. For the 2019 and 2022 exercises, GAD initially adopted the same RAG approach and thresholds, however the flag allocation has been revised to concentrate on funds which raised multiple flags. GAD also introduced a subsequent qualitative step, which utilised the graph showing relative funding level relative and contributions, which assisted GAD in determining whether to flag and/or engage with a fund.

D.7 Following discussions with MHCLG, GAD agreed that it is not helpful to focus on all individual fund flags but rather to concentrate on funds with multiple flags or those highlighted from consideration of the graph of relative funding level and contributions. This resulted in the introduction of a "white" flag. The white flag is an advisory flag that highlights a general risk but does not require action in isolation.

D.8 The chart below illustrates the steps taken by GAD in determining the flag colours for the metrics.



D.9 The text box below defines each flag colour:

Key

AMBER indicates a material issue that may result in the aims of section 13 not being met. In such circumstances remedial action to ensure long term cost efficiency may be considered.

WHITE indicates a potential material issue that we would expect funds' to be aware of. In isolation this would not usually contribute to a recommendation for remedial action in order to ensure long term cost efficiency.

WHITE is an advisory flag that highlights a general issue but one which does not require an action in isolation. It may have been an amber flag if we had broader concerns.

GREEN indicates that there are no material issues that may contribute to a recommendation for remedial action in order to ensure long term cost efficiency.

D.10 GAD will assess the position again at the time of the 2025 section 13 report and will decide whether to retain the white flag, return to the RAG approach or use other metrics/thresholds that are appropriate for the circumstances of the LGPS at that point in time.

Deficit period: The implied deficit recovery period calculated on a standardised best estimate basis

D.11 This is a market related metric and calculations are done on a standardised best estimate basis.

D.12 The implied deficit recovery period in years on the standardised best estimate basis was found by solving the following equation for x:

D.13 $\bar{a}_x = \frac{\text{Deficit on standardised BE basis}}{\text{Annual deficit recovery payment on standardised BE basis}}$

Where:

- x is the implied deficit recovery period.
- $\bar{a}_x$ is a continuous annuity over x years at the rate of interest equal to $\frac{(1+i)}{(1+e)} - 1$.
- i is the nominal discount rate assumption on the standardised best estimate basis.
- e is the general earnings inflation assumption on the standardised best estimate basis.
- The deficit on the standardised best estimate basis is as at 31 March 2022.
- The annual deficit recovery payment on the standardised best estimate basis is calculated as the difference between the average employer contribution rate for the years 2023/24 to 2025/26, allowing for both contributions paid as a percentage of salary and fixed monetary contributions into the fund, where deficit contributions are fixed (i.e. the fixed monetary contributions, if any, have been converted so that they are quoted as a percentage of salary roll), and the employer standard contribution rate on the standardised best estimate basis for the years 2023/24 to 2025/26 (which is assumed to be equal to the future cost of accrual of that particular fund).

D.14 Funds that were in surplus or where the implied deficit recovery period was less than 10 years were flagged as green. Those with recovery periods greater than or equal to 10 years were flagged as amber. If there were any funds that were paying contributions at a level that would result in an increase in deficit, they would have been flagged as red.

D.15 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Required return: The required investment return rates to achieve full funding in 20 years' time on the standardised best estimate basis

D.16 This is a market related metric and calculations are done on a standardised best estimate basis.

D.17 The following assumptions were made for the purposes of this calculations:

> Time 0 is 31 March 2022.

> Time 20 is 31 March 2042.

> A_0 is the value of the fund's assets at time 0 and was obtained from the data provided by the local firms of actuarial advisors.

> A_{20} is the projected value of the fund's assets at time 20 (using the equation below)

> L_0 is the value of the fund's liabilities at time 0, on a standardised best estimate basis

> L_{20} is the projected value of the fund's liabilities at time 20 (using the equation below)

> C_0 is one year's employer contributions paid from time 0

> C_{0-20} is the total employer contributions payable over the period time 0 – 20, assumed to occur mid-way between time 0 and time 20 (i.e. at time 10)

> B_0 is the value of one year's benefits paid (excluding transfers) from time 0

> B_{0-20} is the total value of benefits payable (excluding transfers) over the period time 0 – 20, assumed to occur mid-way between time 0 and time 20 (i.e. at time 10).

> SCR_0 is the standard contribution rate payable from time 0 to time 1 on a standardised best estimate basis.

> SCR_{0-20} is the standard contribution rate payable from time 0 – 20, assumed to occur mid-way between time 0 and time 20 (i.e. at time 10).

> Sal_0 is the salary roll at time 0 and was obtained from the data provided by the local firms of actuarial advisors.

> i is the nominal discount rate assumption on the standardised best estimate basis.

> e is the general earnings assumption on the standardised best estimate basis.

> x is the required investment return that is to be calculated

D.18 The membership profile is assumed to be constant.

D.19 The assets and liabilities at time 20 were then equated and the resulting quadratic equation solved to find the required rate of investment return to achieve full funding, i.e.:

$$A_{20} - L_{20} = 0$$

Where:

- $A_{20} = [A_0 \times (1 + x)^{20}] + [(C_{0-20} - B_{0-20}) \times (1 + x)^{10}]$
- $L_{20} = [L_0 \text{ x } (1 + i)^{20}] + [(SCR_{0-20} - B_{0-20}) \times (1 + i)^{10}]$
- $C_{0-20} = C_0 \times 20 \times (1 + e)^{10}$
- $B_{0-20} = B_0 \times 20 \times (1 + e)^{10}$
- $SCR_{0-20} = Sal_0 \times SCR_0 \times 20 \times (1 + e)^{10}$

D.20 Where the required investment return was higher than the nominal discount rate on the standardised best estimate basis (i.e. i where i = 4.80%) funds would be classified as amber, whereas funds were classified as green if the required return was less than 4.80%.

D.21 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Repayment shortfall: The difference between the actual contribution rate net of GAD's best estimate future service cost and the annual deficit recovery contributions (on a standardised best estimate basis and assuming deficit is paid off in 20 years), as a percentage of payroll

D.22 This is a market related metric and calculations are done on a standardised best estimate basis.

D.23 For this calculation we determine the difference between:

- The employer contributions in excess of GAD's best estimate future service cost, and
- The required annual deficit recovery contribution rate on a standardised best estimate basis to pay off the deficit in 20 years' time

D.24 The required annual deficit recovery contribution rate to be paid on a standardised best estimate basis is equal to:

$$\frac{\text{Deficit on standardised best estimate basis}}{\bar{a}_{\mathbf{20}} \times \text{ Salary Roll}}$$

Where:

- The deficit on the standardised best estimate basis is as at 31 March 2022.
- $\bar{a}_{20}$ is a continuous annuity over the 20 year deficit recovery period at the rate of interest equal to $\frac{(1+i)}{(1+e)} - 1$.
- i is the nominal discount rate assumption on the standardised best estimate basis.
- e is the general earnings inflation assumption on the standardised best estimate basis.
- The salary roll is as at 31 March 2022 and has not been adjusted.

D.25 The difference in deficit recovery contribution rates is then defined as:

$$(\text{Avg ER cont rate paid} - \text{ ER SCR on BE basis}) - \frac{\text{Deficit on BE basis}}{\bar{a}_{20} \text{ x Salary Roll}}$$

Where:

- The average employer contribution rate is for the years 2023/24 – 2025/26, allowing for both contributions paid as a percentage of salary and fixed monetary contributions into the fund where deficit contributions are fixed (i.e. the fixed monetary contributions, if any, have been converted so that they are quoted as a percentage of salary roll).

- The employer standard contribution rate on the standardised best estimate basis is for the years 2023/24 – 2025/26. It is assumed that the standard contribution rate is equal to the future cost of accrual of that particular fund.

D.26 The data required for each of the funds to carry out the above calculation was provided by their respective firms of actuarial advisors.

D.27 Where appropriate, data has been restated on the standardised best estimate basis.

D.28 Funds in surplus on GAD's best estimate basis or where the difference in deficit recovery contribution rates is greater than 0% are flagged as green. Where the difference between contribution rates is between 0% and -3%, the funds would be flagged as amber and if the difference in deficit recovery contribution rates is less than -3%, then the fund would be flagged as red.

D.29 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Return scope: The required investment return rates as calculated in required return, compared with the fund's expected best estimate future returns assuming current asset mix maintained

D.30 This is a market related metric and calculations are done on a standardised best estimate basis.

D.31 The required investment return (x) calculated in the required return measure was compared against the best estimate investment return expected from the fund's assets held on 31 March 2022.

D.32 The asset data used in this calculation was provided by each fund's respective firm of actuarial advisors.

D.33 Funds where the best estimate future returns were higher than the required investment return by 0.5% or more were flagged as green. Those funds where this difference was between 0% and 0.5% would be flagged as amber whilst those where the best estimate returns were lower than the required investment returns were flagged as red.

D.34 As set out in the methodology section above, GAD undertook a subsequent qualitative analysis on whether initial amber flag colours should be revised to white.

Deficit reconciliation: Confirmation that the deficit period can be demonstrated to be a continuation of the previous deficit recovery plan, after allowing for actual fund experience

D.35 This measure is used to monitor the change in the deficit recovery end point set locally by the fund at each valuation and what the underlying reasons are for any adverse changes in this period.

D.36 This measure considers the following:

- Whether contributions have decreased since the previous valuations (reducing the burden on current tax payers)

> Whether the deficit recovery end point has moved further into the future, compared with the previous valuation (increasing the burden on future tax payers)

D.37 Funds where both of the above have occurred are initially flagged amber otherwise funds are flagged green. A subsequent qualitative assessment considered whether the flag was affected by new deficit emerging over the inter-valuation period or by considered funding decisions at either the previous or current valuations.

Long term cost efficiency measures – by fund

Table D2: Long term cost efficiency measures by fund

Pension fund	Deficit period (rank)	Required return/(rank)		Repayment shortfall	Return scope/(rank)		Deficit recovery plan
Avon Pension Fund	Surplus	3.5%	56	Surplus	0.7%	81	Green
Bedfordshire Pension Fund	2 (81)	3.5%	57	8.3%	1.0%	75	Green
Buckinghamshire Pension Fund	Surplus	3.4%	50	Surplus	1.1%	69	Green
Cambridgeshire Pension Fund	Surplus	3.1%	38	Surplus	1.9%	24	Green
Cardiff and Vale of Glamorgan Pension Fund	Surplus	3.9%	76	Surplus	0.9%	77	Green
Cheshire Pension Fund	Surplus	2.4%	10	Surplus	1.6%	41	Green
City and County of Swansea Pension Fund	Surplus	3.3%	46	Surplus	1.9%	23	Green
City of London Corporation Pension Fund	Surplus	3.8%	72	Surplus	1.5%	46	Green
City of Westminster Pension Fund	Surplus	3.0%	29	Surplus	2.1%	20	Green
Clwyd Pension Fund	Surplus	3.7%	66	Surplus	1.3%	51	Green
Cornwall Pension Fund	Surplus	3.9%	77	Surplus	1.3%	58	Green
Cumbria Local Government Pension Scheme	Surplus	2.9%	25	Surplus	1.6%	38	Green
Derbyshire Pension Fund	Surplus	3.2%	43	Surplus	1.5%	47	Green
Devon Pension Fund	Surplus	3.8%	73	Surplus	0.9%	78	Green
Dorset County Pension Fund	3 (82)	4.1%	83	5.1%	0.5%	86	Green
Durham County Council Pension Fund	Surplus	4.0%	78	Surplus	0.8%	79	White

Pension fund	Deficit period (rank)	Required return/(rank)		Repayment shortfall	Return scope/(rank)		Deficit recovery plan
Dyfed Pension Fund	Surplus	3.1%	37	Surplus	1.9%	28	Green
East Riding Pension Fund	Surplus	3.0%	31	Surplus	2.2%	18	Green
East Sussex Pension Fund	Surplus	2.7%	22	Surplus	2.1%	19	Green
Environment Agency Active Fund	Surplus	2.6%	14	Surplus	1.3%	55	Green
Essex Pension Fund	Surplus	2.1%	5	Surplus	2.8%	5	Green
Gloucestershire Pension Fund	Surplus	2.2%	8	Surplus	2.4%	14	Green
Greater Gwent (Torfaen) Pension Fund	Surplus	3.5%	55	Surplus	1.1%	68	Green
Greater Manchester Pension Fund	Surplus	2.4%	12	Surplus	2.2%	17	Green
Gwynedd Pension Fund	Surplus	2.8%	23	Surplus	2.6%	8	Green
Hampshire County Council Pension Fund	Surplus	3.4%	52	Surplus	1.3%	53	Green
Hertfordshire County Council Pension Fund	Surplus	2.9%	24	Surplus	1.7%	35	Green
Isle of Wight Council Pension Fund	Surplus	2.6%	15	Surplus	1.9%	27	Green
Islington Council Pension Fund	Surplus	3.6%	60	Surplus	1.5%	43	Green
Kent Pension Fund	Surplus	3.3%	45	Surplus	1.5%	48	Green
Lancashire County Pension Fund	Surplus	2.7%	21	Surplus	1.8%	29	Green
Leicestershire County Council Pension Fund	Surplus	2.4%	11	Surplus	2.6%	7	Green
Lincolnshire Pension Fund	Surplus	2.3%	9	Surplus	2.5%	11	Green
London Borough of Barking and Dagenham Pension Fund	Surplus	3.6%	63	Surplus	1.3%	52	Green
London Borough of Barnet Pension Fund	1 (79)	3.3%	44	9.9%	1.3%	57	Green
London Borough of Bexley Pension Fund	Surplus	2.6%	16	Surplus	1.5%	44	Green
London Borough of Brent Pension Fund	3 (84)	3.0%	32	12.2%	1.9%	25	White

Pension fund	Deficit period (rank)	Required return/(rank)		Repayment shortfall	Return scope/(rank)		Deficit recovery plan
London Borough of Bromley Pension Fund	Surplus	1.9%	3	Surplus	3.1%	1	Green
London Borough of Camden Pension Fund	Surplus	2.1%	6	Surplus	2.9%	3	Green
London Borough of Croydon Pension Fund	Surplus	3.5%	53	Surplus	1.7%	32	White
London Borough of Ealing Pension Fund	Surplus	3.4%	49	Surplus	1.2%	61	Green
London Borough of Enfield Pension Fund	Surplus	3.3%	47	Surplus	1.3%	56	Green
London Borough of Hackney Pension Fund	Surplus	2.7%	20	Surplus	1.8%	30	Green
London Borough of Hammersmith and Fulham Pension Fund	Surplus	3.6%	59	Surplus	1.0%	74	Green
London Borough of Haringey Pension Fund	Surplus	3.1%	39	Surplus	1.7%	33	Green
London Borough of Harrow Pension Fund	Surplus	4.1%	84	Surplus	0.5%	85	Green
London Borough of Havering Pension Fund	2 (80)	3.7%	65	6.9%	1.1%	66	Green
London Borough of Hillingdon Pension Fund	3 (83)	4.0%	80	5.3%	0.6%	83	Green
London Borough of Hounslow Pension Fund	Surplus	3.7%	67	Surplus	1.1%	72	Green
London Borough of Lambeth Pension Fund	Surplus	2.7%	19	Surplus	2.5%	12	Green
London Borough of Lewisham Pension Fund	Surplus	3.4%	51	Surplus	1.2%	65	Green
London Borough of Merton Pension Fund	Surplus	4.0%	81	Surplus	0.9%	76	Green
London Borough of Newham Pension Fund	Surplus	4.0%	79	Surplus	0.6%	82	Green
London Borough of Redbridge Pension Fund	Surplus	4.3%	86	Surplus	0.6%	84	Amber

Pension fund	Deficit period (rank)	Required return/(rank)		Repayment shortfall	Return scope/(rank)		Deficit recovery plan
London Borough of Southwark	Surplus	2.5%	13	Surplus	2.3%	15	Green
London Borough of Tower Hamlets Pension Fund	Surplus	2.0%	4	Surplus	3.1%	2	Green
London Borough of Waltham Forest Pension Fund	10 (85)	3.8%	71	5.7%	1.1%	70	Green
London Pensions Fund Authority Pension Fund	Surplus	3.1%	35	Surplus	2.2%	16	Green
Merseyside Pension Fund	Surplus	3.7%	64	Surplus	1.0%	73	Green
Norfolk Pension Fund	Surplus	2.9%	26	Surplus	1.9%	22	Green
North Yorkshire Pension Fund	Surplus	3.0%	28	Surplus	1.3%	54	Green
Northamptonshire Pension Fund	Surplus	3.0%	30	Surplus	2.0%	21	Green
Nottinghamshire County Council Pension Fund	Surplus	3.8%	69	Surplus	1.1%	71	Green
Oxfordshire County Council Pension Fund	Surplus	3.6%	62	Surplus	1.3%	60	Green
Powys County Council Pension Fund	Surplus	3.5%	54	Surplus	1.2%	63	Green
Rhondda Cynon Taf County Borough Council Pension Fund	Surplus	3.2%	41	Surplus	1.4%	50	Green
Royal Borough of Greenwich Pension Fund	Surplus	4.1%	82	Surplus	0.8%	80	Green
Royal Borough of Kensington and Chelsea Pension Fund	Surplus	2.7%	17	Surplus	2.5%	13	Green
Royal Borough of Kingston-Upon-Thames Pension Fund	Surplus	3.1%	36	Surplus	1.6%	40	Green
Royal County of Berkshire Pension Fund	12 (86)	4.2%	85	3.3%	1.2%	64	Green
Shropshire County Pension Fund	Surplus	3.8%	75	Surplus	1.3%	59	Green
Somerset County Council Pension Fund	Surplus	3.6%	61	Surplus	2.6%	10	Green

Pension fund	Deficit period (rank)	Required return/(rank)		Repayment shortfall	Return scope/(rank)		Deficit recovery plan
South Yorkshire Pension Fund	Surplus	3.1%	40	Surplus	1.7%	37	Green
Staffordshire Pension Fund	Surplus	1.9%	2	Surplus	2.9%	4	Green
Suffolk Pension Fund	Surplus	2.7%	18	Surplus	1.7%	36	Green
Surrey Pension Fund	Surplus	3.7%	68	Surplus	1.1%	67	Green
Sutton Pension Fund	Surplus	3.3%	48	Surplus	1.5%	42	Green
Teesside Pension Fund	Surplus	3.8%	70	Surplus	1.4%	49	Green
Tyne and Wear Pension Fund	Surplus	3.2%	42	Surplus	1.5%	45	Green
Wandsworth Council Pension Fund	Surplus	2.1%	7	Surplus	2.7%	6	Green
Warwickshire Pension Fund	Surplus	3.0%	33	Surplus	1.8%	31	Green
West Midlands Pension Fund	Surplus	2.9%	27	Surplus	1.9%	26	Green
West Sussex County Council Pension Fund	Surplus	1.8%	1	Surplus	2.6%	9	Green
West Yorkshire Pension Fund	Surplus	3.8%	74	Surplus	1.2%	62	Green
Wiltshire Pension Fund	Surplus	3.0%	34	Surplus	1.6%	39	Green
Worcestershire County Council Pension Fund	Surplus	3.6%	58	Surplus	1.7%	34	Green
Environment Agency Closed Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Long term cost efficiency measures – proposed future metrics

D.38 GAD propose introducing two new metrics to consider if funds are:

a. Utilising surpluses too quickly

b. Retaining “large” surpluses

Surplus retention: contributions from funds in surplus could lead to too great a funding risk in the future (not utilising surpluses too quickly)

D.39 The fund would need to pay sufficient contributions after allowing for future costs of accrual, such that either:

$$\text{Avg ER cont rate paid} - \text{ER SCR on GAD's best estimate basis} > 0$$

Or where

$$\text{Avg ER cont rate paid} - \text{ER SCR on GAD's best estimate basis} < 0$$

The implied surplus sharing period on GAD's best estimate basis was found by solving the following equation for x:

$$\bar{a}_x = \frac{\text{Surplus on GAD's best estimate basis}}{\text{Annual deduction to GAD's best estimate ER SCR}}$$

Where:

- x is the implied surplus sharing period.
- $\bar{a}_x$ is a continuous annuity over x years at the rate of interest equal to $\frac{(1+i)}{(1+e)} - 1$.
- i is the nominal discount rate assumption on the standardised best estimate basis.
- e is the general earnings inflation assumption on the standardised best estimate basis.
- The surplus on the standardised best estimate basis is as at 31 March 2022
- The average employer contribution rate is for the years 2023/24 – 2025/26, allowing for both contributions paid as a percentage of salary and fixed monetary contributions into the fund where deficit contributions are fixed (that is, the fixed monetary contributions, if any, have been converted so that they are quoted as a percentage of salary roll).
- The employer standard contribution rate on the best estimate basis is for the 2023/24 – 2025/26. It is assumed that the standard contribution rate is equal to the future cost of accrual of that fund.

D.40 Funds flag green where:

> the difference in contribution is greater than zero; or

> the difference in contributions is less than zero and the implied surplus sharing is greater than 10 years.

Otherwise, the funds are flagged amber.

Surplus retention: proposed approach to consider if funds are retaining too much surplus

D.41 GAD will adopt a three-step approach:

1. Identify the highest funded funds, considering both the local bases and on a standard basis
2. Identify those funds which are relatively well funded, on the local and standard basis, and are also paying relatively high contributions
3. For those funds identified in steps one to two, we would undertake qualitative analysis, for example considering how contribution rates have evolved since the previous valuation and any stated rationale behind the approach adopted.

D.42 Steps one to three aim to identify funds which are exceptionally well funded, or those which are relatively well funded and paying relatively high contributions. We propose considering results on two bases, initially using the SAB funding level to provide a consistent basis. However as this is not a funding basis we will also consider the position on the local funding basis. The funds identified in steps one to three will not raise an immediate flag as we also wish to consider any other relevant circumstances and the decision-making process.

D.43 We would then engage with any funds identified from this process to discuss any concerns before deciding which funds to flag.

Appendix E: ALM

Why perform an Asset Liability Modelling (ALM) exercise?

E.1 An ALM exercise allows us to simultaneously project the assets and liabilities of the scheme under a range of simulations (known as stochastic economic scenarios), to investigate possible outcomes for key variables and metrics. Modelling the scheme in this way allows us to understand not only central, expected outcomes but also the wider range of possible outcomes and associated probabilities.

E.2 A common use of ALM studies is to help pension scheme managers and sponsors determine investment, contribution and funding policy by illustrating the impact of changing policy on key variables, such as the funding level (i.e. ratio of assets to liabilities) of the scheme under a range of scenarios.

E.3 For this piece of work, we modelled the whole LGPS Scheme rather than individual funds and our focus was on variation in the employer contribution rates and funding level over time. We also analysed the impact of two potential surplus strategies ("surplus buffer" and "stability mechanism"), as a broad measure of long term cost efficiency. We are primarily interested in the extent to which contribution rates can vary from current levels as well as the projection of funding levels. Consequently, we have assumed that the current investment policy remains in place and is constant over the projection period.

E.4 Stochastic modelling techniques allow us to simulate a large number of economic scenarios – with different outturns and paths of key parameters and variables. The simulations are calibrated to reflect views on expected returns and relative behaviours between key variables, but importantly include an element of randomness in order to capture volatility observed in financial markets. By running the scenario generator many times, the spread of different possible outcomes can be illustrated, and the probability of certain outcomes can be estimated.

E.5 As with all models, the outcomes are a function of the assumptions adopted, and the outcomes are not intended to be predictors of the future but are illustrations of the range of possible outcomes. It is highly unlikely that the assumptions made will be borne out in practice and adjustments might be made to manage any pressures that arise. Actual future experience could be more extreme than any of the outcomes shown.

E.6 Our study models changes in economic outcomes only – we have not looked at any other possible changes such as demographic changes, including mortality, nor management changes such as changes to the investment approach or the impacts of climate change.

Methodology

E.7 Our model projects the entire Scheme and assumes that the asset strategy and demographic future valuation assumptions are an average of those used for the individual funds as at 31 March 2022. In practice, schemes are likely to have specific asset strategies and valuation assumptions, for example the discount rate will have regard to the expected return for each fund.

E.8 Projected contribution rates are determined based on the liability and asset values at each future triennial valuation and these are assumed to remain consistent for the following three years.

E.9 To project the development of the scheme we must make assumptions about the following:

> Expected new entrants into the scheme

> The way in which liabilities will evolve – for example, the rate at which current active liabilities "migrate" to being non-active (i.e. deferred/pensioner liabilities) over time or the extent to which liabilities are increased by CPI inflation and wage inflation at each point in time

> The way in which liabilities are assessed, and

> The way in which contributions are determined – both in respect of ongoing accrual and in respect of any surplus or deficit that arises.

E.10 Any change to manage up or down employer contribution rates in the short term do not alter the long term cost of the scheme (which depends on the level of scheme benefits and scheme experience, including asset returns) and more generally might have some other less desirable outcomes, for example:

> increasing the length of recovery periods transfers costs onto future generations

> choosing a more return seeking investment strategy would be expected to increase volatility and risk

> maintaining stable contributions when in surplus may result in a greater burden falling on current tax payers

Assumptions

E.11 An ALM produces a broader amount of information than a traditional deterministic actuarial valuation. Consequently, we need to make more assumptions to simplify the calculations involved in the projections and make it practical to analyse all the key outcomes we are interested in.

E.12 The box below provides details on the key assumptions made in respect of the ALM.

Key assumptions made in the ALM

For the purpose of assessing liabilities and determining contribution rates, assumptions are needed to carry out an actuarial valuation at each future point in time. In our modelling we have assumed that:

> The discount rate is set based on a constant margin above the expected yield on government bonds (gilts).

> The length of the recovery period is reset at each valuation, with deficit being spread over a time horizon of 20 years (based on typical historical recovery periods in the scheme).

> New entrants assumption – the scheme's active membership is assumed to remain stable over time

> The Scheme investment strategy is assumed to remain stable i.e. we assume the assets are rebalanced each year to the same allocation as that in the 2022 valuation.

> Demographic experience is as assumed in the underlying GAD LGPS 2022 valuation

E.13 To project the development of the scheme we must make assumptions about the key economic variables and financial assumptions for example price inflation, salary growth and returns on assets held. These are determined from the economic scenario generator (ESG).

E.14 The ESG was provided by Moody's, with a calibration date of 31 March 2023, and reflected the market expectations at that time. The ESG is calibrated to conditions at that moment in time and Moody's expectations for the future and specifies how key economic variables may vary (stochastically, according to probability distributions) in future. Moody's ESG calibration is only one view of possible future experience. Different assumptions would lead to different results.

E.15 GAD made the following adjustments:

- As the calibration was as at 31 March 2023 and the individual fund valuations were as at 31 March 2022, asset returns for the 2022/23 scheme year were introduced to allow for the known financial outcomes and ensuring that the asset value as at 31 March 2023 is consistent with publicly available SF3 data

- CPI simulations are derived based on projected RPI simulations less a margin. The margin, set at 1.15% at 31 March 2023, is based on GAD's house view for the current difference between RPI and CPI and is expected to reduce to 0.1% at 2030, to reflect the RPI reforms which are expected to be implemented in 2030.

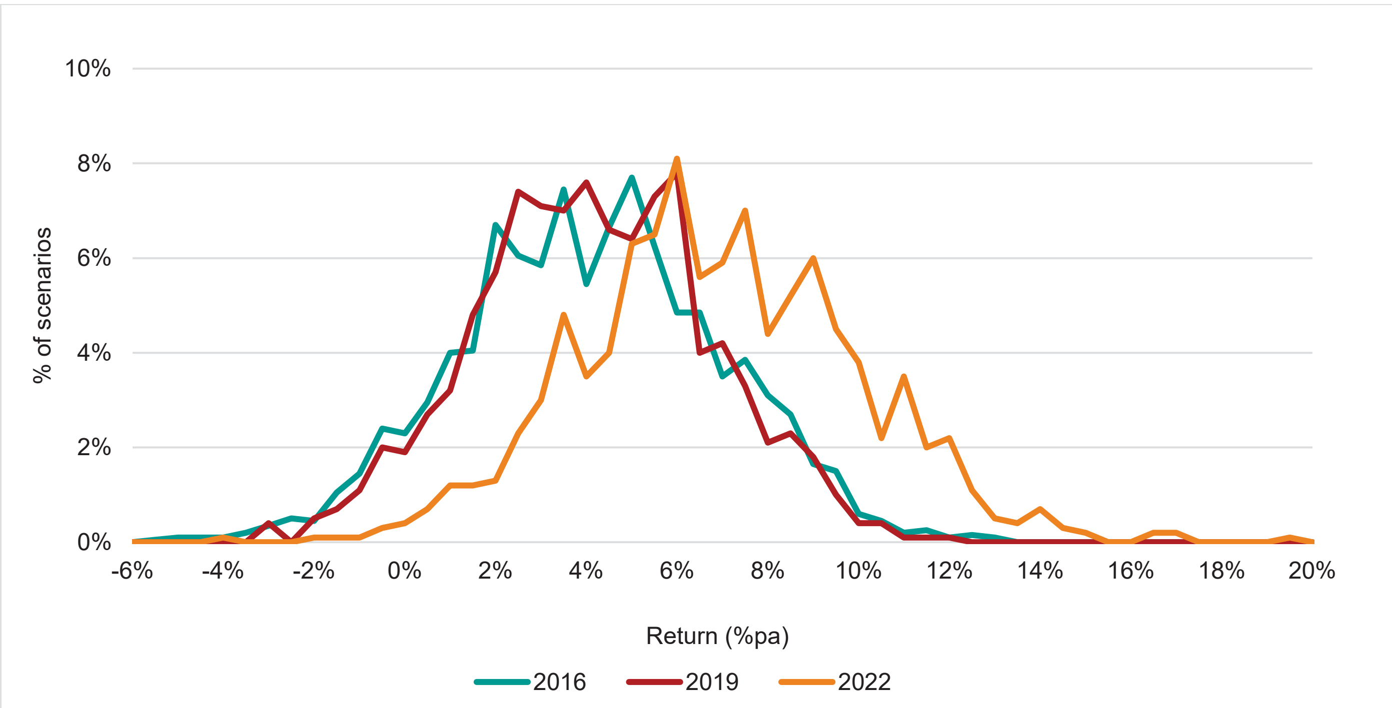
E.16 The annualised mean return over the projection period is 6.7%. The expected return in the ALM is in line with GAD's expectation based on the economic environment as at 31 March 2023.

E.17 Chart E.1 shows the distribution of the annualised portfolio returns over the twenty-year period and compares the projection to that of the 2016 and 2019 ALM exercises. The distributions of the returns show:

- Current expectations are better than those at the previous exercises, which is expected due to the change in the economic outlook since the previous valuations.

- Volatility in projected returns, even when annualised over a 20 year period. The chart illustrates that whilst annualised returns are mainly clustered between 0% and 14%, with the mean just below 7%, significant risks of low returns over the 20-year period remain but so does the upside potential.

Chart E1: Distribution of annualised nominal investment returns



Appendix F: Data Provided

F.1 At the request of MHCLG, GAD collected data from each fund's 2022 valuation via the fund actuaries. These actuarial funding valuations were conducted by four firms of actuarial advisors:

- Aon
- Barnett Waddingham
- Hymans Robertson
- Mercer

F.2 Data was received from the relevant firm of actuarial advisors for all 87 pension funds and included additional information provided to the fund actuaries by administrators in respect of their fund's employers.

F.3 Limited checks, consisting of spot checks to make sure that data entries appear sensible, have been performed by GAD and the data received appears to be of sufficient quality for the purpose of analysing the 2022 valuation results. These checks do not represent a full, independent audit of the data supplied. The analysis contained in this report relies on the general completeness and accuracy of the information supplied by the administering authority or their firms of actuarial advisors.

F.4 In addition, data has been collated from the 'Local government pension scheme funds local authority data', which is published annually by MHCLG at Local government pension scheme funds for England and Wales: 2022 to 2023 - GOV.UK (www.gov.uk). This published data may be referred to elsewhere as SF3 statistics.

F.5 Unless otherwise stated the data detailed above has been used to inform the analysis contained in the LGPS England and Wales section 13 2022 Report.

F.6 The information provided to GAD is, in many instances, more detailed than that provided in the actuarial valuation reports.

Data specification

1) Membership Data

Data split by gender	
a) Active Members	Number of Members Unweighted average age (to 2dp) Total rate of annual actual pensionable pay at 31 March 2022 and 31 March 2019 (2014 pay definition)
b) Deferred Member	Number of members Unweighted average age (to 2dp) Total annual preserved pension revalued to 31 March 2022 for both 31 March 2022 and 31 March 2019. Note this should exclude undecided members.
c) Pensioners (former members)	Number of Members Unweighted average age (to 2dp) Total annual pensions in payment at 31 March 2022 and 31 March 2019
d) Pensioners (dependants including partners and children)	Number of Members Average age (weighted as appropriate) Total annual pensions in payment at 31 March 2022 and 31 March 2019

2) Financial Assumptions

Assumptions used to value the liabilities of the most secure employers (e.g. local authorities)	
a) Specify what proportion of the liabilities is calculated using the assumptions below	
b) Provide assumptions used for past service liabilities, these have been given for both as at 31 March 2022 and 31 March 2019.	Nominal discount rate (pre & post retirement separately if applicable) RPI inflation CPI inflation rate Earnings inflation
c) Provide assumptions used for future contributions, these have been given for both as at 31 March 2022 and 31 March 2019.	Nominal discount rate (pre & post retirement separately if applicable) RPI inflation CPI inflation rate Earnings inflation
d) Short term assumptions used in the valuation (if applicable)	CPI Salary Increases Discount Rate
e) Maximum deficit recovery period	
f) Minimum surplus spreading period	
g) Likelihood of success of valuation funding plan on the previous valuation time horizon (where a fund is in deficit at the valuation date)	

3) Demographic Assumptions

<table>
<tr><td colspan="2">Rates to be provided at sample ages split by gender
Each could be split further in Group 1, Group 2, Group 3, Group 4, and Group 5</td></tr>
<tr><td rowspan="4">a) Assumed life expectancy for members retiring in normal health</td><td>Pensioner members aged 65 (for members retiring on normal health) (to 2dp) (with mortality improvements)</td></tr>
<tr><td>Pensioner members aged 65 (for members retiring on normal health) (to 2dp) (without mortality improvements)</td></tr>
<tr><td>Active / deferred members at age 65 if they are currently aged 45 (to 2dp) (with mortality improvements)</td></tr>
<tr><td>Active / deferred members at age 65 if they are currently aged 45 (to 2dp) (without mortality improvements)</td></tr>
<tr><td rowspan="2">b) Commutation</td><td>Pre 2008 pension Commutation Assumptions (as % of maximum lump sum allowed under HMRC rules).</td></tr>
<tr><td>Post 2008 pension Commutation Assumptions (as % of maximum lump sum allowed under HMRC rules).</td></tr>
</table>

4) ASSETS

<table>
<tr><td colspan="3">These are split to provide information for 31 March 2022 and 31 March 2019</td></tr>
<tr><td colspan="3">a) Market value of assets</td></tr>
<tr><td colspan="3">b) Value of assets used in the valuation</td></tr>
<tr><td colspan="3">c) Do you use a smoothed asset value in the valuation? If yes please attach an explanation</td></tr>
<tr><td colspan="3">d) Were there any “asset transfer” arrangements, as classified in the 2019 S13 report (page 59) for local authorities? If so please include</td></tr>
<tr><td rowspan="8">e) Actual Asset Distribution split into the following:</td><td>Proportion of assets held in Bonds</td><td>Proportion of bonds which are fixed interest government bonds
Proportion of bonds which are fixed interest non-government bonds (investment grade)
Proportion of bonds which are fixed interest non-government bonds (high yield)
Proportion of bonds which are inflation linked bonds</td></tr>
<tr><td>Proportion of assets held in Equities</td><td>Proportion of equities which are UK equities
Proportion of equities which are overseas equities
Proportion of equities which are unquoted or private equities</td></tr>
<tr><td colspan="2">Proportion of assets held in Property</td></tr>
<tr><td colspan="2">Proportion of assets held in Deferred or immediate fully insured annuities</td></tr>
<tr><td colspan="2">Proportion of assets held in Hedge funds</td></tr>
<tr><td colspan="2">Proportion of assets held in Cash and net current assets</td></tr>
<tr><td colspan="2">Proportion of assets held in ABC arrangements</td></tr>
<tr><td colspan="2">Proportion of assets held in Infrastructure – debt type</td></tr>
</table>

	Proportion of assets held in Infrastructure* – equity type
	Proportion of assets held in Multi asset funds (examples include diversified growth funds, managed funds, balanced funds, multi asset credit or absolute returns)
	Proportion of assets held in “Other” investments – defensive
	Proportion of assets held in “Other” investments – return seeking
f) Weighted best estimate return	
g) Strategic asset distribution (if significantly different to actual asset distribution)	Proportion of assets held in: Bonds Equities Property Infrastructure Cash and current assets Other investments – defensive Other investments – return seeking
h) Weighted best estimate return (strategic asset distribution)	

5) LIABILITIES AND FUTURE CONTRIBUTION RATE

These are split to provide information for 31 March 2022 and 31 March 2019	
i) Local Assumptions	a) Past service liability – split between Actives, Deferred, Pensioners and Total b) Funding level c) Surplus / deficit d) Assumed member contribution yield e) Total employer contributions paid in respect of 2022/23 f) Other notable events that have occurred in respect of 2022/23 g) Other notable Post valuation events that have been considered as part of the 2022 valuation (including asset transfer or large contributions not covered in 4d)
ii) SAB Standardised Basis	a) Past service liability – split between Actives, Deferred, Pensioners and Total b) Funding level c) Surplus / deficit d) SAB future service costs (excluding expenses) %

6) EMERGING ISSUES AND ACADEMIES

a) Is there a comment in your report that climate change is implicitly included in the funding basis	
b) Is climate change acknowledged in your FSS	
c) The next section is split for 4 distinct climate scenarios, Base case, Paris scenario, High temperature scenario, Alternative scenario (if applicable)	Funding level at 31 March 2042 Success percentage at 31 March 2042 Nominal discount rate, pre and post retirement RPI inflation

	CPI inflation rate Earnings inflation Change in assumptions volatility
d) General allowances made for COVID-19 in 2022 valuation.	

7) Post 2014 scheme

a) Assumption for members in 50/50 scheme (if a proportion of members include details in 7b below)
b) Proportion of members assumed to be in 50/50 scheme

8) Documentation required

Valuation Report @ 31 March 2022
Relevant related reports
Compliance Extract
Statement of Investment Strategy
Funding Strategy Statement
Other

ALTERNATIVE FINANCIAL ASSUMPTIONS

Specify where a significant proportion of employer liabilities have been valued using alternative assumptions – provided as above in section (2) above.

Appendix G: Assumptions

G.1 Each piece of analysis contained in the main report is based on one of three sets of assumptions:

> The local fund assumptions, as used in the fund's 2022 actuarial valuation

> The SAB standardised set of assumptions, or SAB standard basis: this is used as a comparator between funds but is not market related

> A best estimate set of assumptions: this is a standardised market consistent basis which is used to assess potential impacts to solvency and long term cost efficiency.

G.2 Details of local fund assumptions can be found in each fund's actuarial valuation report as at 31 March 2022. Details of the SAB standard basis and the standardised best estimate basis can be found in the table below.

Table G1: SAB standard basis and best estimate basis

Assumption	SAB standard basis	Best Estimate basis
Methodology	Projected Unit Methodology with 1 year control period	Projected Unit Methodology with 1 year control period
Rate of pension increases	2% per annum	2.4% per annum
Public sector earnings growth	3.5% per annum	3.9% per annum
Discount rate	4.45% per annum	4.8% per annum
Changes to State Pension Age (SPA)	As legislated	As legislated
Pensioner Baseline mortality	Set locally based on Fund experience	Set locally based on Fund experience
Mortality improvements	Core CMI_2021 (no allowance for 2020 and 2021 mortality data) with long term reduction in mortality rates of 1.5% per annum	Improvements in line with those underlying the ONS 2020-based principal population projections for the UK
Age retirement	Set locally based on Fund experience	Set locally based on Fund experience
Ill health retirement rates	Set locally based on Fund experience	Set locally based on Fund experience
Withdrawal rates	Set locally based on Fund experience	Set locally based on Fund experience
Death before retirement rates	Set locally based on Fund experience	Set locally based on Fund experience
Promotional salary scales	None	As set out in GAD's 2020 valuation
Commutation	SAB future service cost assumption of 65% of the maximum allowable amount	As set out in GAD's 2020 valuation

Assumption	SAB standard basis	Best Estimate basis
Family statistics	Set locally based on Fund experience	Set locally based on Fund experience

G.3 The financial assumptions for the best estimate basis are based on GAD's neutral assumptions for long term inflation measures and asset returns, and the split of LGPS assets held, as at 31 March 2022. These neutral assumptions are not deliberately optimistic nor pessimistic and do not incorporate adjustments to reflect any desired outcome. We believe there is around a 50% chance of outcomes being better and a 50% chance of outcomes being worse than these assumptions imply, based on market conditions as at 31 March 2022.

G.4 Future asset returns are uncertain and there is a wide range of reasonable views on what future asset returns will be and therefore the best estimate discount rate should be. We have presented GAD's neutral view above, but there are other reasonable best estimate bases which may give materially different results.

Appendix H: Section 13 of the Public Service Pensions Act 2013

13 Employer contributions in funded schemes

(1) This section applies in relation to a scheme under section 1 which is a defined benefits scheme with a pension fund.

(2) Scheme regulations must provide for the rate of employer contributions to be set at an appropriate level to ensure

(a) the solvency of the pension fund, and

(b) the long term cost efficiency of the scheme, so far as relating to the pension fund.

(3) For that purpose, scheme regulations must require actuarial valuations of the pension fund.

(4) Where an actuarial valuation under subsection (3) has taken place, a person appointed by the responsible authority is to report on whether the following aims are achieved

(a) the valuation is in accordance with the scheme regulations

(b) the valuation has been carried out in a way which is not inconsistent with other valuations under subsection (3)

(c) the rate of employer contributions is set as specified in subsection (2).

(5) A report under subsection (4) must be published and a copy must be sent to the scheme manager and (if different) the responsible authority.

(6) If a report under subsection (4) states that, in the view of the person making the report, any of the aims in that subsection has not been achieved

(a) the report may recommend remedial steps

(b) the scheme manager must

i. take such remedial steps as the scheme manager considers appropriate, and

ii. publish details of those steps and the reasons for taking them

(c) the responsible authority may

i. require the scheme manager to report on progress in taking remedial steps

ii. direct the scheme manager to take such remedial steps as the responsible authority considers appropriate.

(7) The person appointed under subsection (4) must, in the view of the responsible authority, be appropriately qualified.

The section of the legislation can be viewed on legislation.gov.uk, Public Service Pensions Act 2013

Appendix I: Extracts from other relevant regulations

Regulations 58 and 62 of 'The Local Government Pension Scheme Regulations 2013'

Funding strategy statement (Regulation 58)

(1) An administering authority must, after consultation with such persons as it considers appropriate, prepare, maintain and publish a written statement setting out its funding strategy.

(2) The statement must be published no later than 31st March 2015.

(3) The authority must keep the statement under review and, after consultation with such persons as it considers appropriate, make such revisions as are appropriate following a material change in its policy set out in the statement, and if revisions are made, publish the statement as revised.

(4) In preparing, maintaining and reviewing the statement, the administering authority must have regard to

(a) the guidance set out in the document published in October 2012 by CIPFA, the Chartered Institute of Public Finance and Accountancy and called "Preparing and Maintaining a Funding Strategy Statement in the Local Government Pension Scheme 2012" and

(b) the current version of the investment strategy under regulation 7 (investment strategy statement) of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016.

Actuarial valuations of pension funds (Regulation 62)

(1) An administering authority must obtain

(a) an actuarial valuation of the assets and liabilities of each of its pension funds as at 31st March 2016 and on 31st March in every third year afterwards

(b) a report by an actuary in respect of the valuation, and

(c) a rates and adjustments certificate prepared by an actuary.

(2) Each of those documents must be obtained before the first anniversary of the date ("the valuation date") as at which the valuation is made or such later date as the Secretary of State may agree.

(3) A report under paragraph (1)(b) must contain a statement of the demographic assumptions used in making the valuation and the statement must show how the assumptions relate to the events which have actually occurred in relation to members of the Scheme since the last valuation.

(4) A rates and adjustments certificate is a certificate specifying

(a) the primary rate of the employer's contribution and

(b) the secondary rate of the employer's contribution, for each year of the period of three years beginning with 1st April in the year following that in which the valuation date falls.

(5) The primary rate of an employer's contribution is the amount in respect of the cost of future accruals which, in the actuary's opinion, should be paid to a fund by all bodies whose employees contribute to it so as to secure its solvency, expressed as a percentage of the pay of their employees who are active members.

(6) The actuary must have regard to-

(a) the existing and prospective liabilities arising from circumstances common to all those bodies

(b) the desirability of maintaining as nearly constant a primary rate as possible

(c) the current version of the administering authority's funding strategy mentioned in regulation 58 (funding strategy statements) and

(d) the requirement to secure the solvency of the pension fund and the long term cost efficiency of the Scheme, so far as relating to the pension fund.

(7) The secondary rate of an employer's contributions is any percentage or amount by which, in the actuary's opinion, contributions at the primary rate should, in the case of a Scheme employer, be increased or reduced by reason of any circumstances peculiar to that employer.

(8) A rates and adjustments certificate must contain a statement of the assumptions on which the certificate is given as respects

(a) the number of members who will become entitled to payment of pensions under the provisions of the Scheme and

(b) the amount of the liabilities arising in respect of such members

during the period covered by the certificate.

(9) The administering authority must provide the actuary preparing a valuation or a rates and adjustments certificate with the consolidated revenue account of the fund and such other information as the actuary requests.

Government Actuary's Department

Local Government Pension Scheme England and Wales

Funding Analysis Report in conjunction with the review of LGPS fund valuations as at 31 March 2022 under Section 13

Page 197

Fiona Dunsire FIA and Aidan Smith FIA

14 August 2024

Funding levels

The aggregate scheme funding level using the local funding bases (outlined in section 5) has increased from 98% in 2019 to 106% at 2022. Over this period assets have generally performed well.

There is considerable variation in funding levels across individual funds. Around 30% of funds have a funding level below 100% (so the value of their assets is less than the value of their liabilities).

Assumptions (local funding bases)

Past service discount rates and inflation assumptions have both increased on average between 2019 and 2022 (see section 3).

Life expectancy assumptions have remained broadly unchanged on average between 2019 and 2022 (see section 4).

Investments

On average there has been a small shift from defensive assets to return seeking assets between 2019 and 2022 (see section 7).

Membership

The number of members in the LGPS has increased by 300,000 since 2019 (section 2). The 10 largest funds have 35% of all members.

Employer contribution rates

The average primary contribution rate to cover future benefit accruals has increased from 18.6% to 19.8% pay following the 2022 valuations (section 6). Secondary contribution rates in respect of surplus or deficit have decreased on average reflecting the better overall funding position.

Contents

1. Introduction

1.1 The Government Actuary has been appointed by the Ministry of Housing, Communities and Local Government (MHCLG) to report under section 13 of the Public Service Pensions Act 2013 in connection with the actuarial valuations of the 87 funds in the Local Government Pension Scheme in England and Wales (LGPS).

1.2 This report contains our analysis of information from the actuarial valuations of the funds in the LGPS as at 31 March 2022. It is largely factual, background information and is intended to supplement the analysis in our main section 13 report published on 14 August 2024. It may be read in conjunction with that report or as a standalone paper.

1.3 This paper will be of relevance to LGPS stakeholders including MHCLG, administering authorities and other employers, actuaries performing valuations for the funds within the LGPS, the LGPS Scheme Advisory Board (SAB), HM Treasury (HMT) and the Chartered Institute of Public Finance and Accountancy (CIPFA).

1.4 The 2022 data used in this report comes from three sources:

- Data available from individual funds' 2022 valuation reports
- Additional data from the 2022 actuarial valuations provided by funds and their actuarial advisors
- Data published annually by MHCLG in their "Local government pension scheme funds local authority data"; commonly referred to as SF3 statistics

We have used data from the 2019 section 13 report published in 2021 as a comparator.

1.5 Most of our analysis is based on all 87 funds in the LGPS. However, in some cases one or both of the Environment Agency Funds have been excluded, either because the Environment Agency Closed Fund does not have any active members or where data is not available. We have noted where this is the case.

Compliance

1.6 This report has been prepared in accordance with the applicable Technical Actuarial Standard: TAS 100 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

1.7 Any checks that GAD has made on the data used in this report do not represent a full independent audit of the data supplied. In particular, GAD has relied on the general completeness and accuracy of the information without independent verification.

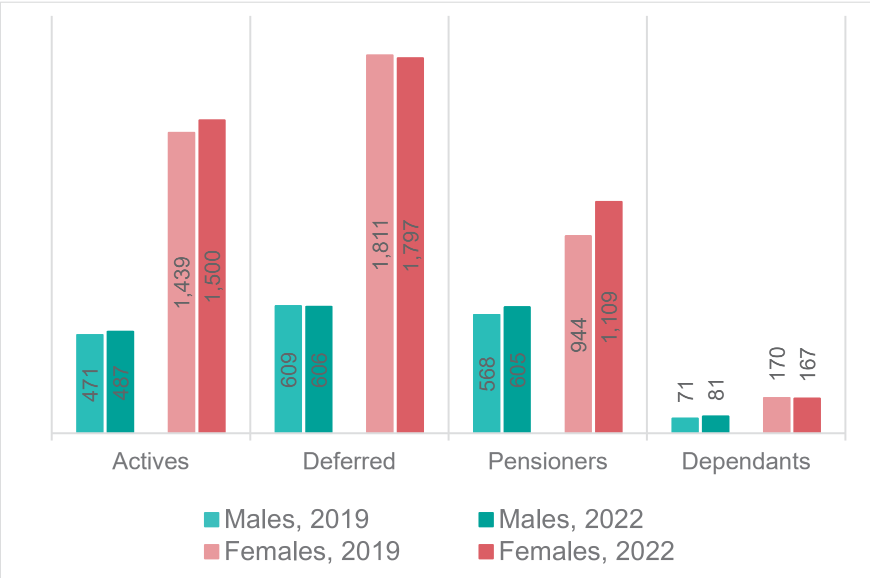
1.8 GAD has no liability to any person or third party for any act or omission taken, either in whole or in part, on the basis of this report.

2. Membership Data

2.1 The total number of member records in the LGPS as at 31 March 2022 was 6.4 million which was an increase of around 300,000 from 31 March 2019. A single individual may have multiple member records in the LGPS. For example, they may have worked for different LGPS employers and not aggregated their service. Throughout this report, we analyse member records rather than individual members.

2.2 The following chart shows the overall member record split by gender and member type.

Chart 1: Number of active, deferred, pensioner and dependent member records split by gender in 2022 and 2019 (thousands)



2.3 Member records were not provided separately for male and female members by the 13 pension funds advised by Mercer. Chart 1 assumes that the gender distribution for these 13 funds is the same as the gender distribution across the other LGPS funds. The same approach is adopted for the average ages in table 1 below.

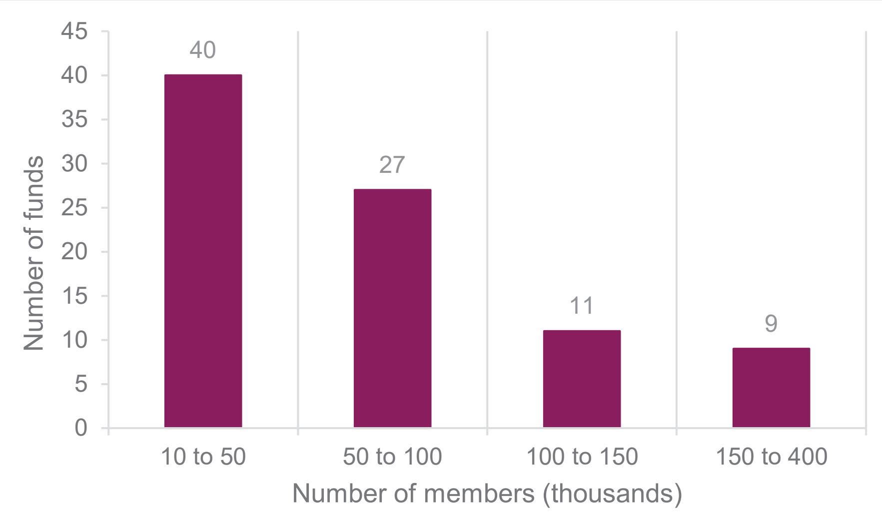
2.4 In chart 1, 'Pensioners' refers to former members and 'Dependants' to the partners and children of former members currently in receipt of a LGPS pension.

2.5 In aggregate, there is a greater increase in the number of female members than male members across all scheme categories.

2.6 The average number of member records for an individual fund in 2022 is 73,000 (compared to 69,100 in 2019). There is significant variance in member records between funds, with the smallest open fund having a total membership of 13,000 records and the largest fund having a total membership of 379,600 records. Chart 2 illustrates this variance.

2.7 As in 2019, the 10 largest funds in the LGPS comprise about 35% of the total membership.

Chart 2: Funds split by number of member records in 2022



Average ages

2.8 The average age of all member categories has increased apart from dependants which decreased by 0.2 years. The overall average age of members increased by **0.8 years.**

Table 1: Average age of active, deferred, pensioner and dependent member records in 2019 and 2022

Member category	Average age (years)	
	2019	2022
Actives	45.9	46.0
Deferred	47.0	47.6
Pensioners	71.1	71.4
Dependants	73.1	72.9
Overall	**53.7**	**54.5**

2.9 The average age of an individual LGPS member record in each of the four member categories is shown in table 1. The overall figure shows the average unweighted age across all member categories based on data for all funds.

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3. Financial Assumptions

3.1 Financial assumptions are a key driver of funding levels in the LGPS. There is variation between the financial assumptions used by individual funds to value their past service liabilities. Some variation is to be expected and may reflect differences in circumstances (for example, different investment strategies, types of employers and attitudes to risk) and differences in views of unknown future experience (for example future investment returns). The range of assumptions, excluding the Environment Agency Closed Fund, is given below:

Table 2: Minimum, maximum and average rates (% a year) for key financial assumptions in 2022 and 2019 (excluding Environment Agency Closed Fund)

	Minimum		Maximum		Average*	
	2019	**2022**	**2019**	**2022**	**2019**	**2022**
Past service discount rate	3.1%	3.1%	5.3%	5.4%	4.1%	4.3%
Earnings inflation	2.3%	2.7%	3.9%	4.6%	3.2%	3.7%
CPI inflation	2.0%	2.3%	2.6%	3.1%	2.4%	2.8%
Past service discount rate net of CPI	0.7%	0.6%	2.6%	2.4%	1.8%	1.5%

* Average weighted by funds' past service liabilities.

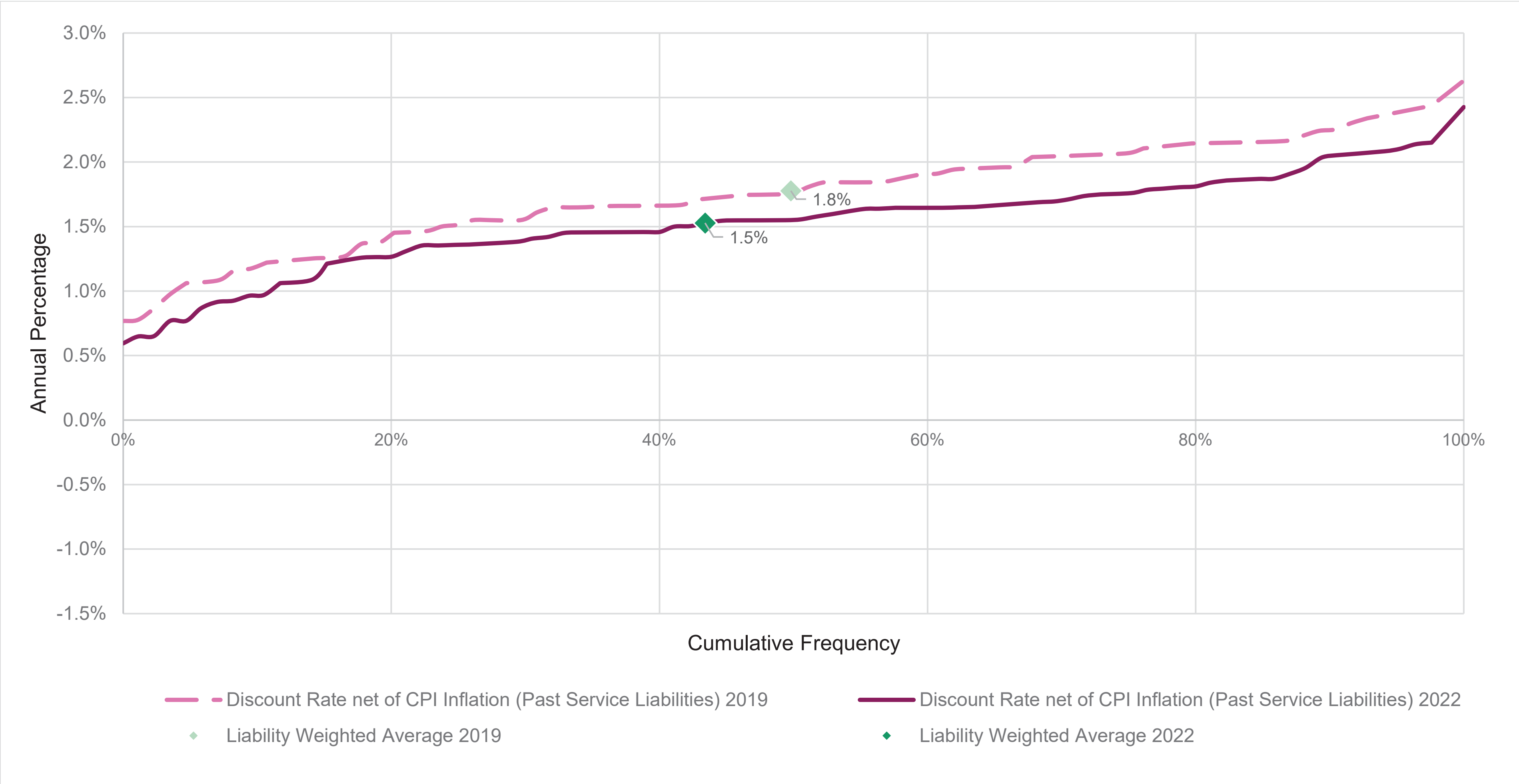
3.2 Many funds used the same financial assumptions when calculating past service liabilities and future contribution rates, although this was not the case for funds advised by Mercer. Mercer's approach allows for contributions made after the valuation date receiving a future investment return that is not directly linked to market conditions at the valuation date. This resulted in a higher discount rate assumption for setting future contribution rates than used to value past service liabilities in the 2022 valuations. Hymans Robertson use an asset liability model to set contribution rates by analysing the probability of success over a projection period. Therefore, future contribution rates are not set deterministically using a discount rate, although projected liabilities are valued consistently with past service liabilities.

3.3 Table 2 opposite summarises the minimum, maximum and average of four key financial assumptions for the LGPS and includes comparison with the corresponding assumptions for the 2019 valuations. Chart 3 shows the cumulative frequency of the discount rate net of CPI.

3.4 The key financial measure in valuing pension scheme liabilities is the excess of the discount rate above the inflation assumption. This relationship reflects the amount by which the return on assets held by a fund is expected to exceed increases in benefits, which generally increase by earnings inflation before retirement or deferment and CPI inflation afterwards. In general, a higher discount rate net of CPI inflation will lead to a lower value of liabilities.

3.5 Since 2019 discount rates used to value past service liabilities net of CPI inflation have decreased by 0.3% on average. In isolation this would increase the value of past service liabilities and, where the same discount rate is adopted for future service, the contributions required for future service.

Chart 3: Cumulative frequency of funds' assumptions for the discount rate net of CPI inflation for past service liabilities (% a year, excluding Environment Agency Closed Fund)



4. Post Retirement Mortality

Table 3: Average life expectancy (years) for current and future normal health pensioners split by gender, assumed by funds in local valuations in 2019 and 2022 and by GAD in the 2020 scheme valuation

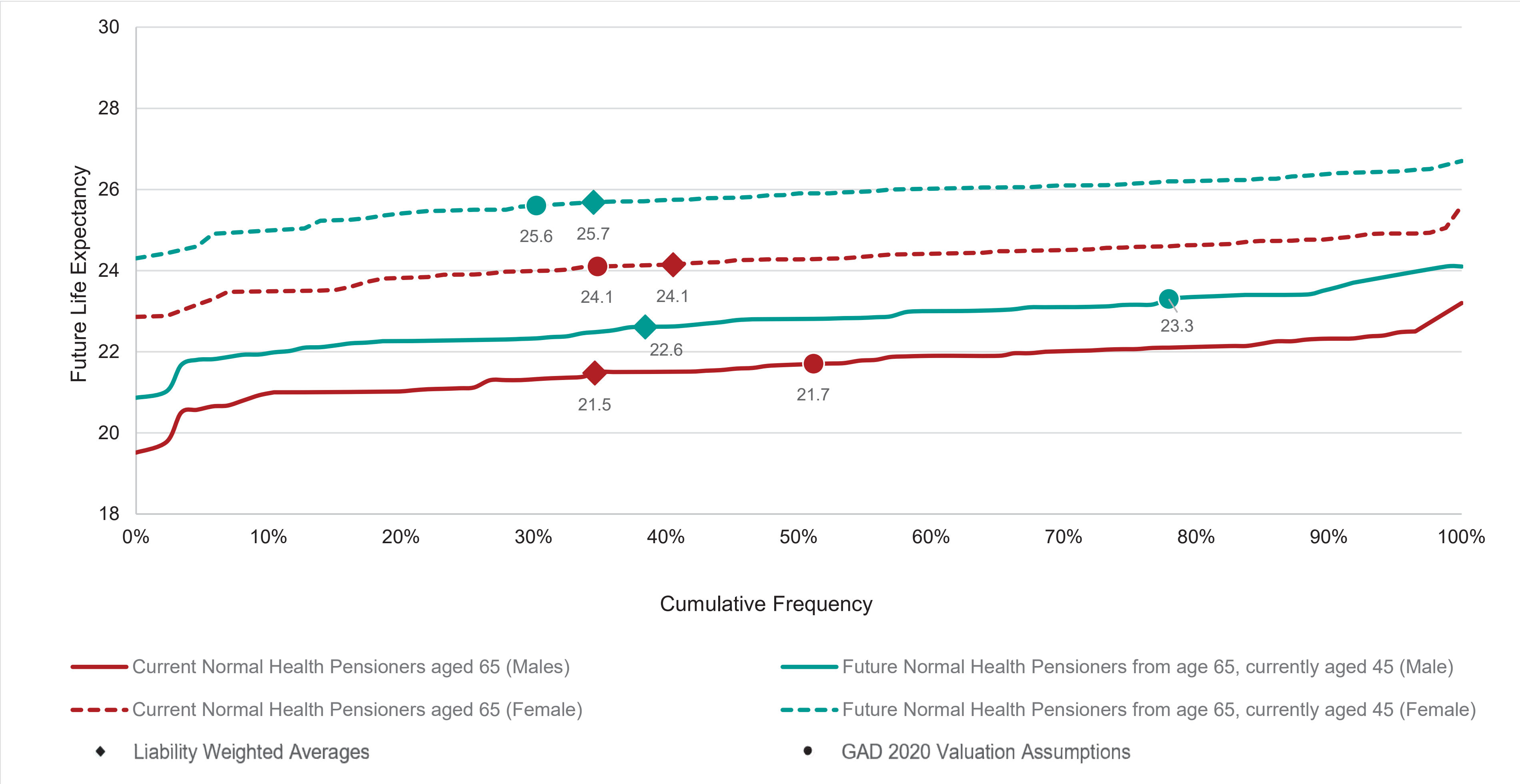
	2019 average local*	2022 average local*	GAD 2020 valuation
Current normal health pensioners aged 65 (male)	21.7	21.5	21.7
Future normal health pensioners from age 65, currently aged 45 (male)	23.0	22.6	23.3
Current normal health pensioners aged 65 (female)	24.1	24.1	24.1
Future normal health pensioners from age 65, currently aged 45 (female)	25.7	25.7	25.6

*weighted by valuation liabilities

4.1 Table 3 summarises the average life expectancy assumptions used for funds' 2019 and 2022 actuarial valuations and the GAD's scheme-wide LGPS valuation as at 31 March 2020 (the latest whole scheme valuation, where the cost of LGPS benefits are evaluated and assessed against the agreed cost control mechanism, under directions set by HM Treasury). The average life expectancy assumptions used in the local 2022 valuations are overall similar to those used in the 2019 fund valuations and GAD's 2020 scheme valuation.

4.2 However we note that there is variation between assumptions adopted by funds. This is shown in the cumulative frequency chart, chart 4, below. The cumulative frequency chart shows the different life expectancies assumed by the individual funds. Diamonds represent liability weighted averages and circles represent the assumptions used by GAD for the 2020 whole scheme valuation, as detailed in table 3.

Chart 4: Cumulative frequency of life expectancy (years) assumed by funds in local valuations in 2022 and by GAD in the 2020 scheme valuation, for current and future normal health pensioners split by gender

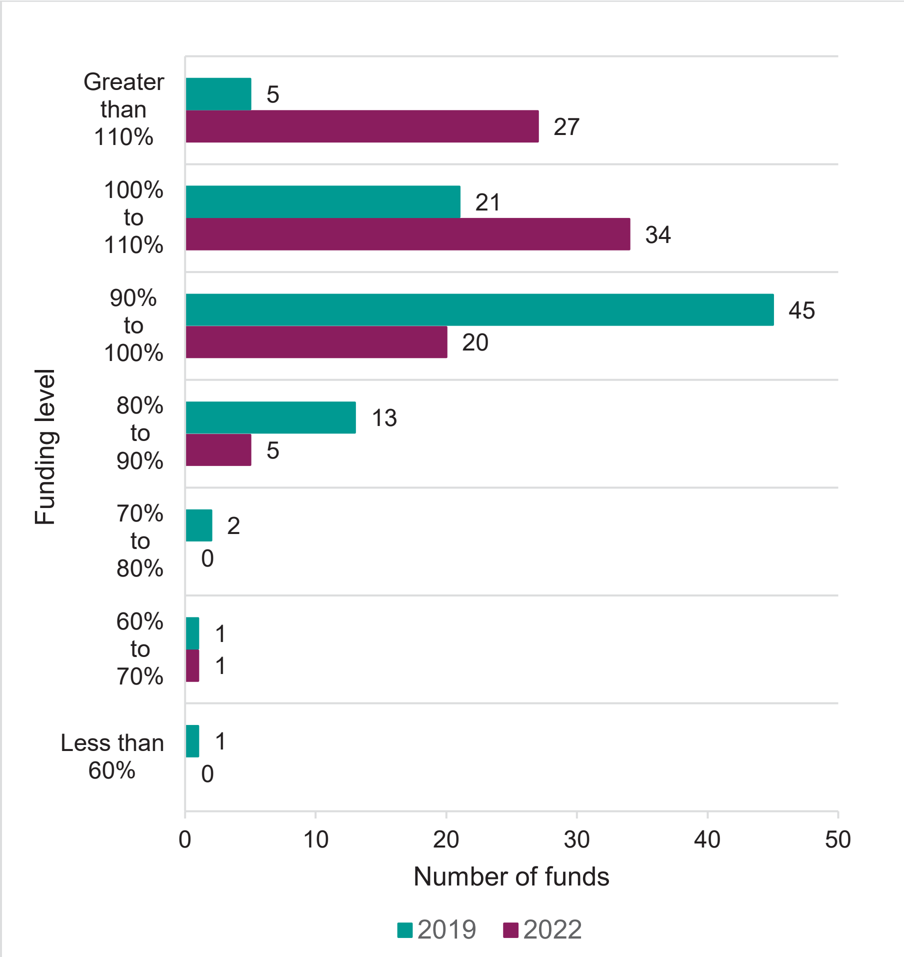


4.3 Life expectancies are calculated using post retirement mortality rates. The assumed post retirement mortality rates in the 2022 actuarial valuations have a direct impact on each fund's liabilities. A high mortality assumption (i.e. a low life expectancy) will result in a lower value being placed on the liabilities as benefits are expected to be paid for a shorter period of time. Life expectancies for the younger active or deferred members are higher than for current pensioners, as they allow for mortality improvements over time.

4.4 Some of the differences in the life expectancies will also be due to the projection methodology used when allowing for future mortality improvements and the assumed long term future trend. All funds have based their future assumptions on a standard actuarial model produced by the CMI, the CMI 2021 projection model, but with different parameters used. The CMI 2021 projection model requires users to select certain parameters, for example the long term rate of mortality improvement.

5. Funding levels

Chart 5: Number of funds by local funding level in 2019 and 2022



5.1 The funding level is the value of assets divided by the value of the past service liabilities (i.e. the expected value of future payments due to members which have been earned up to the valuation date). A funding level of 100% means that a fund's assets are expected to be sufficient to meet future payments to members which have been earned up to the valuation date, if the assumptions used for the valuation were to be borne out in practice.

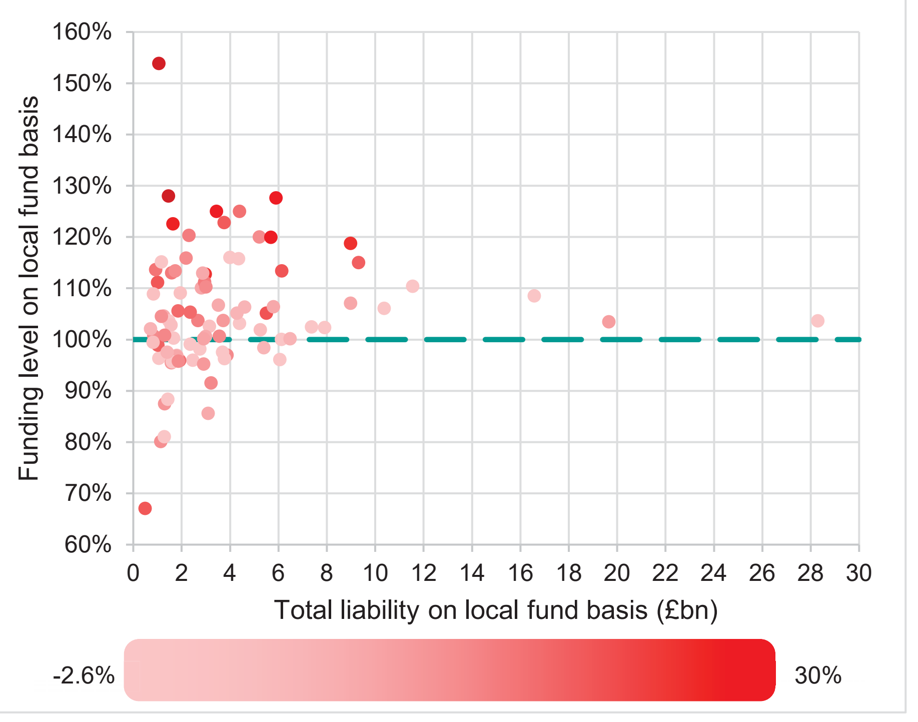
5.2 The local funding bases are required to incorporate prudence, i.e. there is intended to be a greater than 50:50 likelihood of actual future experience being better than the assumptions, in the opinion of the fund actuary.

5.3 The aggregate funding level for the whole scheme has increased from 98% at 31 March 2019 to 106% at 31 March 2022. Chart 5 shows how the distribution of funding levels has shifted over the inter-valuation period, with fewer funds in the 80-90% and 90-100% bands and more funds in the higher funding level bands.

5.4 Whilst funding levels have improved overall since 2019, there remains considerable variation between funds. The highest funding level as at 31 March 2022 was **154%** and the lowest funding level was **67%**. This is a wider range than as at 31 March 2019.

5.5 The distribution of funding levels by the funds' total liability values as at 31 March 2022 is shown in chart 6.

Chart 6: Relationship between size of fund (using total liability value) and funding level on local bases



5.6 The shading in chart 6 above shows the changes in the funding level on a local basis since the 2019 valuation as indicated by the scale above. We note that on average funding levels have increased by 8% but there is considerable variation between funds with the range being around -2.6% to +30%.

5.7 Chart 6 shows that there is no clear trend that funds with a higher value of liabilities (i.e. larger funds) are better funded or vice versa. However there appears to be some correlation with better funded funds having greater improvements in funding level.

6. Employer contribution rates

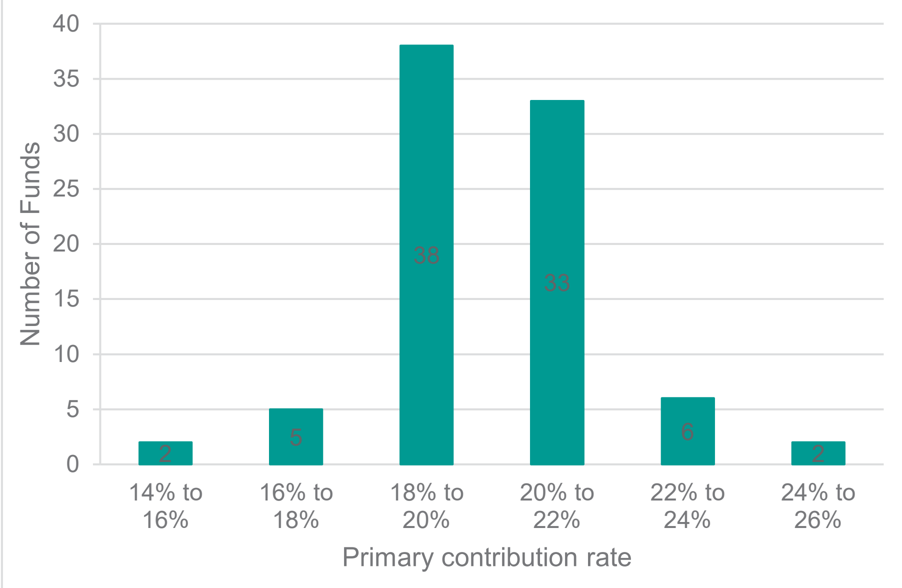
6.1 This section looks at how employer contribution rates have changed. The primary contribution rate is the average rate paid by employers to cover future benefit accrual. The secondary contribution rate is the additional contributions required to allow for a deficit or a surplus in a fund; these may be negative. In addition to employer contribution rates, members contribute to the fund but these rates are based on individual members' salary and do not vary across funds.

6.2 The rates quoted in table 4 are in respect of the three years following completion of the valuation; i.e. the agreed rates following the 2022 valuations will be payable between April 2023 and March 2026. We note that average employer rates may change in individual future years and will also differ for different employers.

Table 4: Average primary and secondary contribution rates (% of pay) following the 2016, 2019 and 2022 valuations (excluding Environment Agency Closed Fund) weighted by salary

	2016	**2019**	**2022**
Primary contribution rate	16.8%	18.6%	19.8%
Secondary contribution rate in respect of surplus or deficit	6.3%	3.7%	1.0%
Total	**23.1%**	**22.3%**	**20.8%**

Chart 7: Number of funds split by primary contribution rate (% of pay) following the 2022 valuations (excluding Environment Agency Closed Fund)



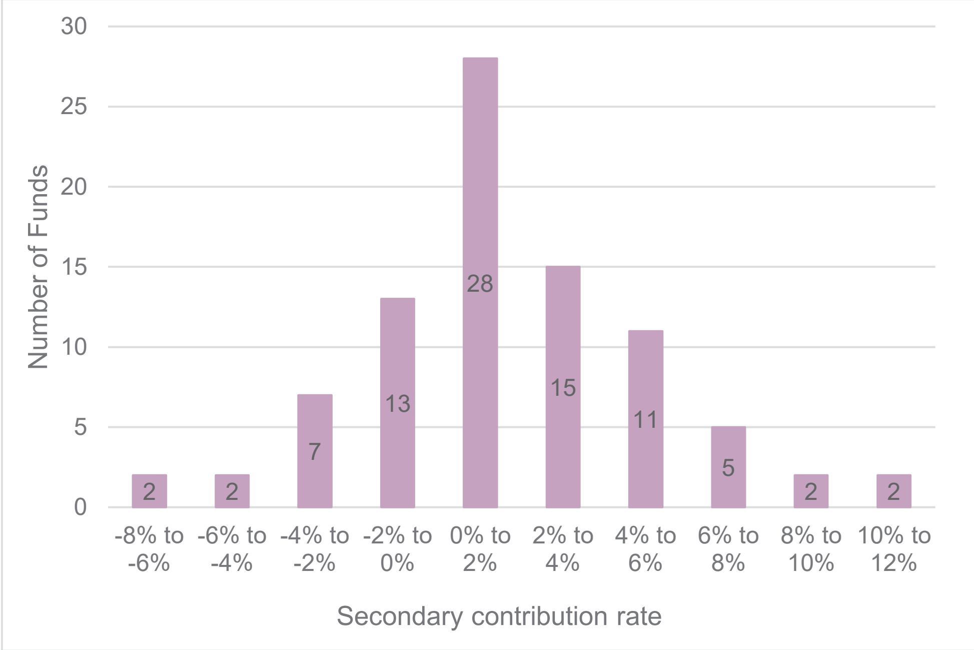
6.3 The average primary contribution rate (weighted by salary) has increased from the 2016 to 2022 valuations, whereas the average secondary contribution rate (again weighted by salary) has decreased. Details are shown in table 4 opposite.

6.4 Secondary contribution rates are negative where a fund has decided to reduce its surplus through lower contributions. In such cases, the total contributions paid (being the primary rate plus the negative secondary rate) will be lower than the expected cost of future benefits (being the primary rate).

6.5 There was some variation in primary contribution rates as shown in chart 7. All funds set primary contribution rates between 14% and 26% of pay with around 80% of funds setting contribution rates between 18% and 22% of pay.

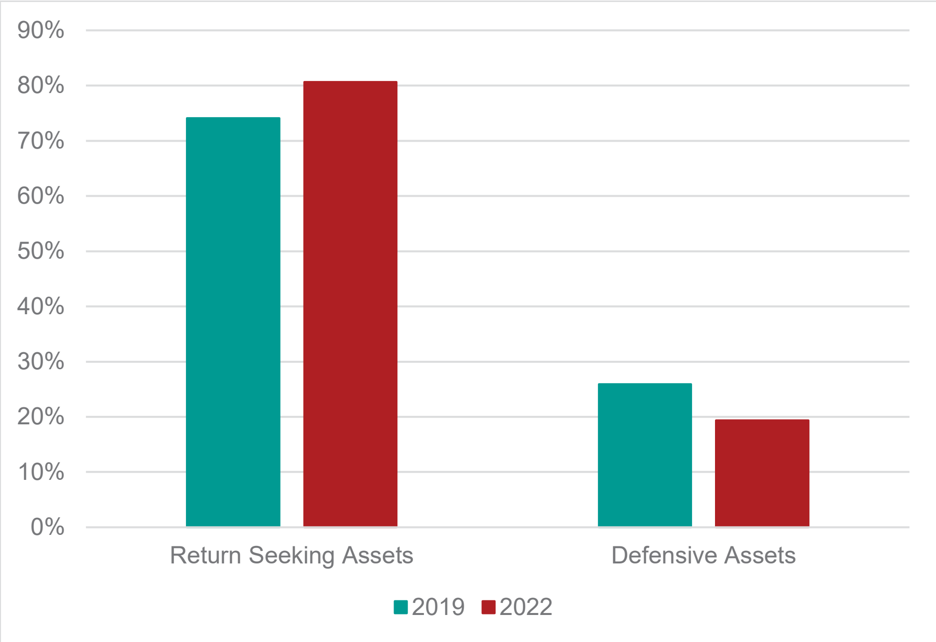
6.6 The decrease in average secondary contribution rates reflects the improvement in the scheme's overall funding position. Funding positions vary across funds, and Chart 8 shows the distribution of average secondary contribution rates for individual funds following the 2022 valuations. We note that there is more variation in the distribution of secondary contributions than primary contributions.

Chart 8: Number of funds split by average secondary contribution rate (% of pay) following the 2022 valuations



7. Investments

Chart 9: The proportion of total LGPS assets in return seeking and defensive asset classes by market value at 31 March 2019 and 2022



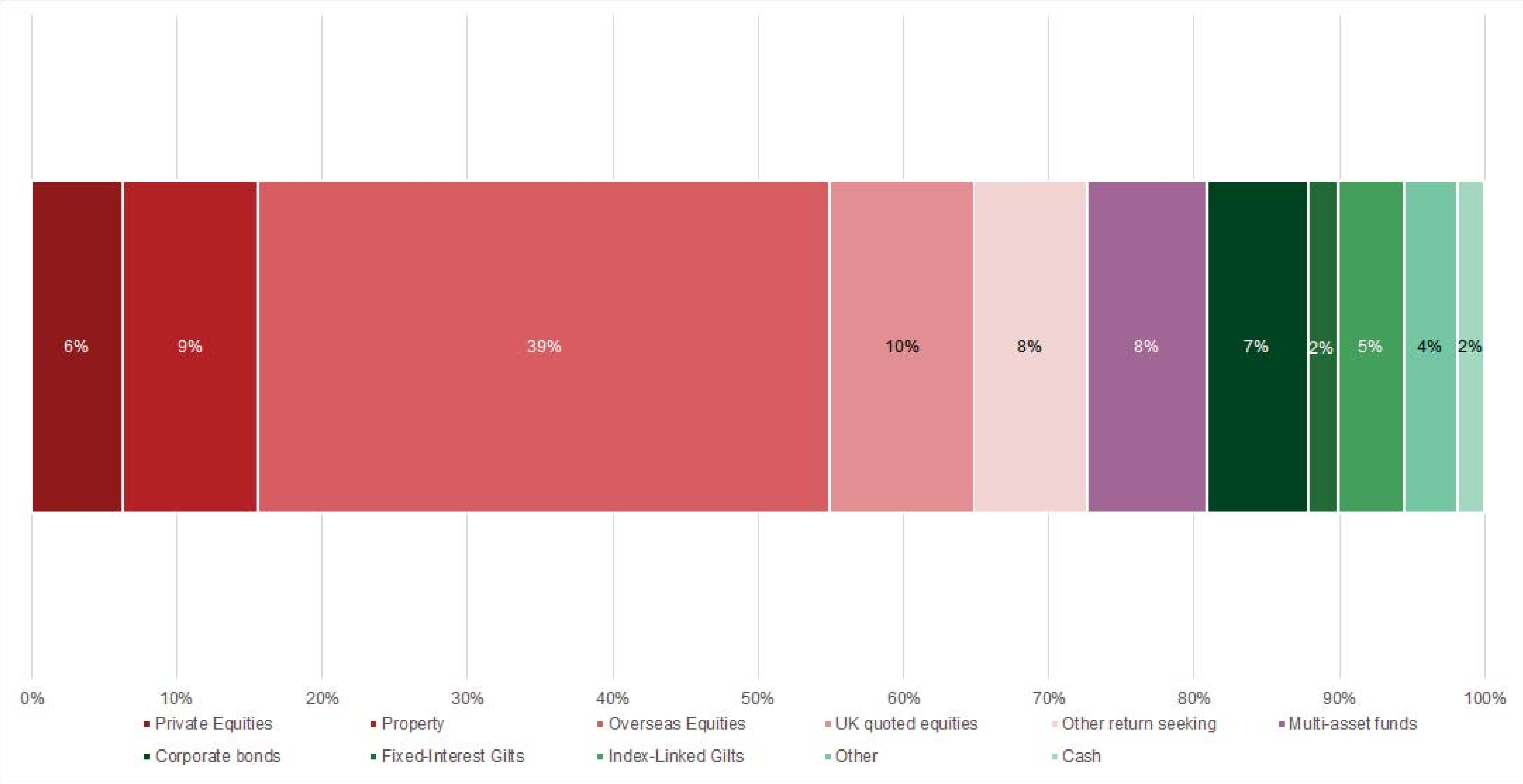
7.1 Chart 9 shows the total LGPS asset values split by return seeking and defensive assets as at 31 March 2019 and 31 March 2022. There has been a shift towards return seeking assets over this period, a reversal of the change seen between 2016 and 2019.

7.2 The allocation of asset classes to return seeking and defensive assets is somewhat subjective. We have classified Overseas Equities, UK Equities, Other Investments and Property to be return seeking assets and Corporate Bonds, Gilts and Cash to be defensive assets. We note this is a broad and subjective categorisation. The proportion of assets by market value invested in return seeking assets has increased from 74% as at 31 March 2019 to 81% as at 31 March 2022, with a corresponding decrease in the proportion invested in defensive assets. We note that whilst defensive assets are expected to generate less volatile returns overall relative to changes in liability values, they may still be expected to generate a positive return relative to the fund liabilities.

7.3 This analysis is based on the data provided by the fund actuaries. There is a wide range of investments held by LGPS funds and it is not always possible for fund actuaries to allocate all assets to the categories used for this purpose. As a result, this analysis should be treated with caution particularly in relation to the asset split between UK quoted equities and Overseas equities. For example, a global equity fund holding which includes some UK equities is likely to be recorded only as an overseas equity holding. Further, private equity is not separated between UK and overseas. It is therefore likely that the UK asset holdings are understated.

7.4 The majority of the LGPS assets are held in equities, with the bulk of this investment being recorded as overseas equities. Of the defensive asset category the largest asset class remains in corporate bonds.

Chart 10: The proportion of total LGPS assets split by broad asset class by market value at 31 March 2022



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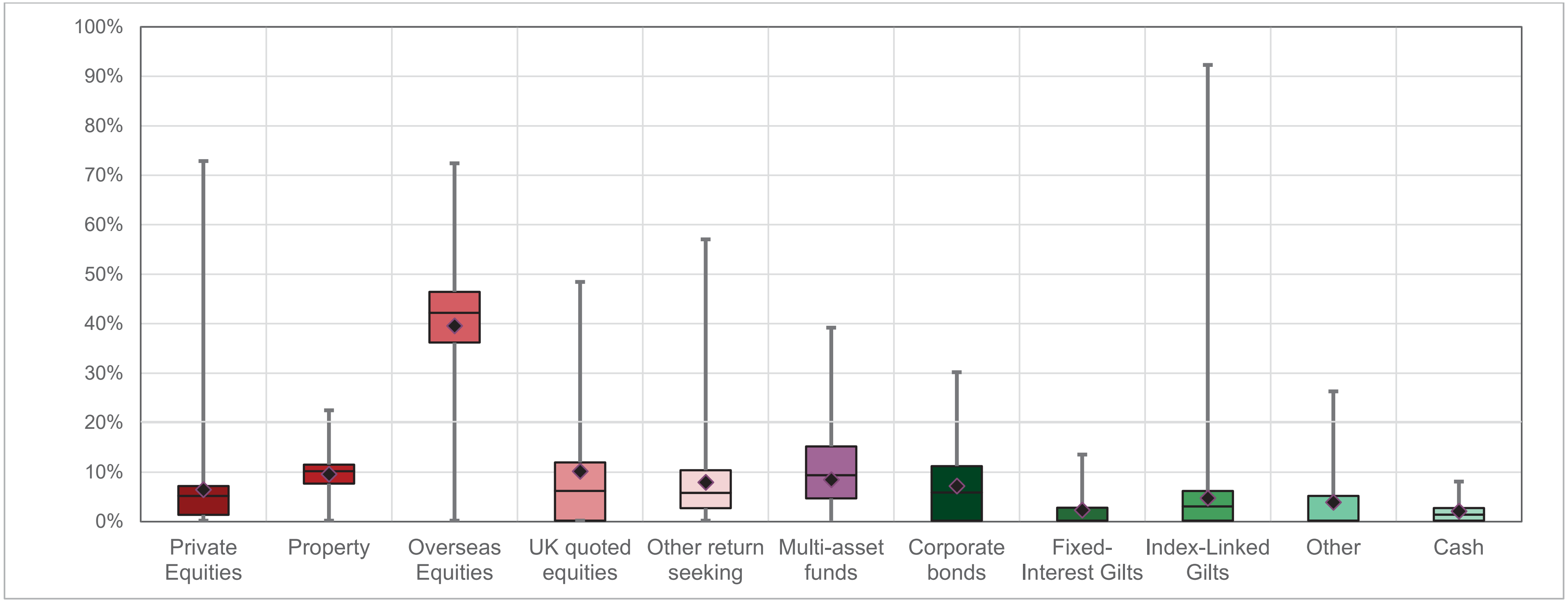
7.5 There is some variance between the investment strategies of different funds. Chart 11 demonstrates this variance by asset category.

7.6 The coloured box in the middle represents the range of proportions within which the middle 50% of funds sit. The lower and upper lines represent the spread of proportions for the lower and upper 25% of funds such that the end points represent the minimum and maximum proportions. (Note that where the middle coloured box includes 0% the lower black line may not be clear). The black diamonds represent the asset weighted averages as seen in chart 10 above. For the purpose of this evaluation we have deducted values less than 0% (i.e. debts or negative derivative values) from other assets.

Chart 11: Variation in asset split by broad asset class by market value at 31 March 2022 (provided by fund actuaries)



These categorisations are based on data provided by fund actuaries. We note there are some limitations in the data as explained above.

8. Net cashflow position

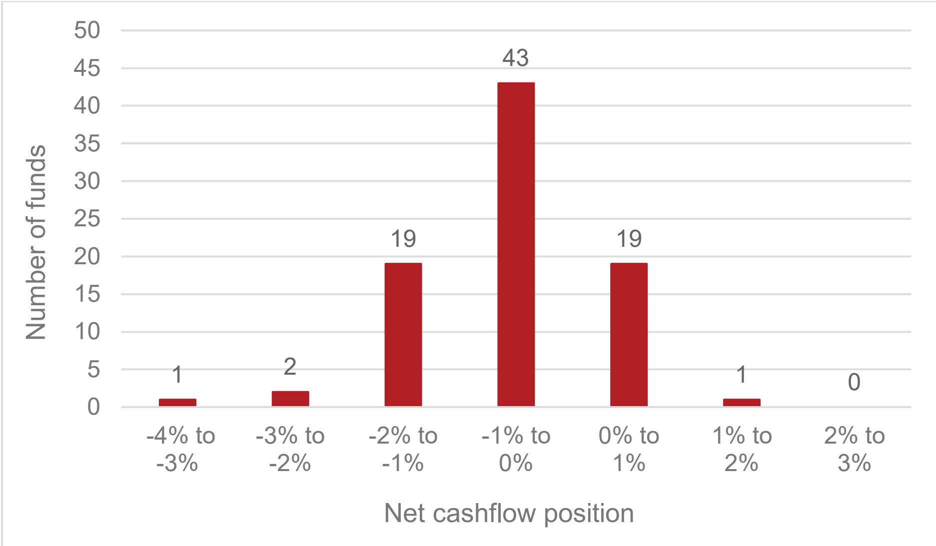
8.1 For the purpose of this analysis we have defined the net cashflow position relative to assets of the individual funds as:

$$\frac{\text{Total income over the year (excluding investment returns) less Total expenditure over the year}}{\text{Market value of assets held at the beginning of the year}}$$

8.2 The higher a fund's net cashflow position, the better position it is in to meet pension payments without reliance on current investment returns. A strongly negative cashflow position (of less than -3% say) means that cashflow requirements will be a potentially material factor impacting investment strategy.

8.3 Chart 12 shows the distribution of funds by net cashflow position in 2022. It highlights that there is considerable variance within this measure. There are three funds with a net cashflow position of less than -2%.

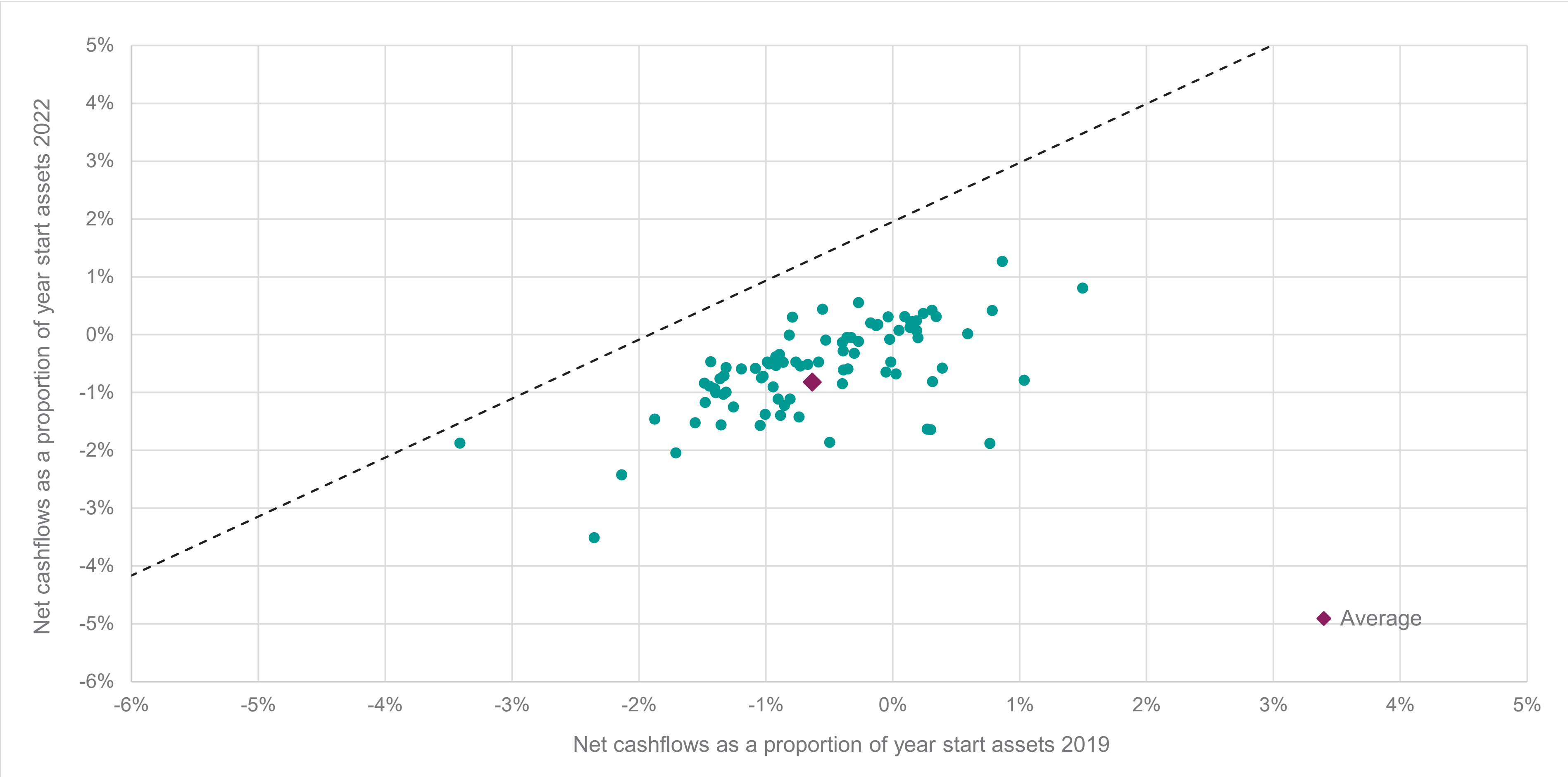
Chart 12: Number of funds by net cashflow position in 2022 (excluding Environment Agency Funds)



8.4 Chart 13 has been derived from SF3 data publicly available. The data is not available for the Environment Agency Closed and Active Funds, which have been excluded from this analysis. Funds sitting above the dotted line have seen an improvement in their net cashflow position from 2019 to 2022 and vice versa.

8.5 The average net cashflow position across all funds was -0.8% for the financial year starting April 2022. This is a small deterioration of 0.2 percentage points on the position for the financial year commencing April 2019 of -0.6%.

Chart 13: Change in net cashflow position as a proportion of assets between 2019 and 2022 (excluding Environment Agency Closed and Active Funds)



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9. Further information

9.1 Further information and analysis can be found in:

- Review of LGPS fund valuations as at 31 March 2022 under Section 13 main report dated 14 August 2024

- Review of LGPS fund valuations as at 31 March 2022 under Section 13 appendices dated 14 August 2024

9.2 This analysis was undertaken based on the data and funding positions as at 31 March 2022, see Introduction for details. Changes may have occurred since then.

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London Borough of Havering Pension Fund

2022 Valuation Section 13 Results

Steven Law FFA
Ciaran Henry AFA

1 October 2024
For an on behalf of Hymans Robertson LLP

Contents

We will discuss:

HYMANS # ROBERTSON

Section 13 – What is it?

What is Section 13?

Under Section 13 of the Public Service Pensions Act the Ministry of Housing, Communities and Local Government ("MHCLG") appointed the Government Actuary's Department (GAD) to carry out a review of the LGPS local funding valuations. We previously submitted data and information regarding the 2022 valuation on the Fund's behalf to GAD and they used this data, along with data from the other LGPS Funds to carry out their analysis.

GAD published their report on the 2022 valuations on 14 August 2024.

The full report can be found at:

https://www.gov.uk/government/publications/lgps-ew-review-of-the-actuarial-valuations-of-funds-as-at-31-march-2022

What does the Section 13 report cover?

This GAD analysis is very analytical and presents various metrics in a "like-for-like" fashion so that reasonable comparisons can be made between LGPS funds. Section 13 requires GAD to ascertain whether each local fund valuation has achieved the following aims:

- The valuation ***complies*** with the LGPS regulations.

In assessing compliance, GAD has focussed on Regulation 62 covering mainly the valuation report and employer contribution rate setting and has not considered other elements of the valuation process, including the compliance of the Funding Strategy Statement.

- The valuation has been carried out in a way which is ***not inconsistent*** with other local fund valuations.

- The valuation has set employer rates that ensure the ***solvency*** and the ***long-term cost efficiency*** of the fund.

For solvency GAD focuses on whether the assets held, together with employers' contributions are sufficient to target 100% funding over an appropriate period.

For long-term cost efficiency GAD also considers issues of inter-generational fairness in employer contribution rates, ensuring that employers pay a fair amount to cover benefits earned during the current period of participation.

Section 13 – General Results

What did GAD report for all LGPS Funds to consider?

Compliance

The valuations were considered compliant with the relevant Regulations.

Consistency

GAD recognised the improved presentational consistency in the 2022 valuations, and that the continued **use of the section 13 dashboard** (first introduced for the 2019 valuations) **greatly aids stakeholders' understanding**.

GAD noted **concern around the continued lack of evidential consistency** since the previous review at 2019. Whilst GAD appreciate that specific fund circumstances may merit the use of different actuarial assumptions, they believe that these differences may lead to different outcomes, for example different contribution rates. Wherever possible, GAD believe in the importance of information being presented in a way that facilitates comparisons.

GAD made 2 formal recommendations in this area for the Scheme Advisory Board to consider:

- **Whether greater consistency could and should be achieved to allow easier comparison between funds and better understanding of risks**, and
- **whether guidance would be helpful to support greater consistency on emerging issues**

Climate risk

GAD recognised the **significant progress made by funds and actuarial advisers in the presentation of climate risk analysis** as part of the 2022 fund valuations. They recommended that work continues to refine their Climate Change Principles Document in advance of the 2025 fund valuations.

Hymans Robertson comments

On **consistency** recommendations:
"We have commented to GAD that it would be helpful to understand which elements of a valuation they believe there could be greater consistency. There are legitimate reasons why LGPS funds may have differing views and circumstances regarding elements such as methodology, prudence, assumptions and a one size fits all consistent approach would not be appropriate.

We are supportive of anything that helps awareness around emerging risks and offers ideas about how these risks can be assessed, understood and reported on. However, given such risks are emerging and typically uncertain, we believe that it is beneficial for the LGPS if funds are free to proportionately explore a variety of managing, measuring and mitigation options to avoid 'group think' and systemic risk.

What did GAD report for all LGPS Funds to consider?

Flags

To assess solvency and long-term cost efficiency GAD designed a number of metrics and raised flags against these metrics against specific funds to highlight areas where risk may be present, or further investigation is required, using a red/amber/green/white rating approach.

- Red = Material issue
- Amber = Potential material issue
- White = Advisory highlighting a general issue
- Green = No material issues

The London Borough of Havering Pension Fund received all **green** flags for both Solvency and Long-Term Cost Efficiency.

Solvency

On solvency GAD reported:

- In aggregate, the funding position of the LGPS has improved since 31 March 2019; and the scheme appears to be in a strong financial position.
- Total **assets** have **grown** in market value from **£291bn to £379bn**
- Total **liabilities** disclosed in the 2022 local valuation reports amounted to **£355bn**.
- The aggregate funding level of the LGPS on prudent local bases has improved from **98%** (in 2019) to **106%** (at 2022) due in large part to strong asset returns over the 3-year period to 31 March 2022.
- The size of funds has grown significantly over the three years to 31 March 2022 relative to the size of the underlying authorities. This means that funds in deficit were more likely to trigger GAD's asset shock measure, where there is a risk of a large changes in contribution rates following a sustained reduction in the value of return-seeking assets. GAD raised white flags against impacted funds.

Given the strong position, **no red or amber flags** were raised in the LGPS for solvency concerns.

.

What did GAD report for all LGPS Funds to consider?

Long-term Cost Efficiency

In assessing long-term cost efficiency, GAD focussed mainly on Funds' contribution levels, deficit recovery plans and on ensuring that Funds maintained a deficit recovery plan from one valuation to the next.

GAD raised amber flags against 3 funds:

- For 2 funds, GAD were concerned about their deficit recovery periods. GAD estimated that current contribution rates will not be sufficient to reach full funding on a best estimate basis within the deficit recovery period used at the valuation.
- For a further fund, GAD were concerned that employer contribution rates were decreasing (reducing the burden on current taxpayers) at the same time as the deficit recovery is being extended further into the future (increasing the burden on future taxpayers).

As in their 2019 valuation report, GAD recommended that (where deficits exist) funds should be able to demonstrate that deficit recovery plans are a continuation of the previous plan. Given the strong funding positions across the LGPS, GAD further **recommended that the Scheme Advisory Board consider the approach to surpluses** in their review of the Funding Strategy Statement (FSS) guidance.

Hymans Robertson comments

On **long-term cost efficiency** recommendations:
We are supportive of the recommendation that additional guidance be provided to support funds in balancing considerations when in surplus positions, so long as it does not constrain individual funding strategy decisions.

We remain unconvinced that continuing the same plan (which GAD interpret to mean recovering a deficit by a fixed end point) is appropriate for LGPS employers that are expected to participate for the long term. It also ignores that there is no single 'deficit recovery' for the fund, it is in effect the sum/average of all the employers' own funding strategies

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Section 13 – London Borough of Havering Results

Summary Metrics for London Borough of Havering Fund

Funding Level

The funding level calculated using the SAB "best estimate" basis. This facilitates like for like comparison but is not suitable for funding purposes

Required Return

The required investment return rate to achieve full funding in 20 years' time on the standardised best estimate basis

Return Scope

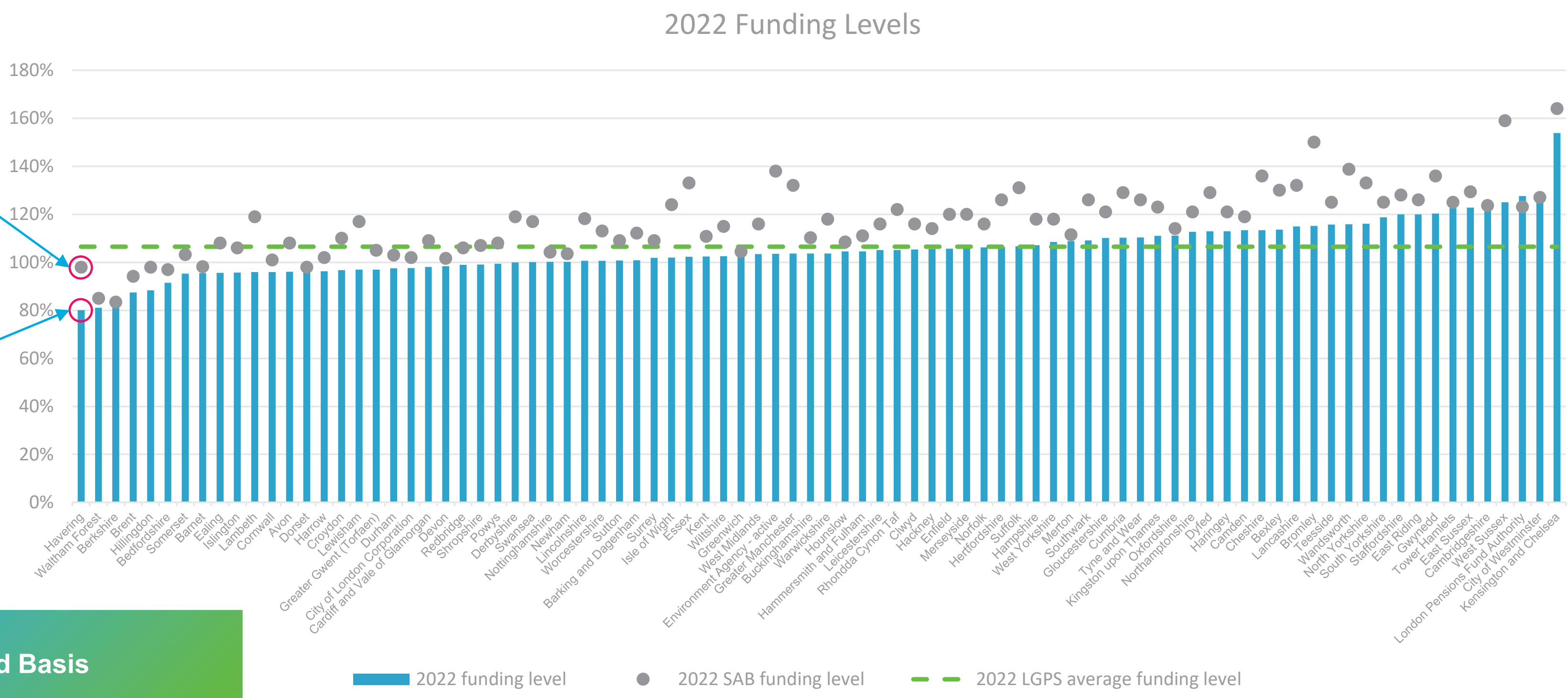
The required investment return rate as calculated in required return, compared with the fund's expected best estimate future returns assuming current asset mix is maintained. The more positive the return scope is, the more prudent the funding plan is.

Metric	Havering	Rank out of 87 Funds
Funding Level	98%	81st
Required return	3.7%	65th
Return Scope	1.1%	66th

Solvency

SAB standard basis – ranked **81 out of 86* LGPS funds**

Local funding basis – ranked **86 out of 86* LGPS funds**



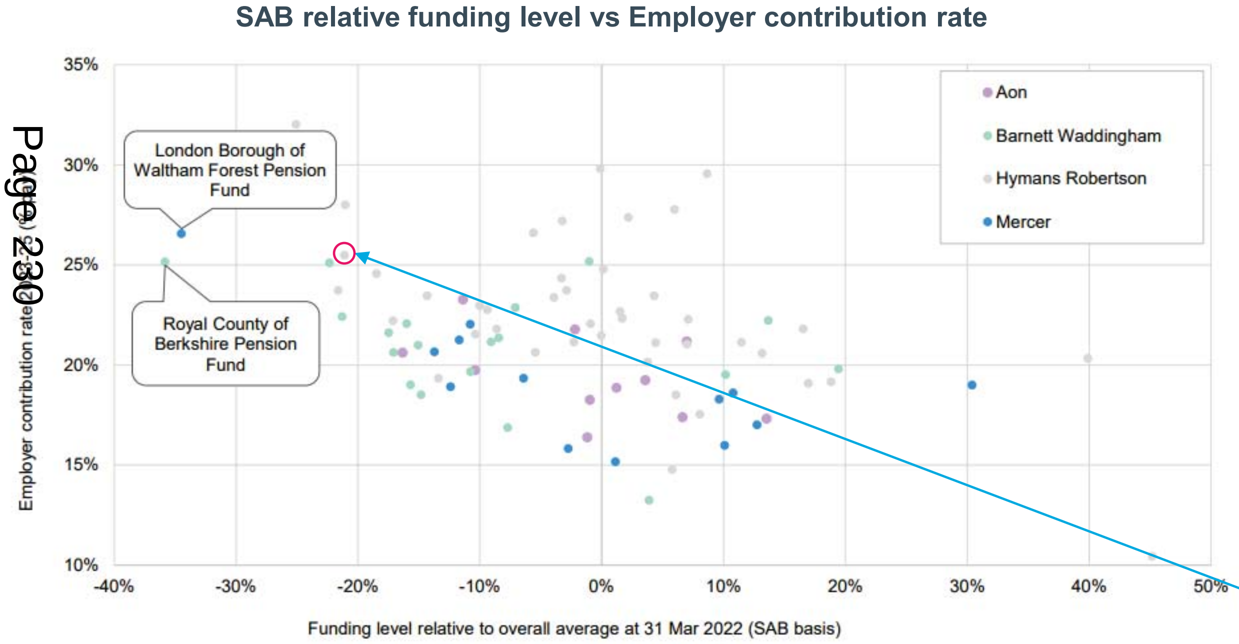
Funding Level on SAB Standardised Basis

The funding level calculated using the SAB "best estimate" basis facilitates like for like comparison but is not suitable for funding purposes

London Borough of Havering have moved up 3 places versus 2019 on SAB's Standardised Basis. As a result, **London Borough of Havering Pension Fund received no flags for solvency concerns.**

*Analysis excludes the Environment Agency Closed Fund

Long-term cost efficiency



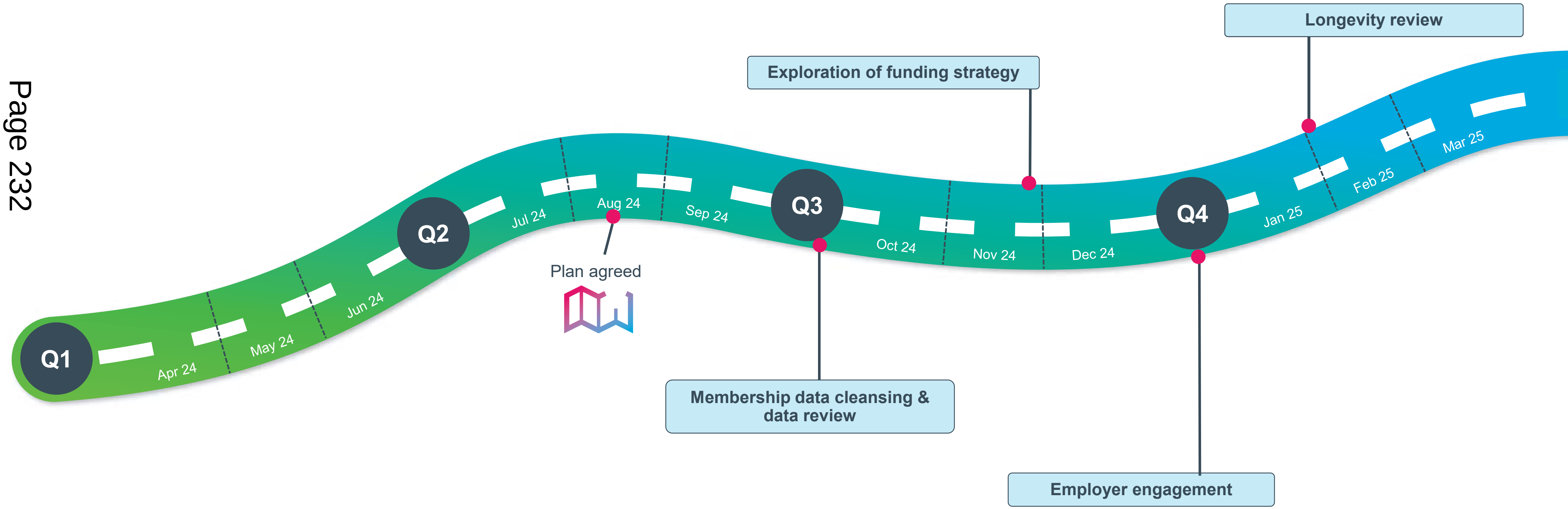
Comparing Contributions and Funding Level

This chart shows the contributions paid by each Fund against their relative funding level. Each dot represents a fund.

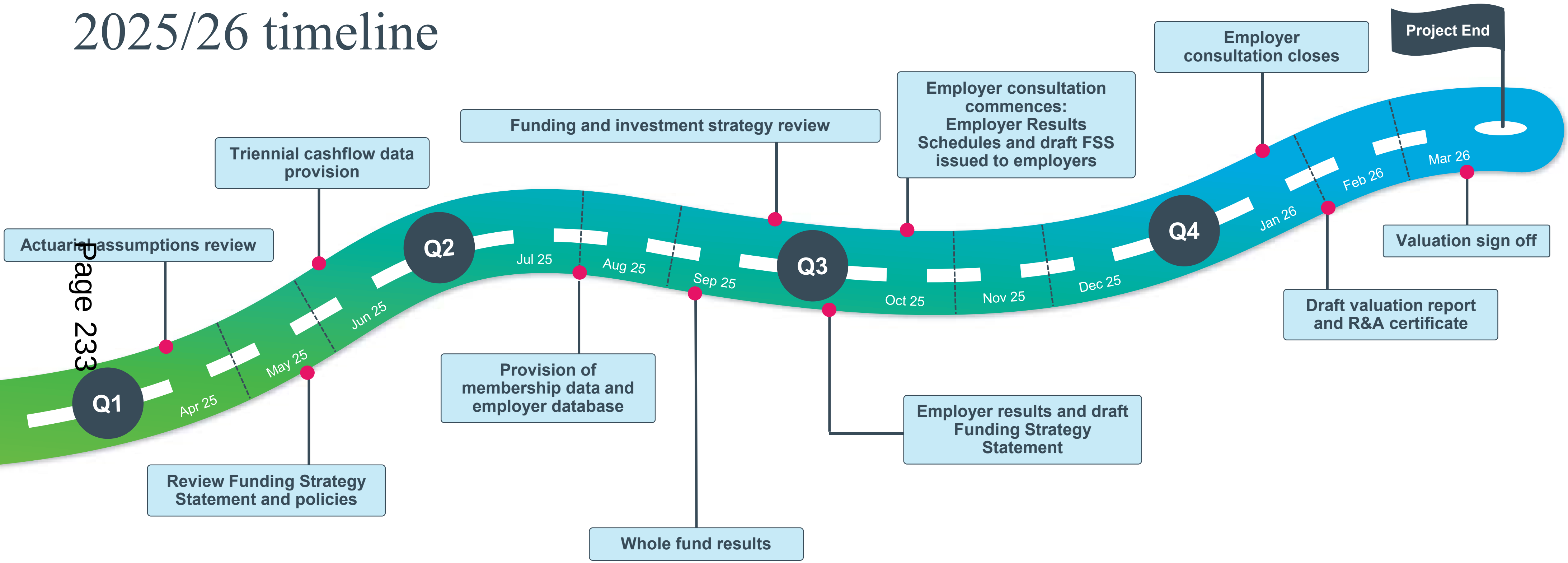
- Everything else being equal you would expect lower funding levels (left hand side) to correspond to higher contribution rates.
- GAD has raised amber flags against the two funds indicated as it considers that the current contribution rates will not be sufficient to reach full funding on a best estimate basis within the deficit recovery period used at the valuation.
- This analysis is limited as it doesn't allow for different investment strategies or lump sum payments made outside of the regular contributions certified.
- London Borough of Havering Pension Fund is indicated. **No flags were raised against the Fund for long-term cost efficiency concerns**.

Looking ahead to the 2025 valuation

2024/25 timeline



2025/26 timeline



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HYMANS ROBERTSON

Current pressures on the valuation

Reasons for Caution	**Future asset returns** Central banks signalling economic slow-down	**Inflation** BoE signalling higher than 2% expectations	**Government policy** Interference in investment risks, real pay growth
Reasons for Optimism	**Higher interest rates vs 2022** Puts downwards pressure on contribution rates	**Investment returns** In line with actuarial expectation	**Benefit uncertainty** Cost-sharing and McCloud increasingly settled
Known unknowns	**Pensions review** Potentially impacting investment risk / benefits	**GAD Section 13** Increasing focus on intergenerational fairness	**Council funding** Government support still not clear

Thank you

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