



# Government Actuary's Department

## **LGPS ENGLAND AND WALES**

Section 13 Dry Run Report

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## 1 Executive summary

In connection with the local fund valuations of the Local Government Pension Scheme (LGPS) from 2016, section 13 of the Public Service Pensions Act 2013 requires the Government Actuary to report on whether four main aims are achieved:

- > 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 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 scheme, so far as relating to the pension fund

We have carried out a "dry run" section 13 analysis based on the 2013 local valuations.

### **Compliance**

We found no evidence of material non-compliance.

### **Consistency**

We found inconsistencies between the valuations in terms of approach taken, assumptions used and disclosures. These inconsistencies make meaningful comparison of local valuation results unnecessarily difficult.

### **Solvency**

For the two closed passenger transport funds, we are not aware of any plan in place to ensure solvency. Had this not been a dry run exercise we would have engaged with the administering authorities to discuss the need for plans to be put in place.

A number of amber flags were raised under this heading for the open funds. We may have engaged with some of these administering authorities to discuss the reasons behind these flags. However, none were red-flagged.

### **Long term cost efficiency**

For the following funds we would have engaged with the administering authority to investigate in more detail whether the aims of section 13 were met:

- > Royal County of Berkshire Pension Fund
- > Somerset County Council Pension Fund

We may also have engaged with some other administering authorities who had a significant combination of amber flags if section 13 had applied as at 31 March 2013.

### **Future analysis**

Based on our on-going experience of reporting under section 13(4) (including this dry run) we may change or add considerations, criteria, tests or metrics to the analysis in the future.



- 1.1 The Government Actuary has been appointed by the Department of Communities and Local Government to report under section 13 of the Public Service Pensions Act 2013 in connection with the Local Government Pension Scheme (“LGPS” or “the Scheme”) in England and Wales. Section 13 provides for a review of LGPS funding valuations and employer contribution rates to check that they are appropriate and requires remedial steps to be taken where scheme managers consider appropriate.

### **Aims of section 13**

- 1.2 Section 13 will apply for the first time to the 2016 round of ninety-one separate fund valuations for the LGPS. Specifically, in relation to each fund within the LGPS, section 13 requires the Government Actuary to report on whether four main aims are achieved:
- > 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 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 scheme, so far as relating to the pension fund

### **Purpose of the dry run**

- 1.3 The Department of Communities and Local Government (“DCLG”) has asked the Government Actuary’s Department (“GAD”) to carry out a “dry run” based on the round of LGPS valuations completed as at 31 March 2013 to demonstrate how we may have approached our analysis had section 13 applied to those valuations. This dry run report is designed to help those administering authorities and their actuarial advisors to prepare for the 2016 round of valuations with some knowledge about how GAD might approach reporting under section 13 following the 2016 round of valuations.
- 1.4 Based on our on-going experience of reporting under section 13(4) (including this dry run) we may change or add considerations, criteria, tests or metrics to the analysis in the future.
- 1.5 In this dry run report we make no specific recommendations for remedial steps in relation to solvency and long term cost efficiency, as section 13 did not apply as at 31 March 2013. We do however highlight areas for some specific funds where the aims of section 13 are potentially not being met, and where we may have then sought further information and engagement before recommending remedial steps if section 13 had applied at 31 March 2013.



- 1.6 As part of the dry run analysis, we indicate in this report how the process following production of a draft report under section 13 might have progressed had section 13 applied in terms of engagement with administering authorities prior to finalisation of the report.
- 1.7 In some cases, the data initially provided or disclosed in the valuation report raised additional questions following our initial analysis and concerns raised were allayed following the provision of further information. This serves to highlight the importance of clear disclosure in the valuation reports and accurate provision of data from the local authorities and the actuarial firms.

### **Compliance**

- 1.8 We found no evidence of non-compliance with the scheme regulations.

### **Consistency**

- 1.9 Under the heading of consistency, we have found inconsistencies between the valuations in terms of approach taken, assumptions used and disclosures. These inconsistencies make meaningful comparison of local valuation results unnecessarily difficult.
- 1.10 The primary areas GAD has analysed are:
- > Common contribution rates
  - > Average actual contributions vs common contribution rate
  - > Assumptions
- 1.11 We have viewed consistency in two ways:
- > Presentational. Those aspects of the valuations for which we consider there is no particular justification for differences in disclosure between different funds. This includes results disclosures (i.e. presenting the key results in a similar format) and agreeing a common understanding of terms such as the common contribution rate (“CCR”<sup>1</sup>) even if these are not explicitly defined in regulations.
  - > Evidential. Those aspects of the valuations that should be consistent except where supported by evidence or local circumstances (e.g. some demographic assumptions). On financial assumptions, we believe that local circumstances may merit different assumptions (e.g. current and future planned investment strategy, different financial circumstances) leading to different levels of prudence adopted. However, in some areas, it appears that the choice of assumptions is highly dependent on the “house view” of the particular firm of actuaries advising the fund, with only limited evidence of allowance for local circumstances.

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<sup>1</sup> CCR has been replaced by primary and secondary rates in regulation 62.



- 1.12 There is a wide range of reasonable assumptions for uncertain future events, such as the financial assumptions. For the avoidance of doubt, we have not concluded that any of the approaches, taken in isolation, are unreasonable. However the approaches are not consistent with each other, and it is not clearly explained in valuation reports whether the relevant assumptions, and hence differences in those assumptions between funds, are solely driven by local circumstances. Furthermore, there would also seem to be no common understanding of what constitutes “prudence” for the purposes of regulation 58 of the Local Government Pension Scheme Regulations 2013, and its reference to CIPFA guidance.
- 1.13 We are not expecting the immediate prescription of assumptions. Nevertheless readers of the reports might expect there to be consistency, and that transparent comparisons can be made between funds.
- 1.14 We are only able to conclude under section 13(4)(b) of the PSPS Act 2013 Act that ‘the valuation has been carried out in a way which is not inconsistent with other valuations’, if the valuations are carried out in consistent manner. Currently, in our opinion, the valuations are not carried out consistently.
- 1.15 We appreciate that there are significant challenges to achieving full consistency, particularly in the short term. In the longer term, we would however expect a narrowing of the range of assumptions used, where local experience cannot be used to justify differences.
- 1.16 We are grateful to the SAB Cost Management and Contributions sub-committee and the SAB Secretariat for developing a standard basis and metrics to enable comparisons between funds and we recommend that the valuation results on the SAB standard basis and associated “dashboard” metrics are published in valuation reports to allow readers to make like for like comparisons.
- 1.17 We recommend that the four actuarial firms who advise administering authorities in carrying out funding valuations should seek to agree a standard way of presenting relevant disclosures in their valuation reports to better facilitate comparison.

### **Solvency**

- 1.18 Under the heading of solvency, we found that a number of our assessment measures were triggered by the two Passenger Transport funds, West Midlands Integrated Transport Authority Pension Fund and South Yorkshire Passenger Transport Authority Pension Fund. These funds are both closed to new entrants. In particular we might have sought to better understand whether the relevant administering authorities had a plan in place to ensure that the fund continues to meet benefits due in an environment of no future employer contributions being available, if section 13 had applied as at 31 March 2013.
- 1.19 A number of amber flags were raised under solvency for the open funds. Had section 13 applied, we may have engaged with some of these administering authorities, particularly where there was significant combination of amber flags, to discuss reasons behind these flags. However, none were red-flagged. Please see table 5.2 for further detail.



- 1.20 We have also highlighted the ten funds with the lowest funding level on the Scheme Advisory Board's ("SAB") standardised basis. Had section 13 applied, we may have engaged with some of these funds to better understand how they intended to improve their funding position.
- 1.21 We believe it is important that administering authorities and other employers understand the potential cost, so that they can understand the affordability of potential future contribution requirements.
- 1.22 The local valuations and our calculations underlying this dry run report are based on specific sets of assumptions about the future. To help the understanding of the potential for volatility in contributions, we estimate that the aggregate impact on contributions under a financial crisis scenario, similar to the 2008 financial crisis, is an increase in contributions of between £1.7 and £4.9 billion per year (compared with the actual outturn from the 2013 valuations of £6.6 billion).
- 1.23 A more detailed description of the tests and triggers alluded to in the tables below can be found in the relevant sections of this report and are not repeated in this executive summary.

*Table 1.1: Funds with a material combination of amber and/or red flags*

PENSION FUND	MATURITY (RANK)	SOLVENCY MEASURES					
		RISKS ALREADY PRESENT			EMERGING RISKS		
		SAB FUNDING LEVEL	OPEN FUND	NON-STATUTORY EMPLOYEES	LIABILITY SHOCK	ASSET SHOCK	EMPLOYER DEFAULT
SOUTH YORKSHIRE PTA <sup>2</sup>	25.2 (1)	114%	NO	100%	+5%	+3%	N/A
WEST MIDLANDS ITA <sup>1</sup>	25.1 (2)	100%	NO	100%	+5%	+7%	N/A

### Long term cost efficiency

- 1.24 For the following funds we would have engaged with the administering authority to investigate whether the aims of section 13 were met, had section 13 applied:
- > Royal County of Berkshire Pension Fund
  - > Somerset County Council Pension Fund

<sup>2</sup> The **Employer Default** measure is shown as N/A because there are no statutory employers participating in these two closed funds.



*Table 1.2: Funds with a material combination of amber and/or red flags*

PENSION FUND	MATURITY (RANK)	LONG TERM COST EFFICIENCY MEASURES						
		RELATIVE CONSIDERATIONS				ABSOLUTE CONSIDERATIONS		
		DEFICIT REPAID	DEFICIT PERIOD	REQUIRED RETURN	REPAYMENT SHORTFALL	RETURN SCOPE	DEFICIT EXTENSION	INTEREST COVER
BERKSHIRE	5.9 (78)	4%	34	6%	-2%	-0.5%	-3	No
SOMERSET	5.9 (80)	5%	24	6%	-1%	0.0%	0	No

1.25 A number of other funds have triggered flags. We do not consider that these funds are failing to meet the aims of section 13, but we may have encouraged these other funds to provide further information regarding the relevant measures. Please see table 6.2 for further details.





## 2 Introduction

This report summarises GAD's "dry run" review of the actuarial valuations of the Local Government Pension Scheme as at 31 March 2013 as if section 13 of the Public Service Pensions Act 2013 had been in force at that date with the Government Actuary as the appointed person under section 13.

We have looked at a range of metrics to identify exceptions. Remedial steps may have been recommended where there is a potentially material or potent combination of negative outcomes against those metrics which is not satisfactorily explained or justified. Failure against one metric may not by itself always lead to remedial action being recommended.

- 2.1 This report is addressed to the DCLG. GAD has prepared this paper to set out the results of our review of the 2013 funding valuations of LGPS as if section 13 of the Public Service Pensions Act 2013 ("section 13" of "the Act") as it pertains to LGPS had been in force as at 31 March 2013.
- 2.2 Section 13 will apply for the first time to the valuations as at 31 March 2016. This report therefore does not have authority under the Act. Instead it serves as a "dry run" to assist stakeholders in preparing for the 2016 round of LGPS funding valuations, and is hereafter referred to as the "dry run report". We expect our report following the 2016 valuations to comprise more in-depth analysis in some areas. In relation to exceptions (this term is described below), we refer to action we may have taken had section 13 applied as at 31 March 2013.
- 2.3 Subsection (4) of section 13, requires the Government Actuary to report on whether the four main aims are met:
  - > 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 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 scheme, so far as relating to the pension fund
- 2.4 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.

### **Purpose of this paper**

- 2.5 The purpose of this paper is to provide stakeholders with information about:
- > the tests and metrics we have used to assess whether the aims of compliance, consistency, solvency and long term cost efficiency have been achieved;
  - > an indication of how funds performed against the chosen metrics; and
  - > how we determined exceptions.
- 2.6 This report is designed to help those authorities prepare for valuations from 2016 onwards, when section 13 will be in force.
- 2.7 This paper will be of relevance to LGPS stakeholders including DCLG, the Chartered Institute of Public Finance & Accountancy (CIPFA), administering authorities and other employers, actuaries performing valuations for the funds within LGPS, SAB (or, where relevant, interim board) and HM Treasury (HMT).

### **Exceptions**

- 2.8 Exceptions occur where funds appear to be materially out of line with other funds, or out of line with what we might have expected based on our judgement and our interpretation of solvency and long term cost efficiency.
- 2.9 We have had regard to the particular circumstances of some potential exceptions, following consultation with the fund actuary. This informal consultation has enabled us to explore in greater depth the issues identified and understand the fund's specific circumstances. We may conclude in the light of that engagement that administering authorities and employers are taking appropriate action and that the outcome is reasonable given the circumstances.
- 2.10 We have looked at a range of metrics to identify exceptions under solvency and long term cost efficiency. We have expressed these in the form of green, amber or red flags. In broad terms, a red flag or a combination of amber flags would tend to indicate a need for further investigation and/or engagement with the relevant administering authority and their actuary. The trigger points for these flags are based on a combination of absolute measures and measures relative to the bulk of the funds in scope.



- 2.11 More detail is provided in the solvency and long term cost efficiency chapters and appendices. It should be noted that these flags are intended to highlight areas for further investigation, but green does not indicate a clean bill of health and also that the fact we are not specifically suggesting remedial action does not mean that scheme managers should not consider actions.
- 2.12 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, but it is not our role to express an opinion as to whether that conclusion was driven by the actions of authorities or their actuary, or other stakeholders.
- 2.13 The Environment Agency Closed Pension Fund is different from other LGPS funds, in that the benefits payable and costs of the fund are met by Grant-in-Aid funding by the Department for Environment, Food and Rural Affairs<sup>3</sup>, thus guaranteeing the security of these benefits. In general, the fund has been excluded from the analyses that follow.

#### **Remedial steps**

- 2.14 Section 13 does not prescribe what remedial steps may be recommended, but for example they could include:
- > that the administering authority consider and report on an issue (e.g. if a closed scheme has no plan in place);
  - > that the administering authority strengthens scheme governance, for example by making changes to a section 101 committee or pensions board;
  - > that a revised approach be taken at the next valuation; and
  - > that the current valuation be reopened and changes made to employer contributions in advance of the next valuation.
- 2.15 Remedial steps may be recommended if there is a potentially material combination of negative outcomes against those metrics which is not satisfactorily explained or justified. Failure against one metric may not by itself lead to remedial steps being recommended.
- 2.16 This report contains specific reference to those funds considered to be exceptions. Had section 13 been in force for the 2013 valuations, we would have expected to engage with the relevant administering authorities named in this report.
- 2.17 Our aim in producing this dry run report is to encourage, where appropriate, administering authorities to consider taking steps to change the approach taken to the 2016 valuation.

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<sup>3</sup> <http://www.lgpsboard.org/images/Valuations2013/EnvironmentAgencyClosedFund2013.pdf>



### **Limitations**

- 2.18 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 significantly less detailed than that available to funds. Our risk assessment framework enables us to broadly assess scheme risks and decide on our engagement with schemes on an indicative basis.
- 2.19 Although much of the analysis, particularly the calculations we have undertaken, is approximate, we consider it to be sufficient for the purposes of identifying which funds could be subject to recommendation for remedial steps. While the measures used should not represent targets, these measures help us determine whether a more detailed review is required; for example, we may have highlighted where multiple measures are triggered amber for a given fund.
- 2.20 For some measures under solvency and long term cost efficiency, data were not available. We expect that data will be available for the section 13 work following the 2016 valuations.
- 2.21 We have not considered the impact of post valuation events except to the extent that these may have already been taken into account in the valuation disclosures.

### **Data on contributions paid**

- 2.22 We were provided by the actuarial firms with data on average contributions expected to be paid into each fund. We also had access to data published by DCLG in their LGPS funds local authority data: 2014 to 2015<sup>4</sup> (referred to elsewhere in this report as SF3 statistics). Both sources covered only the 2014-15 financial year (being the first year in which rates recommended in the 2013 valuations were expected to apply).
- 2.23 There were significant differences between these two data sources. For some funds, this may be further complicated by the stepping process (in which employers gradually shift towards the contribution rate recommended by the actuary over a few years). This meant we had to decide which was likely to be more reliable. We opted to base our calculations on the SF3 statistics.
- 2.24 Our data request following the 2016 valuations will seek further information, including all three years' expected contributions from 2017/18 – 2019/20. The discrepancy highlighted above is a cause for concern, which we aim to eliminate by requesting clearer explanations of what the data contains from the actuarial firms.

### **Standardised basis**

- 2.25 There are significant areas of inconsistency highlighted in chapter 4, which make meaningful comparison of valuation results set out in local valuations reports unnecessarily difficult.

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<sup>4</sup> <https://www.gov.uk/government/statistical-data-sets/local-government-pension-scheme-funds-local-authority-data-2014-to-2015>



- 2.26 To address this, we have restated the results on two bases:
- > The standard basis established by the SAB
  - > A market consistent basis derived by us
- 2.27 The market consistent basis is a best estimate as at 2013, based on our views of returns on each asset class across the Scheme. We expect this basis to change for 2016, based on conditions at the time and any other relevant factors.
- 2.28 The restatement to these standardised bases has been done approximately. For example, if results for different employers within a particular fund are produced on different bases, our restatement process would not be able to pick up that level of detail, and the restated results could be incorrect if a particular employer was material in relation to the overall assets and liabilities of that fund.
- 2.29 The data request for the 2016 exercise will explicitly ask for liabilities expressed on the SAB standard basis which should eliminate this potential error.
- 2.30 This use of standardisation does not imply the bases are suitable to be used for funding purposes:
- > The SAB standard basis is not market consistent, and
  - > The market consistent basis is a best estimate (while regulations and CIPFA guidance call for prudence to be adopted). This best estimate is based on the average investment strategy for the overall scheme, and so will not be pertinent to any given fund's particular investment strategy. Further this does not take into account any anticipated changes in investment strategy that may be planned/in train.

### **Sensitivities**

- 2.31 The local valuations and our calculations underlying this dry run report are based on specific sets of assumptions about the future. Some of our solvency measures are stress tests but these are not intended to indicate a worst case scenario. Following the 2016 valuations, we intend to illustrate a range of potential outcomes. In the solvency chapter of this report we have added an indication of the estimated aggregate impact on contributions under a financial crisis scenario, similar to the 2008 financial crisis.

### **Future review**

- 2.32 Based on our on-going experience of reporting under section 13 (including this "dry run" report) we may add additional considerations, criteria, tests or metrics to the analysis. It is currently our intention that we will endeavour to consult (informally or formally), or forewarn, stakeholders in advance of adding such additional considerations/criteria.



- 2.33 We note that following the publication of the dry run report, there may be changes to regulations and approaches to local valuations in 2016 and beyond, which could lead to changes in the items analysed, under consistency for example, in future iterations of section 13.

### Appendices

- 2.34 Appendices are contained in a separate document.
- 2.35 We reproduce section 13 of the Act in Appendix A. Other relevant regulations are reproduced in Appendix B. Appendix C contains a description of data provided. Appendix D contains descriptions of standardised assumptions used. Appendix E contains descriptions of measures for Solvency. Appendix F contains a table of measures under solvency by fund. Appendix G contains descriptions of measures for long term cost efficiency. Appendix H contains a table of measures for long term cost efficiency by fund.

### Other important information

- 2.36 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. 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.
- 2.37 In performing this analysis, we are grateful for helpful discussions with and cooperation from
- > CIPFA
  - > DCLG
  - > Fund actuaries
  - > HMT
  - > LGPS Scheme Advisory Board
- 2.38 We have conducted our analysis assuming that the *desirability* of stable contributions is subordinate to the *requirement* for solvency and long term cost efficiency under the relevant legislation.
- 2.39 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, and neither does the appointment to report under section 13 give the Government Actuary any statutory power to enforce actions on scheme managers (or others).
- 2.40 The modelling underlying this report has been prepared in accordance with the Board for Actuarial Standards' Technical Actuarial Standard M: Modelling. The report complies with TAS M and TAS R: Reporting.



### 3 Compliance with scheme regulations

We have relied on statements of compliance with regulations by, and professional requirements on, the actuaries performing the valuations of LGPS funds. We have performed some spot checks of compliance, and investigated further where funds are identified as exceptions using the metrics set out in this chapter.

We found **no evidence of non-compliance** with the scheme regulations.

- 3.1 There are a number of regulations that administering authorities are required to comply with when producing their respective valuation reports, funding strategy statements ("FSS") and statements of investment principles ("SIP").
- 3.2 These regulations are:
- > Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008 for valuation reports;
  - > Regulation 35 of the same regulations for FSSs; and
  - > Regulation 12 of the LGPS (Management and Investment of Funds) Regulations 2009 for SIPs.
- 3.3 These regulations include reference to CIPFA guidance on preparing and maintaining a FSS in the LGPS 2012.
- 3.4 From 1 April 2014, regulations 62 and 58 of the Local Government Pension Scheme Regulations 2013 will apply to valuation reports and FSSs respectively. We understand that CIPFA's FSS guidance is being updated prior to the completion of the 2016 valuations. However, for the purposes of this report compliance has been checked against the regulations in place as at 31 March 2013, as detailed above<sup>5</sup>. We are not lawyers and have performed these checks as a lay reader of the regulations. We do not expect changes in regulations to have a material effect to this approach.

#### Selecting funds based on predetermined criteria

- 3.5 In order to investigate the compliance of fund documentation with the regulations detailed above the following two approaches have been used:
- 1) Selecting funds based on predetermined criteria; and
  - 2) A risk based approach.

<sup>5</sup> Copies of the regulations listed on this page can be found in Appendix B of this report.



3.6 When selecting funds based on predetermined criteria, we selected funds that were different types of authority (i.e. a London Borough, a Welsh Authority, a County Council and a Metropolitan Authority) and which used different actuarial advisors.

3.7 The four selected funds under these criteria were:

- > The Royal Borough of Kensington and Chelsea Pension Fund (*Barnett-Waddingham*);
- > Cardiff and Vale of Glamorgan Pension Fund (*Aon Hewitt*);
- > Northamptonshire Pension Fund (*Hymans Robertson*); and
- > South Yorkshire Pension Fund (*Mercer*).

3.8 All four funds had short paragraphs in each of the respective documents stating that they had complied with the relevant regulations.

#### **Selecting funds using a risk based approach**

3.9 Under the second, risk based approach, compliance was investigated where funds were flagged as being of concern based on comparison with other funds' solvency or long term cost efficiency.

3.10 The four open funds that were of interest to us are:

- > Royal County of Berkshire Pension Fund;
- > Somerset County Council Pension Fund;
- > London Borough of Waltham Forest Pension Fund; and
- > City of Westminster Pension Fund.

3.11 All four funds had short paragraphs in each of their respective documents stating that they had complied with the relevant regulations.

3.12 The two closed funds that were of interest to us are:

- > South Yorkshire PTA Pension Fund; and
- > West Midlands ITA Pension Fund.

3.13 Both these funds were flagged under our solvency measures. A check of the funds' respective valuation reports showed that both had stated that they had complied with the relevant regulations.

3.14 Therefore we would need to make further enquiries with the funds to determine how they meet the requirements of regulation 36(5) of the LGPS 2008 Administration regulations, in particular the requirement for employers to pay sufficient contributions, expressed as a percentage of pay of the active members, to ensure the solvency of the fund.





- 3.15 In our data request for the 2016 section 13 work we intend to seek additional information on how funds ensured compliance with the relevant regulations and request that this be consistently documented between actuarial advisors.



## 4 Consistency between valuations under the scheme regulations

We viewed consistency in two ways: presentational and evidential. Whilst none of the individual approaches taken are unreasonable, they are not consistent and some variations in assumptions seem to be based on only limited allowance for local circumstances.

We found inconsistencies in the following areas, and recommend the four actuarial firms agree an approach to ensuring each is more readily comparable following 2016 and subsequent valuations.

- > The interpretation of the common contribution rate (CCR) disclosed in the valuations
- > Average actual contributions vs CCR
- > The assumption concerning the amount of commutation
- > The assumption for expected pensioner mortality
- > The derivation of discount rates used for the valuations
- > The assumption used for real earnings growth

If a similar approach is retained for the 2016 valuations we expect to still conclude that the consistency aim of section 13 is not met. Therefore, as an initial step towards achieving consistency, we recommend that the four actuarial firms seek to agree a standard way of presenting the valuation results on the SAB standard basis and associated “dashboard” metrics and other relevant disclosures to permit comparison in their valuation reports. GAD is prepared, if required, to help facilitate these discussions.

- 4.1 Section 13(4)(b) states that actuarial valuations should be carried out in a way which is not inconsistent with other valuations completed under the scheme regulations. For the purposes of this section GAD has, in line with Explanatory note 88 of the Act, taken “other valuations” to mean valuations of other funds within LGPS as at 31 March 2013.
- 4.2 After consultation with stakeholders, we interpreted “not inconsistent” to mean that methodologies and assumptions used, in conjunction with adequate disclosure in the report, should allow comparison by a reader of the reports. We explain this further below. We found that there are inconsistencies between the valuations in terms of approach taken, assumptions used and disclosures. These inconsistencies make meaningful comparison of local valuation results unnecessarily difficult.



4.3 In this chapter we highlight inconsistencies that cannot, in our opinion, be justified by local considerations. The primary areas GAD has analysed are:

- > Common contribution rates (“CCR”)
- > Average actual contributions vs CCR
- > Assumptions

We also looked at smoothed asset values and post valuation asset returns as aspects adopted by one of the firms, but not the others.

4.4 In many cases we found there is a considerable amount of consistency in these areas between funds advised by the same firm of actuarial advisors, but inconsistency between funds advised by different actuarial advisors. In this chapter, where relevant, we refer to the relevant actuarial firms as a proxy to listing out the funds that those actuarial firms advise. The charts in this chapter clarify the actuarial firm advising each fund.

4.5 We consider that readers of LGPS valuation reports might expect there to be consistency, and that transparent comparisons can be made between funds.

4.6 We have viewed consistency in two ways:

- > Presentational. Those aspects of the valuations for which we consider there is no particular justification for differences in disclosure between different funds. This includes results disclosures (i.e. presenting the key results in a similar format) and agreeing a common understanding of terms such as CCR<sup>6</sup>, even if these are not explicitly defined in regulations.
- > Evidential. Those aspects of the valuations that should be consistent except where supported by evidence or local circumstances (e.g. some demographic assumptions). On financial assumptions, we believe that local circumstances may merit different assumptions (e.g. current and future planned investment strategy, different financial circumstances) leading to different levels of prudence adopted. However, in some areas, it appears that the choice of assumptions is highly dependent on the “house view” of the particular firm of actuaries advising the fund, with only limited evidence of allowance for local circumstances.

4.7 There is a wide range of reasonable assumptions for uncertain future events, such as the financial assumptions. For the avoidance of doubt, we have not concluded that any of the approaches, taken in isolation are unreasonable. However the approaches are not consistent with each other, and it is not clearly explained in valuation reports whether the relevant assumptions, and hence differences in those assumptions between funds, are solely driven by local circumstances. Furthermore, there would also seem to be no common understanding of what constitutes “prudence” for the purposes of regulation 58 (reproduced in Appendix B) of the scheme’s regulations and its reference to CIPFA guidance.

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<sup>6</sup> CCR has been replaced by primary and secondary rates in regulation 62.



- 4.8 In the case of LGPS, a scheme split into a number of different funds, inconsistencies in the approach to doing the valuation and the way in which assumptions are set, hinders transparency.
- 4.9 We have illustrated the effects of inconsistencies by restating the local valuation results on a standardised basis specified by the SAB (the SAB standard basis) and also on a market consistent, best estimate basis derived by us. In Chart 4.6 later in this chapter, we set out the relative rankings on 2013 local bases and the SAB standard basis for each fund. Publication of results on SAB's standardised basis will improve the ability of a reader to be able to make comparisons, but does not in itself address the inconsistencies on which section 13 requires us to comment.
- 4.10 We can only conclude under section 13(4)(b) of the PSPS Act 2013 Act that 'the valuation has been carried out in a way which is not inconsistent with other valuations', if the valuations are carried out in consistent manner. Currently, in our opinion, the valuations are not carried out consistently.
- 4.11 We acknowledge that there are significant challenges to achieving consistency, particularly in the short term under existing regulations. In the longer term, we would expect a narrowing of the range of assumptions used, where local experience cannot be used to justify differences.
- 4.12 As an initial step towards achieving consistency, we recommend that the valuation results on the SAB standard basis and associated "dashboard" metrics are published in valuation reports to allow readers to make like for like comparisons.

#### **Differences in interpretation of 'common contribution rate'**

- 4.13 Regulation 36 of the LGPS (Administration) Regulations 2008<sup>7</sup> states that:
- > An actuarial valuation must contain a rates and adjustments certificate;
  - > The rates and adjustments certificate must specify:
    - The common rate of employers' contributions; and
    - Any individual adjustments

Where the common rate of employers' contribution is defined as:

*"the amount which, in the actuary's opinion, should be paid to the 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."*

- 4.14 The funds advised by Aon Hewitt and Mercer have interpreted this to mean that the CCR should be set as a fund's standard contribution rate ("SCR") in respect of future accrual. Under this approach any contributions required in respect of existing deficits are recorded as individual adjustments for each employer.

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<sup>7</sup> Regulation 36 is reproduced in Appendix B.



- 4.15 Funds advised by Barnett Waddingham and Hymans Robertson have interpreted the legislation to mean that a fund's CCR should be equal to its SCR plus any contributions required in respect of deficit. Any individual adjustments therefore reflect only the differences between employers contributing to a given fund.
- 4.16 It is not possible to compare the CCR for all funds. There is a clear inconsistency in how the CCR is interpreted.
- 4.17 We recommend that the four actuarial firms seek to agree a standard way of presenting contribution rates and other relevant disclosures to permit comparison. We acknowledge that new regulations specify the terms primary and secondary contributions rates and that CCR will no longer be relevant. However, the general principle that the four actuarial firms should interpret these terms consistently, and by reference to contributions actually received, remains valid.

#### **Average actual contributions vs common contribution rate**

- 4.18 Regulation 36(6)(b) of the Local Government Pension Scheme (Administration) Regulations 2008<sup>8</sup> states that when calculating a fund's CCR the actuary must have regard to the desirability of maintaining as nearly constant a common rate as possible. We expected to see a relationship between the actual contributions paid over a given period and the CCR, but found we were not able to reconcile the two for most funds.
- 4.19 This "stability clause" is one of a number of reasons why employers are not necessarily required to pay the CCR derived in the fund's local valuation report. Other reasons include varying historical liabilities by employer and different contribution rates for scheduled bodies (due to variation in covenant quality). In some cases, if required contribution rates increase, actual contributions can taper towards the required contribution rate over a number of years.
- 4.20 Employers may also pay additional lump sum contributions as set out in the rates and adjustments certificate of their local valuation report. This is a common practice amongst many employers, reflecting their specific cash flow situation at a given point in time. These lump sums could, in addition to the employer's regular contributions, lead to total contributions exceeding the fund's CCR.
- 4.21 In practice, the approach to setting contributions varies according to actuarial firm.
- 4.22 In particular, Hymans Robertson state in their reports that:

*The CCR "does not represent the rate which any one employer is actually required to pay, nor is it the average of the actual employer rates". Hymans Robertson "undertake an asset-liability modelling exercise that investigates the effect on the Fund of possible investment scenarios that may arise in the future. An assessment can then be made as to whether long term, secure employers in the Fund can stabilise their future contribution rates (thus introducing more certainty into their future budgets) without jeopardising the long-term health of the Fund."*

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<sup>8</sup> See Appendix B



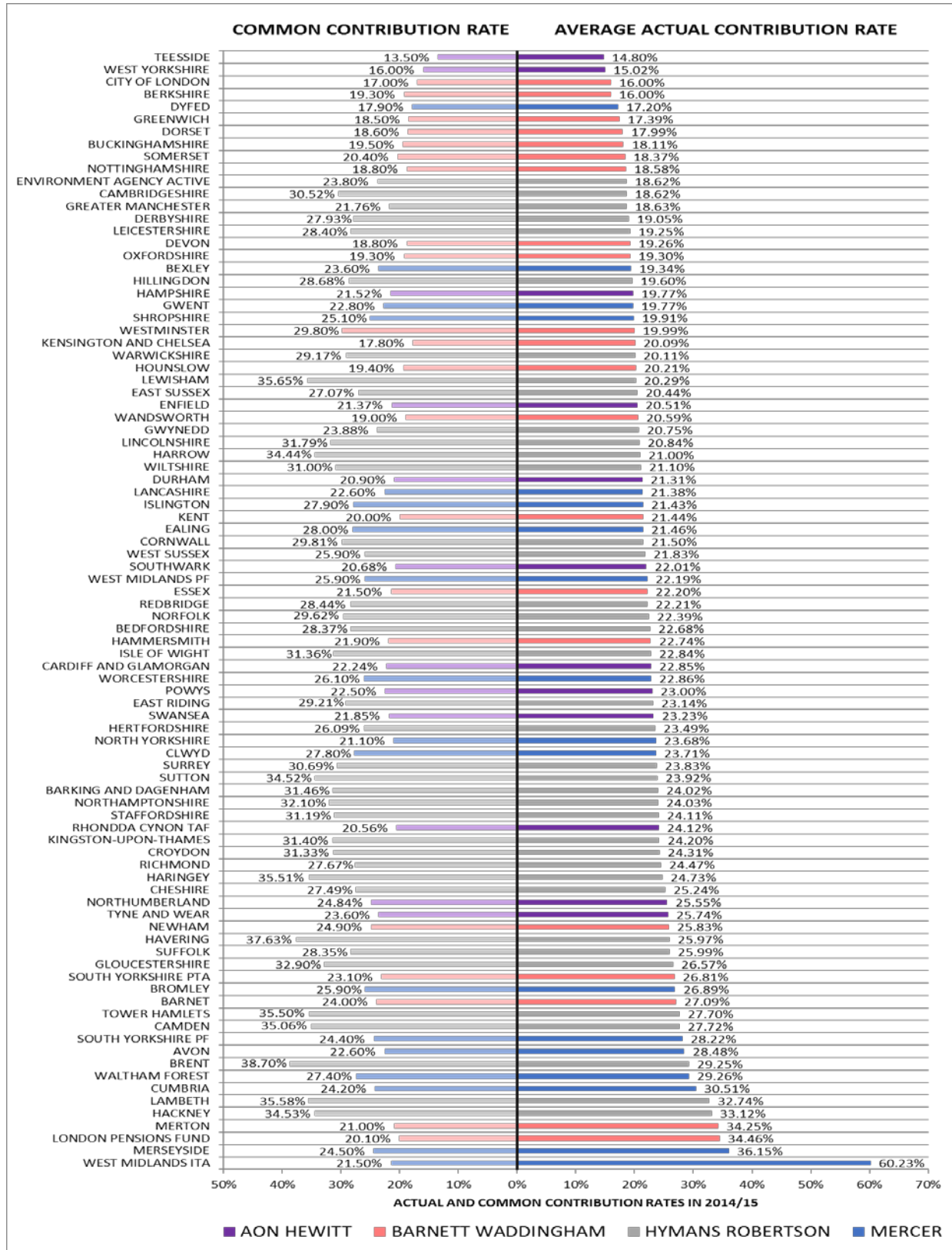
- 4.23 Funds advised by Mercer adopt a different discount rate assumption for future service, as set out in paragraph 4.50. This implies a different methodology for recommending rates, but the actual rates recommended to Mercer-advised funds are typically the same as the recommended rates.
- 4.24 Funds advised by Aon Hewitt and Barnett Waddingham generally use a single discount rate for both past and future service liabilities.
- 4.25 The following chart shows the difference between actual 2014/15 employer contributions, derived from SF3 statistics<sup>9</sup>, and the common contribution rate specified in the fund's local valuation report. For the purposes of the following chart, the CCR is taken to be the sum of the standard contribution rate and any additional contribution rate in respect of deficit. Whilst we understand that there is a stepping process through which contributions move towards the recommended rates, we found that the relationship between the CCR and contributions actually paid by employers was difficult to interpret, regardless of which firm the fund in question is advised by.
- 4.26 This inconsistency makes it unnecessarily difficult for a reader to be able to understand the results of the valuation and to be able to interpret and compare those results with other funds. We understand that the CCR will no longer be required as a disclosure under revised regulations from 2016. However, we believe it is imperative that the primary and secondary rates that are required under new regulations should relate directly to the contributions recommended to be paid by the actuary (over a suitable period), and consistently reported, to enable comparisons to be made.

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<sup>9</sup> Actual contributions include lump sum contributions referred to in paragraph 4.19.



Chart 4.1: Average actual contributions vs. common contribution rates





### **Use of smoothed asset values**

- 4.27 20 of the 21 funds advised by Barnett Waddingham used smoothed asset values to calculate funding ratios in their 2013 actuarial valuations, where the smoothing period was the six month period from 1 January 2013 to 30 June 2013. This is not consistent with other funds who have used the actual market value of assets as at the valuation date of 31 March 2013.
- 4.28 In all cases the smoothed asset value was lower than the market value of assets at 31 March 2013. However we do not consider this to introduce bias because in other circumstances the opposite could be true and as mentioned in paragraph 4.44, Barnett Waddingham also set their discount rate according to prevailing market conditions over the six months straddling the valuation date.

### **Use of post valuation asset returns to calculate future contribution rates**

- 4.29 The 18 funds advised by Mercer took account of market conditions after the valuation date when calculating future contribution rates. All other funds used market conditions as at 31 March 2013. The reasoning for this approach given by Mercer is:

*“Since 31 March 2013 there have been significant changes in the financial market position. In particular there has been an increase in gilt yields, which underpin the assessment of the past service liability values and therefore the long term funding target. As the new contribution rates are effective from 1 April 2014, if required, it is appropriate to allow for this improvement as part of the stabilisation of contribution requirements for individual employers.”*

- 4.30 This tends to lead to lower contribution rates than they would have otherwise been.

### **Pension commutation assumptions**

- 4.31 Scheme regulations and HM Revenue and Customs (HMRC) rules allow members to commute a percentage of their pension, reducing the annual amount of pension they receive for a lump sum on retirement.
- 4.32 Regulations currently permit members to commute at a rate of £12 lump sum for each £1 reduction in pension, subject to HMRC limits on the maximum proportion of benefits that can be taken as a lump sum. As the discounted future life expectancy of a member is usually more than 12 years at retirement, commutation tends to be cheaper for the pension scheme. High assumed levels of commutation will therefore tend to reduce the assessed cost of liabilities already accrued and the assessed cost of future accrual.
- 4.33 LGPS benefits were restructured in 2008, with one of the changes being the removal of an automatic lump sum for any pension accrued post 2008. Many funds therefore have different assumptions for commutation of pre 2008 and post 2008 pensions and the assumptions are uniformly expressed as a proportion of the maximum allowable.

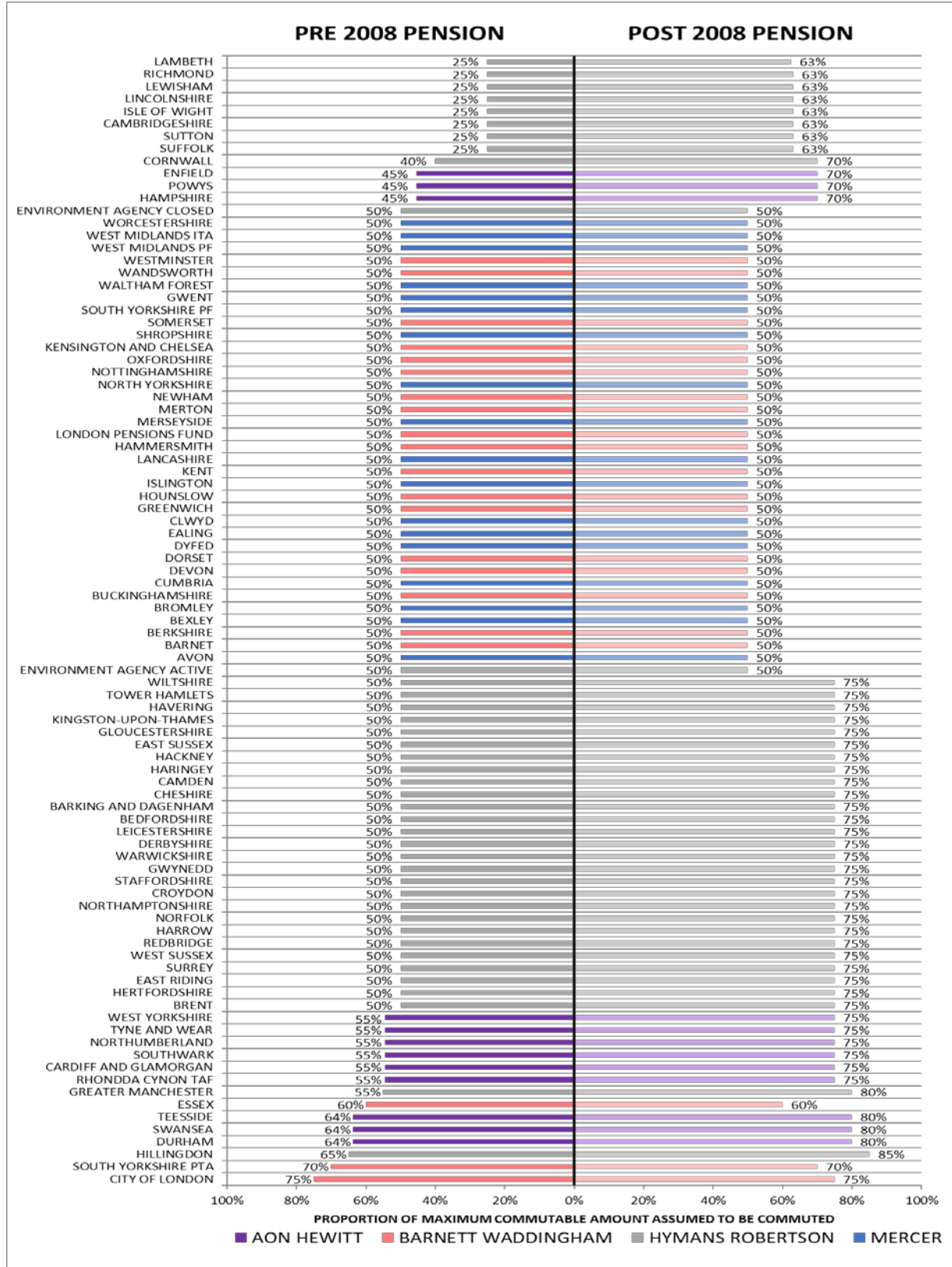




- 4.34 The following chart shows the differing assumptions between funds for the assumed proportion of maximum allowable pension commuted for both pre and post 2008 pension. For pre-2008 pension, the assumed proportion applies to the remaining maximum amount after the automatic lump sum has been taken.
- 4.35 Our interpretation of the chart is that there appears to be a common view amongst funds with the same actuarial advisor, but some inconsistency between actuarial advisors. Where this assumption is set based on local experience, this should be explained in the valuation report



Chart 4.2: Commutation assumptions for pre and post 2008 pension





### Long term mortality improvements

- 4.36 Mortality rates are expected to improve in the future, resulting in longer life expectancies. As benefits are expected to be paid for longer, improving life expectancy results in higher liabilities in respect of existing accrued benefits and higher contributions to cover the cost of future accrual.
- 4.37 There may be evidence of regional variation in mortality rates that justify funds having different assumptions, but it is perhaps more difficult to justify different assumptions for the future improvements in those mortality rates.
- 4.38 GAD's analysis shows that each actuarial advisor appears to have a common 'house' view on the extent of future mortality improvements. The table below shows the assumed rates of annual improvement in male mortality rates by advisor. In all cases the assumed improvement for female mortality rates is the same as those shown below.

*Table 4.1: Annual assumed rate of future mortality improvements*

ACTUARIAL ADVISOR	LONG TERM RATE OF MORTALITY IMPROVEMENTS (MALE)				TOTAL
	0.50%	1.00%	1.25%	1.50%	
AON HEWITT	0	0	0	12	12
BARNETT WADDINGHAM	0	1	1	19	21
HYMANS ROBERTSON	1	0	39	0	40
MERCER	0	0	1	17	18

- 4.39 Hymans Robertson appears to differ from the other advisors with an assumed rate of mortality improvement of 1.25% for the majority of the funds they advise.
- 4.40 The "outliers" in the table above are mature/closed funds:
- > South Yorkshire Passenger Transport Authority Pension Fund (*Barnett Waddingham, 1.00%*);
  - > City of London Corporation Pension Fund (*Barnett Waddingham, 1.25%*);
  - > Environment Agency Closed Fund (*Hymans Robertson, 0.50%*); and
  - > West Midlands Integrated Transport Authority Pension Fund (*Mercer, 1.25%*).

### Derivation of discount rates

- 4.41 At each actuarial valuation a fund, on the advice of its actuary, sets the discount rate or rates that will be used to value its existing liabilities and calculate the contributions that should be paid in order for the fund to meet the cost of future accrual of benefits, and to remove any existing deficit from the scheme.
- 4.42 The four actuarial advisors approach the derivation of these discount rates differently. The table below summarises the approach taken by one "typical" fund advised by each firm, and is taken from that fund's valuation report and FSS.



*Table 4.2 Discount rate methodology*

ACTUARIAL ADVISOR	DISCOUNT RATE	METHODOLOGY	2013 VALUATION ASSUMPTION
CARDIFF AND VALE OF GLAMORGAN PENSION FUND (AON HEWITT)	PAST SERVICE LIABILITIES AND FUTURE CONTRIBUTIONS	ASSET BASED RATE	5.6%
ROYAL BOROUGH OF KENSINGTON AND CHELSEA PENSION FUND (BARNETT WADDINGHAM)	PAST SERVICE LIABILITIES AND FUTURE CONTRIBUTIONS	ASSET BASED RATE	5.9%
NORTHAMPTONSHIRE PENSION FUND (HYMANS ROBERTSON)	PAST SERVICE LIABILITIES AND FUTURE CONTRIBUTIONS	GILT YIELDS + 1.6%	4.6%
SOUTH YORKSHIRE PENSION FUND (MERCER)	PAST SERVICE LIABILITIES	GILT YIELDS + 1.4%	4.6%
	FUTURE CONTRIBUTIONS	CPI + 3%	5.6%

- 4.43 Further details on the approach used are set out below, taken from the fund's valuation report and funding strategy statement

Cardiff and Vale of Glamorgan Pension Fund

- 4.44 The fund's valuation report says:

*"The funding strategy statement describes the risk based approach used to set the funding strategy and hence the discount rate. Under this risk based approach:*

- > The discount rate for long term scheduled bodies assumes indefinite future investment in assets similar to the Fund's holdings at the valuation date (allowing for any known planned changes to the long term investment strategy).*
- > The Fund assets are considered to have a better than evens chance of delivering investment returns in excess of the scheduled body discount rate."*

Royal Borough of Kensington and Chelsea Pension Fund

- 4.45 The fund's funding strategy statement says:

*"The discount rate that is applied to all projected liabilities reflects a prudent estimate of the rate of investment return that is expected to be earned from the underlying investment strategy by considering average market yields in the six months straddling the valuation date."*

- 4.46 The fund's valuation report says:

*"The discount rate – this is based on the expected investment return from the Fund's assets."*

Northamptonshire Pension Fund



4.47 The fund's funding strategy statement says:

*"This "discount rate" assumption makes allowance for an anticipated out-performance of Fund returns relative to long term yields on UK Government bonds ("gilts").....Given the very long-term nature of the liabilities, a long term view of prospective asset returns is taken. The long term in this context would be 20 to 30 years or more. For the purpose of the triennial funding valuation at 31 March 2013 and setting contribution rates effective from 1 April 2014, the Fund actuary has assumed that future investment returns earned by the Fund over the long term will be 1.6% per annum greater than gilt yields at the time of the valuation (this is the same as that used at the 2010 valuation)."*

4.48 The fund's valuation report says:

*"Although there has been a downward shift in the expected returns on risky assets since the 2010 valuation, we believe the expected returns in excess of the returns on government bonds to be broadly unchanged since 2010. Therefore, we are satisfied that an AOA<sup>10</sup> of 1.6% p.a. is a prudent assumption for the purposes of this valuation. This results in a discount rate of 4.6% p.a."*

South Yorkshire Pension Fund

4.49 The fund's funding strategy statement says:

*"The funding strategy adopted for the 2010 valuation is based on an assumed asset out-performance of 2% in respect of liabilities pre-retirement, and 1% in respect of post-retirement liabilities. Based on the liability profile of the Fund at the valuation, this equates to an overall asset out-performance allowance of 1.4% ahead of the LRP<sup>11</sup> p.a."*

4.50 The fund's valuation report says:

*"The discount rate adopted to set the Funding Target is derived by mapping projected cashflows arising from accrued benefits to a yield curve (which is based on market returns on UK Government gilt stocks and other instruments of varying durations), in order to derive a market consistent gilt yield for the profile and duration of the Scheme's accrued liabilities. To this an Asset Out-performance Assumption ("AOA") of 1.4% per annum is added to reflect the Fund's actual investment strategy.*

*"The financial assumptions in relation to future service (i.e. the normal cost) are not specifically linked to investment conditions as at the valuation date itself, and are based on an overall assumed real return (i.e. return in excess of price inflation) of 3% per annum."*

<sup>10</sup> AOA = Asset Outperformance Assumption

<sup>11</sup> LRP = Least Risk Portfolio. "a portfolio which closely matches the liabilities and represents the least risk investment position. Such a portfolio would consist of a mixture of long-term index-linked and fixed interest gilts"



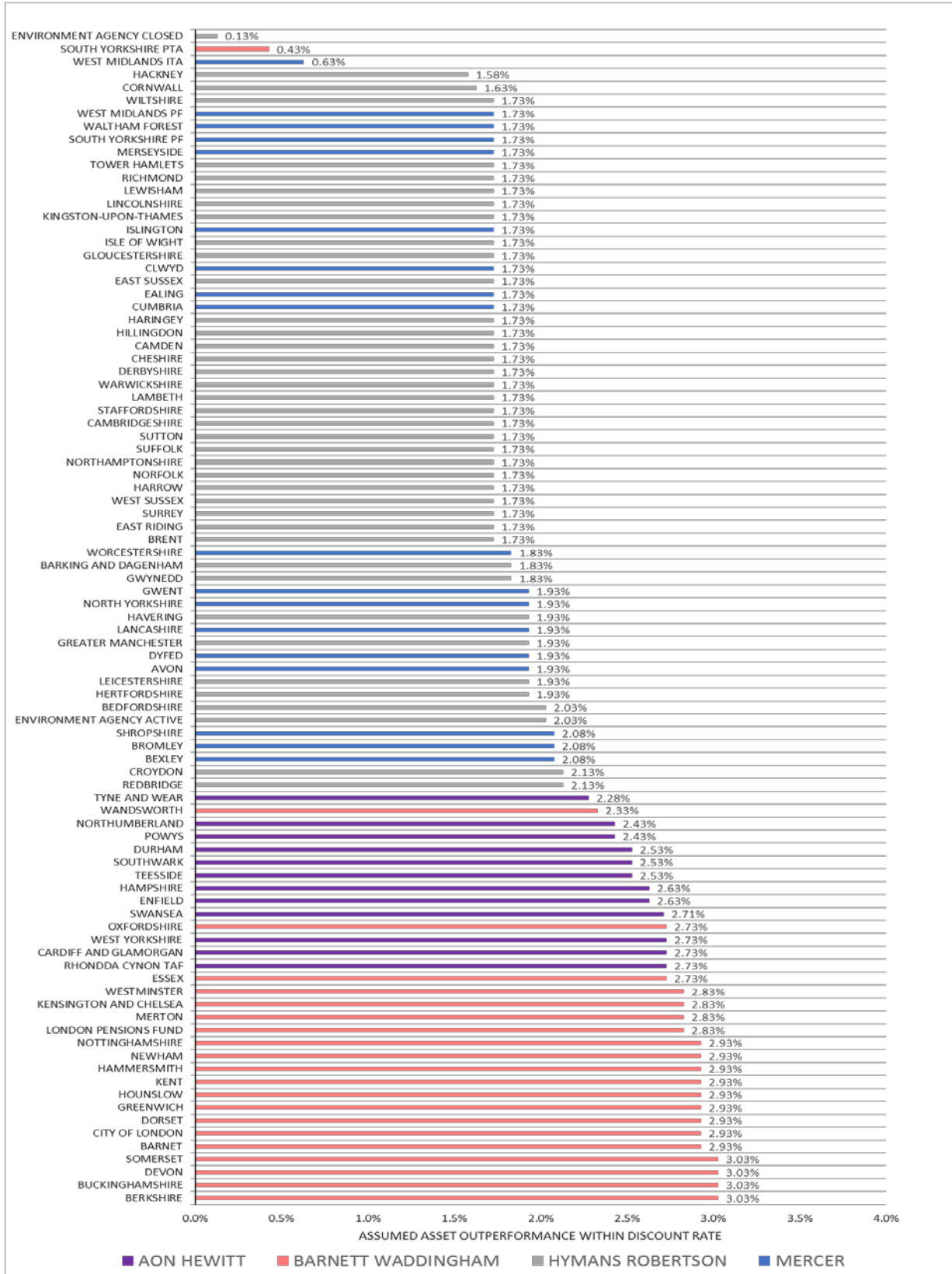
- 4.51 This review does not seek to comment on the methodologies the four firms use to derive their discount rates. Further we accept that the discount rate is the main vehicle for adding prudence, as required by regulations. We are pointing out that the methods are different, resulting in different levels of prudence being incorporated into the valuation results, and that this in itself is not explicit, which makes the results of the 2013 valuations unnecessarily difficult to compare for the reader. We also note that the production of standardised results for the 2016 valuations will help in this regard.

#### **Assumed asset out performance within discount rate**

- 4.52 In practice, each actuarial firm has its own method of assessing the appropriate discount rate. However, based on information provided, we considered it appropriate to break this down into the following four components (although we acknowledge this construct does not reflect the way some firms assess their discount rate assumption).
- > A risk free real rate of return (“RFR”)
  - > Assumed Consumer Price Index (“CPI”) inflation
  - > The excess of assumed Retail Price Index (“RPI”) inflation over assumed Consumer Price Index inflation
  - > The assumed asset performance over and above the risk free rate (which is a balancing item to get to the discount rate used, and therefore the main determinant of the variation in discount rates, and ultimately the level of prudence adopted)
- 4.53 Chart 4.3 shows the assumed asset out performance over and above the risk free rate, where the asset outperformance assumption (“AOA”) is calculated as the fund's nominal discount rate (“DR”) net of:
- > The RFR – the real 20 year Bank of England spot rate as at 31 March 2013
  - > Assumed CPI – as assumed by the fund in their 2013 actuarial valuation
  - > The excess of assumed RPI inflation over assumed CPI inflation (“RPI–CPI”) – as assumed by the fund in their 2013 actuarial valuation
- i.e.  $AOA = DR - RFR - CPI - (RPI - CPI)$ .
- 4.54 The chart is ordered by maximum assumed AOA within the advisory firm, as represented by the colour scheme. It indicates that the different rates are more likely to be the result of differing future expectations between the four actuarial advisors than, for example, different investment strategies. A higher AOA tends to lead to a higher discount rate and a lower value placed on the liabilities, other things being equal.
- 4.55 As we have noted, Mercer use a different discount rate to assess future contribution rates.



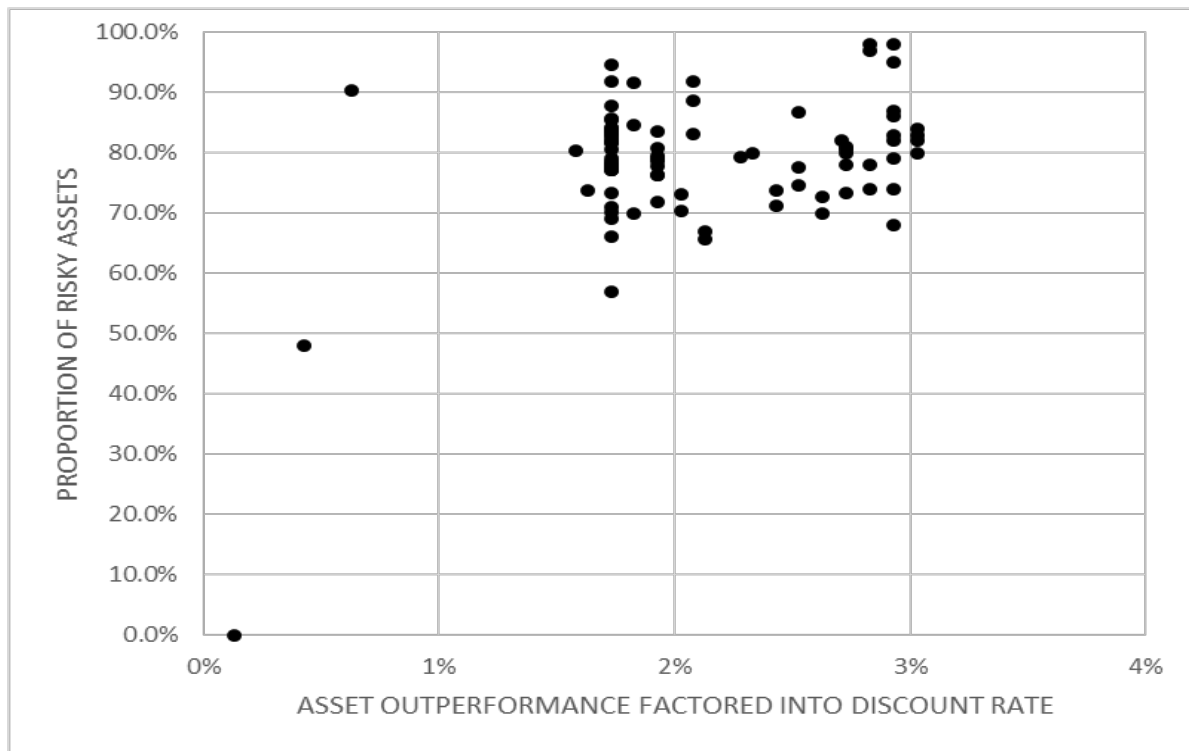
Chart 4.3: Assumed asset outperformance within discount rate





- 4.56 The large variation between funds in the implied level of asset outperformance over and above the risk free rate of return could be due to differing investment strategies between funds. For example, a fund invested solely in defensive assets, such as Government bonds, would expect a lower rate of return than a fund invested solely in return-seeking assets, such as equities. They would typically use a lower discount rate in their actuarial valuation to allow for this low-risk, low-return investment strategy.
- 4.57 The variation in asset outperformance could also be considered as a measure of the risk appetite adopted by the funds. We would encourage the actuarial firms to provide additional explicit discussion of this aspect in the 2016 and subsequent valuation reports to assist the reader in interpreting the fund's risk appetite.
- 4.58 The following chart shows that there is not a definite link between asset outperformance assumption and proportion of return seeking assets.

Chart 4.4: Asset Outperformance by proportion of return seeking assets





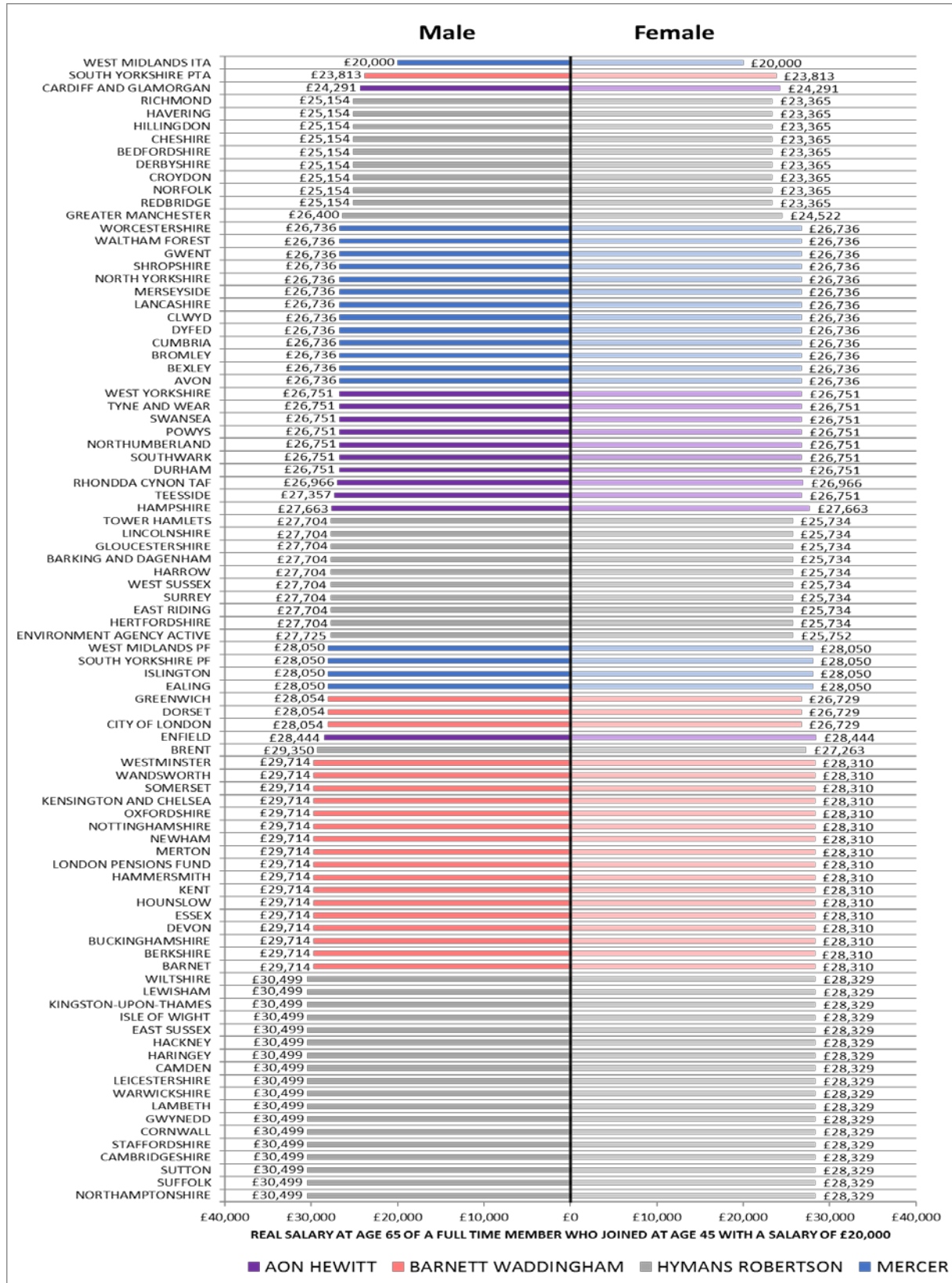


### Real earnings growth

- 4.59 There is considerable inconsistency in the assumptions of future real earnings growth, where real earnings growth consists of:
- > The excess of the assumed rate of earnings inflation over the assumed rate of CPI inflation
  - > Assumed promotional salary growth
- 4.60 A higher rate of real earnings growth (all other assumptions remaining constant) will lead to higher liabilities in an actuarial valuation as the majority of existing liabilities are linked to a member's final salary.
- 4.61 However, where contribution rates are quoted as a percentage of payroll (although this appears to be relatively rare) a higher rate of real earnings growth also means that future contributions, in money terms, will increase. A higher real earnings assumption may therefore have the effect of weighting contributions in respect of deficit further towards the future, when a fund's payroll is expected to be larger, rather than the present day.
- 4.62 The following chart shows the assumed salary at age 65, in 2013 prices terms, for a member who joined the fund aged 45 on 31 March 2013 with a salary of £20,000 per annum. Mercer combine their general salary increase and promotion salary increase assumptions into a single figure. The funds they advise have been included in the analysis on that basis. The Environment Agency Closed Fund is excluded as it has few or no active members.
- 4.63 The majority of funds have assumed different levels of promotional salary growth for male and female members, except 9 of the 12 funds advised by Aon Hewitt for whom a unisex promotional salary growth assumption is used.
- 4.64 Funds advised by Hymans Robertson also generally have a separate promotional salary growth assumption for full-time and part-time members whereas funds advised by other firms have a single assumption for all active members.
- 4.65 We would expect some regional variation in this assumption. We also understand that it is an area in which the local authorities may have some input, particularly in short term variations. We would encourage the actuarial firms to add explicit commentary about both short term and long term impacts of these factors on the assumptions adopted.



Chart 4.5: Projected real salary at age 65 for a member aged 45 on £20,000 pa 2013 prices



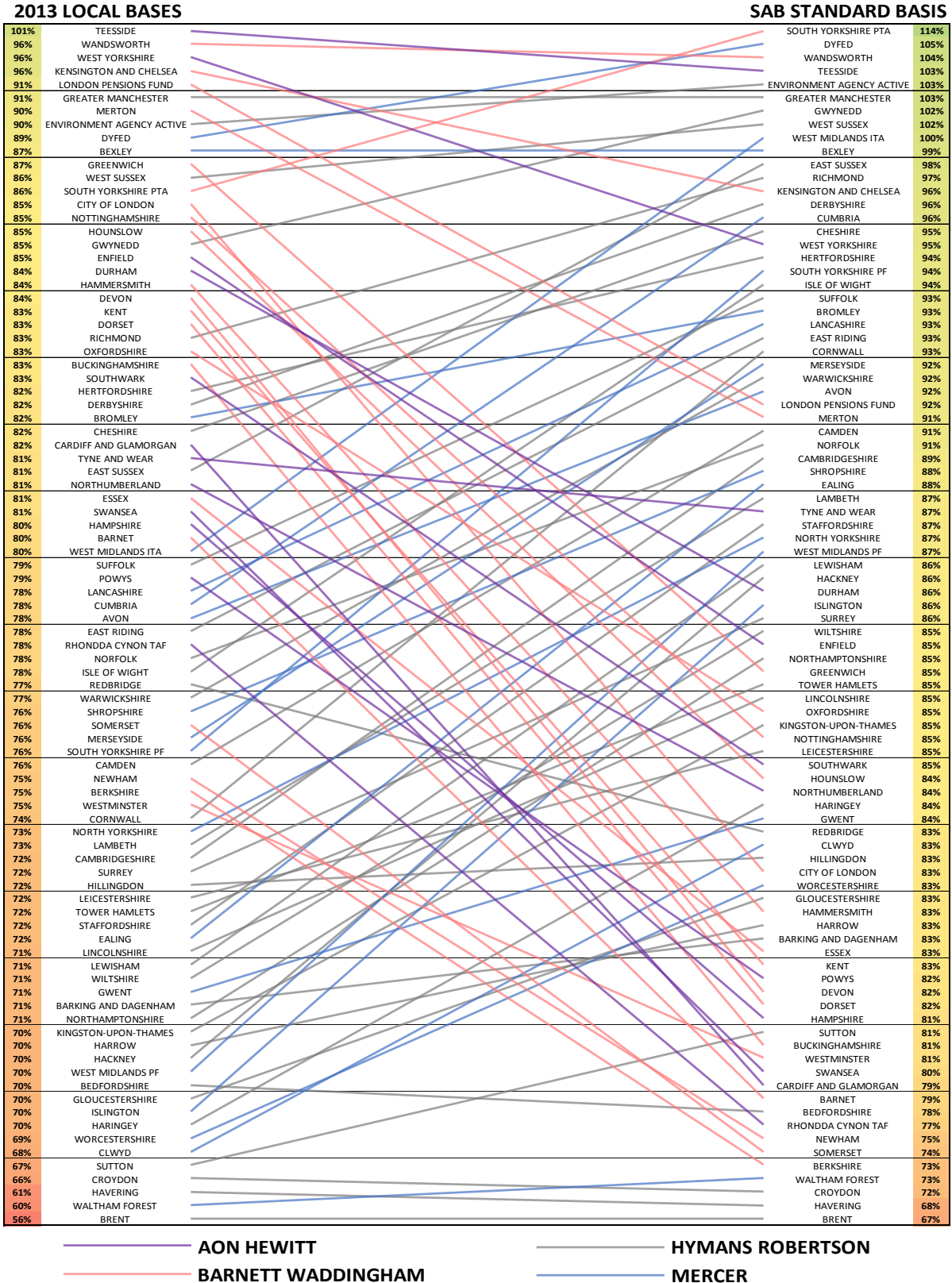


### Standardising the valuation results

- 4.66 Whilst we acknowledge that no presentation of results on a standardised basis was required as at 2013, the inconsistencies between funds identified above prevent meaningful comparison of local valuation results. As part of the next valuation cycle, as at 31 March 2016, it is expected that funds will produce results on a standardised set of assumptions as well as on their local assumptions, which is a positive step towards allowing the reader to be able to compare the results of valuations for different funds.
- 4.67 As this information is not available for the actuarial valuations as at 31 March 2013 GAD have adjusted the existing valuation results in order to approximately standardise them using a set of assumptions published by the SAB. This paper refers to this set of assumptions as the "SAB standard basis".
- 4.68 The SAB standard basis is reproduced in Appendix D.
- 4.69 Although the basis proposed by SAB for comparisons is not market consistent, it does allow a meaningful comparison to be made, as this is purely a relative ranking chart. Note that the SAB standard basis is not designed to be market consistent. The funding levels are therefore not intended to represent our opinion of how well funded a particular fund is, but rather to assist in identifying approximate ranking relativities.
- 4.70 The following chart shows how the relative ranking of funds by funding ratio (assets/liabilities) has changed as a result of the standardisation process. Funds at the top of the list are those that have the highest funding levels and those at the bottom of the list have the lowest funding levels.
- 4.71 The chart shows a clear pattern, with funds advised by Aon Hewitt and Barnett Waddingham tending to be lower ranked following the standardisation process, and funds advised by Hymans Robertson and Mercer tending to be higher ranked. This may be interpreted as an indication of differing levels of prudence adopted.
- 4.72 The extent of the changes in ranking between the two bases indicate that any comparisons based on the local fund valuation results, which are inherently inconsistent, could lead to incorrect conclusions.
- 4.73 The Environment Agency Closed Pension Fund has been excluded from the table as explained in paragraph 4.62.



Chart 4.6: Standardising local valuation results





## 5 Solvency

The conclusions of this chapter are that:

- > For the two closed Passenger Transport funds, we are not aware of any plan in place to ensure solvency. We would have engaged with the administering authorities to discuss the need for plans to be put in place had section 13 applied as at 31 March 2013.
- > We have also highlighted the ten funds with the lowest funding level on the Scheme Advisory Board (SAB) standardised basis. Whilst being poorly funded is not necessarily sufficient, by itself, to warrant a recommendation for remedial action had section 13 been in force, we may nevertheless have engaged with a number of these funds to better understand how they intend to improve their funding position.
- > We believe it is important that administering authorities and other employers understand the potential variability of contributions, so that they can understand the affordability of providing LGPS benefits to their employees.

5.1 Under section 13(4)(c) of the Act the Government Actuary (as the person appointed by the responsible authority) must, following an actuarial valuation, report on whether the rate of employer contributions to the pension fund (in this case an LGPS pension fund) is set at an appropriate level to ensure the solvency of the pension fund.

5.2 The explanatory notes to the Act state that solvency means that the rate of employer contributions should be set at "*such a level as to ensure that the scheme's liabilities can be met as they arise*". We do not regard that this means that a pension fund should be 100% funded at all times. Rather, and for the purposes of section 13, we consider that the rate of employer contributions shall be deemed to have been set at an appropriate level to ensure solvency of the pension fund if:

- > the rate of employer contributions is set to target a funding level for the whole fund (assets divided by liabilities) of 100% over an appropriate time period and using appropriate actuarial assumptions (where appropriateness is considered in both absolute and relative terms in comparison with other funds)

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, or if there is expected in future to be, no or a limited number of fund employers, or a material reduction in the capacity of fund employers to increase contributions as might be needed



5.3 In the context of the LGPS:

- > Our understanding based on confirmation from DCLG 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 will assume that local authority sponsors cannot default on their pension liabilities through failure
- > For funds with local authority employers, members' benefits are therefore dependent on the assets of the scheme and future contributions from employers including local authorities

It is therefore important that administering authorities and other employers understand the potential cost, so that they can understand the affordability of potential future contribution requirements.

**Volatility of contributions**

5.4 The future rate of employer contributions to ensure the solvency of the fund can be highly volatile, and dependent on economic conditions at the time of valuation and asset returns over the periods between valuations.

5.5 In a financial crisis scenario, similar to the 2008 financial crisis, we estimate that aggregate contributions would have to increase by around £1.7 billion per year assuming that some of the existing prudence in assumptions is relaxed. If the same level of prudence was maintained we estimate that contributions would increase by £4.9 billion per year (compared with the actual outturn from the 2013 valuations of £6.6 billion). Over the three years from 1 April 2016 to 31 March 2019 we estimate additional contributions of approximately £13.5bn would be required.

**Solvency considerations**

5.6 In assessing whether the conditions in paragraph 5.2 are met, we will have regard to:

**Risks already present:**

- > funding level on the SAB standard basis
- > the extent to which the fund continues to be open to new members. If the fund is closed to new members or is highly mature, we will focus on the ability to meet additional cash contributions
- > the ability of the fund to meet benefits due (without constraining investment policy)
- > the ability of tax raising authorities to meet employer contributions

**Emerging risks:**

- > the cost risks posed by changes in the value of the scheme liabilities (to the extent that these are not matched by changes to the scheme assets)



- > 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)
- > the proportion of scheme employers without tax raising powers or without statutory backing
- > how the risks above compare with the pensionable payroll of scheme employers, and the wider income of sponsoring employers as a whole

5.7 If the conditions in paragraph 5.2, taking into account the considerations above, are met then it is expected that the fund will be able to pay scheme benefits as they fall due.

### Solvency measures

5.8 In the 2016 section 13 report GAD is likely to use ten<sup>12</sup> measures across the two categories to assess whether the above conditions are met. In this 2013 dry run report GAD has only used six of these ten measures as the data required for the other four measures were not available within the necessary time frame. However, we have included all ten measures in the descriptions that follow for information purposes.

5.9 In the following table we set out the considerations with regards to risks already present and emerging risks, and map these to the likely measures:

*Table 5.1: Solvency measures*

Consideration	Measure Used
<b>Risks already present:</b>	
The relative ability of the fund to meet its accrued liabilities	<b>SAB funding level:</b> A fund's funding level using the SAB standard basis, as set out in Appendix D
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	<b>Open fund:</b> Whether the fund is open to new members
The proportion of scheme employers without tax raising powers or without statutory-backing	<b>Non-statutory members:</b> The proportion of members within the fund who are/were employed by an employer without tax raising powers or statutory backing

<sup>12</sup> Data were not available to populate all measures. We expect these data to be available for the section 13 work following the 2016 valuations.



Consideration	Measure Used
The ability of tax raising authorities to meet employer contributions	<b>Contribution cover<sup>10</sup>:</b> Actual contributions paid to the fund as a proportion of local authority income
<b>Emerging risks:</b>	
The cost risks posed by changes in the value of the scheme liabilities (to the extent that these are not matched by changes to the scheme assets) compared with the pensionable payroll of scheme employer	<b>Liability shock:</b> The change in average employer contribution rates as a percentage of payroll after a 10% increase in liabilities
How the risk above compares with the pensionable payroll of scheme employers, and the wider income of sponsoring employers as a whole	<b>Liability shock cover<sup>13</sup>:</b> The change in average employer contribution rates as a percentage of local authority income after a 10% increase in liabilities
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)	<b>Asset shock:</b> The change in average employer contribution rates as a percentage of payroll after a 15% fall in value of return-seeking assets
How the risk above compares with the pensionable payroll of scheme employers, and the wider income of sponsoring employers as a whole	<b>Asset shock cover<sup>11</sup>:</b> The change in average employer contribution rates as a percentage of local authority income after a 15% fall in value of return-seeking assets
The impact of non statutory employers defaulting on contributions	<b>Employer default:</b> 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
How the risk above compares with the pensionable payroll of scheme employers, and the wider income of sponsoring employers as a whole	<b>Employer default cover<sup>11</sup>:</b> The change in average employer contribution rates as a percentage of local authority income if all employers without tax raising powers or statutory backing default on their existing deficits

<sup>13</sup> Data were not available for these measures. We expect information to be available following the 2016 valuations.





- 5.10 We have included reference to tax payer-backed employers being of stronger covenant value than other employers. Data for this purpose are captured from SF3 statistics which labels employers with one of four categories. For this purpose we have taken categories 1 and 2 to be tax payer-backed, while categories 3 and 4 are not tax payer-backed. It is likely that some category 3 employers have council guarantees, bonds or other external security. However, we consider that this does not alter the general principle that the residual liability falls back to the tax payer-backed employers.
- 5.11 Each fund's score under each measure is colour coded, where:
- > **RED** indicates a potentially material issue that may contribute to a recommendation for remedial action in order to ensure solvency;
  - > **AMBER** is used to highlight a possible risk to sponsoring employers; and
  - > **GREEN** indicates that there are no material issues that may contribute to a recommendation for remedial action in order to ensure solvency.
- 5.12 It should be noted that these flags are intended to highlight areas for further investigation, but green does not indicate a clean bill of health and also that the fact we are not specifically suggesting remedial action does not mean that scheme managers should not consider actions.
- 5.13 Emerging risk measures require assumptions. We used market consistent assumptions for this purpose, details of which can be found in Appendix D. Details of the methods used to calculate scores under each measure and the criteria used to assign a colour code can be found in Appendix E.
- 5.14 In tables 5.2 (open funds) and 5.3 (closed funds) below we illustrate the results of the six solvency measures we have used for each of the individual funds in the LGPS where at least one measure of insolvency was amber or red. A fund with a large number of amber or red measures is one where the solvency of the fund may be at risk. Table F.1 in Appendix F sets out the results of each solvency measure for each fund in LGPS.
- 5.15 The rates shown in tables 5.2, 5.3 and F.1 are approximate, and are based on the information provided to GAD and/or publicly available. Although the calculations are approximate, we consider they are sufficient for the purposes of identifying which funds are a cause for concern. While they should not represent targets, these measures help us determine whether a more detailed review is required; for example, we would have concern where multiple measures are triggered amber for a given fund.



Table 5.2: Open funds with amber or red solvency measures

PENSION FUND	MATURITY (RANK)	SOLVENCY MEASURES					
		RISKS ALREADY PRESENT			EMERGING RISKS		
		SAB FUNDING LEVEL	OPEN FUND	NON-STATUTORY EMPLOYEES	LIABILITY SHOCK	ASSET SHOCK	EMPLOYER DEFAULT
BEDFORDSHIRE	5.9 (76)	78%	YES	4%	+3%	+3%	+0%
BERKSHIRE	5.9 (78)	73%	YES	6%	+3%	+3%	+1%
BEXLEY	7.4 (14)	99%	YES	7%	+4%	+6%	-0%
BRENT	6.9 (28)	67%	YES	0%	+4%	+3%	+0%
BROMLEY	6.8 (33)	93%	YES	2%	+4%	+5%	+0%
CAMDEN	8.6 (7)	91%	YES	9%	+5%	+6%	+0%
CROYDON	6.7 (37)	72%	YES	5%	+4%	+3%	+1%
EAST SUSSEX	6.3 (52)	98%	YES	2%	+4%	+5%	-0%
GREATER MANCHESTER	7.2 (22)	103%	YES	22%	+4%	+5%	-1%
GREENWICH	7.2 (21)	85%	YES	6%	+4%	+5%	+0%
HACKNEY	7.4 (15)	86%	YES	0%	+4%	+5%	+0%
HAMMERSMITH	8.9 (6)	83%	YES	6%	+5%	+6%	+0%
HARINGEY <sup>14</sup>	7.8 (11)	84%	YES	N/A	+4%	+5%	N/A
HAVERING	6.8 (34)	68%	YES	1%	+4%	+3%	+0%
ISLE OF WIGHT	7.4 (16)	94%	YES	3%	+4%	+5%	+0%
KENSINGTON AND CHELSEA	7.7 (13)	96%	YES	5%	+4%	+6%	-0%
LAMBETH	8.9 (5)	87%	YES	5%	+5%	+5%	+0%
LEWISHAM	7.8 (10)	86%	YES	16%	+4%	+5%	+1%
LONDON PENSIONS FUND	9.6 (4)	92%	YES	0%	+6%	+4%	+0%
MERSEYSIDE	7.3 (17)	92%	YES	13%	+4%	+5%	+0%
NEWHAM <sup>12</sup>	7.3 (19)	75%	YES	N/A	+4%	+4%	N/A
NORTHUMBERLAND	8.2 (8)	84%	YES	6%	+5%	+5%	+0%
OXFORDSHIRE	5.9 (75)	85%	YES	36%	+3%	+4%	+2%
RHONDDA CYNON TAF	6.1 (68)	77%	YES	5%	+3%	+3%	+0%

<sup>14</sup> The information required for the **Non-Statutory Employees** and **Employer Default** measures was not available in the SF3 statistics.



PENSION FUND	MATURITY (RANK)	SOLVENCY MEASURES					
		RISKS ALREADY PRESENT			EMERGING RISKS		
		SAB FUNDING LEVEL	OPEN FUND	NON-STATUTORY EMPLOYEES	LIABILITY SHOCK	ASSET SHOCK	EMPLOYER DEFAULT
RICHMOND	7.1 (24)	97%	YES	3%	+4%	+5%	-0%
SOMERSET	5.9 (80)	74%	YES	13%	+3%	+3%	+1%
TEESSIDE	6.8 (29)	103%	YES	13%	+4%	+5%	-0%
TOWER HAMLETS	8.1 (9)	85%	YES	0%	+5%	+5%	+0%
WALTHAM FOREST	7 (26)	73%	YES	5%	+4%	+4%	+1%
WANDSWORTH	7.7 (12)	104%	YES	1%	+4%	+6%	-0%
WEST SUSSEX	6 (72)	102%	YES	6%	+3%	+5%	-0%
WESTMINSTER	10.1 (3)	81%	YES	11%	+6%	+6%	+1%

*Table 5.3: Closed funds with amber or red solvency measures*

PENSION FUND	MATURITY (RANK)	SOLVENCY MEASURES					
		RISKS ALREADY PRESENT			EMERGING RISKS		
		SAB FUNDING LEVEL	OPEN FUND	NON-STATUTORY EMPLOYEES	LIABILITY SHOCK	ASSET SHOCK	EMPLOYER DEFAULT
SOUTH YORKSHIRE PTA <sup>15</sup>	25.2 (1)	114%	NO	100%	+5%	+3%	N/A
WEST MIDLANDS ITA <sup>13</sup>	25.1 (2)	100%	NO	100%	+5%	+7%	N/A

## Observations based on the solvency measures

### Open Funds

- 5.16 All funds should be aware of their solvency position to ensure that the relevant plans are in place to be able to pay benefits when they fall due, and employers are able to accommodate potential future increases in contributions.
- 5.17 This is particularly important in the case of mature funds. They should ensure that sufficient plans are in place to be able to pay benefits when they fall due in the environment of no future employer contributions.

<sup>15</sup> The **Employer Default** measure is shown as N/A because there are no statutory employers participating in these two closed funds.



- 5.18 We may also have engaged with a number of funds showing amber flags under the SAB funding level measure to better understand how they intend to improve their funding position had section 13 applied as at 31 March 2013.

**Adjustment to results for City of Westminster Pension Fund and London Borough of Waltham Forest Pension Fund**

- 5.19 As noted in paragraph 2.9, the purpose of the flags is to identify authorities with whom we might engage and potentially seek additional information from. The importance of clear disclosure in the valuation reports and accurate provision of data from the local authorities and the actuarial firms is highlighted by two examples from our analysis.
- 5.20 For the City of Westminster Pension Fund, we sought more information from the fund's actuary, clarifying the different actuarial basis that had been applied to some admission bodies, whereas our standard assessment methodology had relied on the same actuarial assumptions being applied for all participating employers in the fund except where this was clear from the valuation report. Based on this additional information, we recalculated our measures and have reported on this revised basis. The result was that Westminster raised only two amber flags.
- 5.21 For the Borough of Waltham Forest Pension Fund, following engagement with the fund's actuary, we were advised that a material proportion of members had seemingly been incorrectly classified in SF3 data returns. Upon receipt of data reflecting a revised classification of those members, we were able to conclude that Waltham Forest raised only one amber flag.
- 5.22 Following the 2016 valuation we will request more explicit information and our expectation is that this, together with having highlighted the need for clear and full disclosure and the production of liabilities on the SAB standard basis, will help to improve the overall quality of information provided.

**Closed Funds**

- 5.23 The Environment Agency Closed Pension Fund has not been shown in the table above and is excluded from the analyses that follow as the benefits payable and costs of the fund are met by Grant-in-Aid funding by the Department for Environment, Food and Rural Affairs as set out in the Compliance chapter.
- 5.24 Table 5.3 shows that both West Midlands Integrated Transport Authority Pension Fund and South Yorkshire Passenger Transport Authority Pension Fund raised a number of red/amber flags.
- 5.25 Our further investigation indicates that West Midlands Integrated Transport Authority Pension Fund has taken out a buy-in policy with an insurer to reduce its exposure to asset/liability shocks. Furthermore we understand that a guarantee has been obtained from the parent company of the employer. Both of these provide some additional assistance with solvency risk, but do not fully eliminate that risk.



- 5.26 The 2013 local valuation reports for both funds show that employers are paying additional lump sum contributions in order to meet their liabilities. However, the two transport authority funds are wholly dependent on the performance of a limited company.
- 5.27 As they are closed to new members, their payrolls are also decreasing, which may reduce the scope to be able to meet variations in contributions. This means that they are at risk of requiring outside funding in the future, which in turn may be uncertain.
- 5.28 Had section 13 been in force at the time, we would have raised concerns about the two transport authority funds. We would expect to have engaged with them to discuss their plans. Remedial action may have been recommended, depending on the outcome of that engagement. That remedial action may have included putting in place a plan to pay benefits when they fall due in the environment of no future employer contributions, and may have included a requirement to seek a guarantor (should there not already be one).



## 6 Long term cost efficiency

For the following two funds we would have engaged with the administering authority to investigate whether the aims of section 13 were met had section 13 applied as at 31 March 2013:

- > Royal County of Berkshire Pension Fund
- > Somerset County Council Pension Fund

A number of other funds have triggered flags. We do not consider that these funds are not meeting the aims of section 13 yet, but we would have encouraged these funds to provide further information regarding the relevant measures.

Neither of the closed Passenger Transport authority pension funds triggered long term cost efficiency flags.

We had some concerns regarding the actual contributions data underlying the contribution shortfall measure. A number of red flags were triggered that we have ignored due to these data concerns. We would have sought additional clarification

- 6.1 Under section 13(4)(c) of the Act, the Government Actuary (as the person appointed by the responsible authority) must, following an actuarial valuation, report on whether the rate of employer contributions to the pension fund (in this case an LGPS pension fund) are set at an appropriate level to ensure the long-term cost efficiency of the scheme, so far as relating to the pension fund.
- 6.2 The accompanying explanatory notes to the Act state that: "Long-term cost-efficiency implies that the rate must not be set at a level that gives rise to additional costs. For example, deferring costs to the future would be likely to result in those costs being greater overall than if they were provided for at the time."
- 6.3 We conclude 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.
- 6.4 In assessing whether the requirement for long term cost efficiency is met, we had regard to a number of absolute and relative considerations and constructed ten<sup>16</sup> measures to assess these considerations. Data were not available to populate all measures, although we expect data to be available for the section 13 work following the 2016 valuations.

<sup>16</sup> Data were not available to populate all measures. We expect these data to be available for the section 13 work following the 2016 valuations.



6.5 A relative consideration is primarily concerned with comparing LGPS pension funds with other LGPS pension funds. An absolute consideration is primarily concerned the fund on a standalone basis. In the following table we set out the relative and absolute considerations, and map these to the ten measures.

*Table 6.1: Long term cost efficiency measures*

Consideration	Measure Used
<b>Relative considerations:</b>	
The pace at which the deficit is expected to be paid off	<b>Deficit Repaid:</b> The proportion of deficit paid off in the first year, where the deficit is calculated on a standardised market consistent basis (SAB key indicator 2(i))
The implied deficit recovery period	<b>Deficit Period:</b> Implied deficit recovery period calculated on a standardised market consistent basis (SAB key indicator 3)
The investment return required to achieve full funding	<b>Required Return:</b> The required investment return rates to achieve full funding in 20 years' time on a standardised market consistent basis (SAB key indicator 4(i))
The pace at which the deficit is expected to be paid off	<b>Repayment Shortfall:</b> The difference between the actual deficit recovery contribution rate 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 market consistent basis
The pace at which the deficit is expected to be paid off	<b>Repayment Pace</b> <sup>17</sup> : The amount of deficit paid off over each future valuation period, as a proportion of the original deficit, and the number of years required to pay off 50% of the value of original deficit, where the deficit calculations are carried out on a standardised market consistent basis
<b>Absolute Considerations:</b>	
The extent to which the required investment return above is less than the estimated future return being targeted by a fund's investment strategy	<b>Return Scope:</b> The required investment return rates as calculated in required return (i.e. SAB key indicator 4(i)), compared with the fund's expected best estimate future returns assuming current asset mix maintained (SAB key indicator 4(ii))

<sup>17</sup> Data were not available to populate all measures. We expect these data to be available for the section 13 work following the 2016 valuations.



Consideration	Measure Used
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	<b>Deficit Extension:</b> The change in each fund's reported deficit recovery period from the 2010 valuation to the 2013 valuation
If there is a deficit, the extent to which the contributions payable are sufficient to cover the cost of current benefit accrual and the interest cost on the deficit over the current inter-valuation period	<b>Interest Cover:</b> A check on whether the annual deficit recovery contributions paid by the fund are sufficient to cover the annual interest payable on that deficit, where the deficit is calculated on a standardised market consistent basis
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	<b>Deficit Reconciliation:</b> <sup>18</sup> Confirmation that the deficit period can be demonstrated to be a continuation of the previous deficit recovery plan, after allowing for actual fund experience
If there is no deficit, the extent to which contributions payable are likely to lead to a deficit arising in the future	<b>Surplus retention</b> <sup>16</sup> : Confirmation that contributions from funds not in deficit are not likely to lead to a deficit arising in the future.

- 6.6 Four of these measures were selected from the KPIs defined by the SAB<sup>19</sup>.
- 6.7 The selected SAB measures have been augmented with six additional measures which we believe are appropriate in helping to assess whether the aims of section 13 are met.
- 6.8 Three of the measures (deficit extension, deficit reconciliation and surplus retention) were assessed based on the local funds' actuarial bases (i.e. no standardised basis was required), or are proposed to be assessed on these bases as part of the section 13 work following the 2016 valuations. However, because of the inconsistencies in approach highlighted in chapter 4, it was not possible to assess the other measures using the local valuations.

<sup>18</sup> Data were not available to populate all measures. We expect these data to be available for the section 13 work following the 2016 valuations.

<sup>19</sup> <http://committees.westminster.gov.uk/documents/s15058/11%20-%20Appendix%201%20-%20KPI%20Guidance.pdf>





- 6.9 For the remaining measures (deficit repaid, deficit period, required return, repayment shortfall, repayment pace, return scope and interest cover) we assessed the metrics on a standardised market-consistent basis (as set out in Appendix D), or we propose to do so as part of the section 13 work following the 2016 valuations. Although some could have been assessed on the SAB prescribed basis described in Appendix D, the non-market-related SAB basis is not appropriate for some of the comparisons between the funds, and so for consistency, we have adjusted this basis to make it market consistent.
- 6.10 Each fund's score under each measure is colour coded, where:
- > **RED** indicates a potentially material issue that may contribute to a recommendation for remedial action in order to ensure long-term cost efficiency of contributions;
  - > **AMBER** indicates a possible risk to the long-term cost efficiency of contributions; and
  - > **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 of contributions.
- 6.11 It should be noted that these flags are intended to highlight areas for further investigation, but green does not indicate a clean bill of health and also that the fact we are not specifically suggesting remedial action does not mean that scheme managers should not consider actions.
- 6.12 The Environment Agency Closed Fund was excluded from the analyses that follow, as the benefits payable and costs of the fund are met by Grant-in-Aid funding by the Department for Environment, Food and Rural Affairs as set out in the Compliance chapter.
- 6.13 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 fund actuaries and the data published by DCLG in their SF3 statistics<sup>20</sup>.
- 6.14 Although the calculations are approximate, we consider they are sufficient for the purposes of identifying which funds are a 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 concern where multiple measures are triggered amber for a given fund.
- 6.15 In the table that follows we illustrate the results of each long term cost efficiency measure for each of the individual funds in the LGPS where at least one measure of insolvency was amber or red.

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<sup>20</sup> <https://www.gov.uk/government/statistical-data-sets/local-government-pension-scheme-funds-local-authority-data-2014-to-2015>



6.16 The data that have been used to calculate the measures employed in this dry run report are set out in Appendix C while the methodology is set out in Appendix G. The complete table of funds and their long-term cost efficiency measures can be found in Appendix H.

*Table 6.2: Open funds with amber or red long term cost efficiency measures*

PENSION FUND	MATURITY (RANK)	LONG TERM COST EFFICIENCY MEASURES						
		RELATIVE CONSIDERATIONS				ABSOLUTE CONSIDERATIONS		
		DEFICIT REPAID	DEFICIT PERIOD	REQUIRED RETURN	REPAYMENT SHORTFALL	RETURN SCOPE	DEFICIT EXTENSION	INTEREST COVER
BERKSHIRE	5.9 (78)	4%	34	6%	-2%	-0.5%	-3	No
BROMLEY	6.8 (33)	>50%	2	3%	13%	3.1%	3	Yes
ENVIRONMENT AGENCY ACTIVE <sup>21</sup>	5.8 (85)	IN SURPLUS	IN SURPLUS	N/A	N/A	N/A	3	N/A
GWENT	5.9 (79)	13%	8	5%	5%	1.5%	5	Yes
SOMERSET	5.9 (80)	5%	24	6%	-1%	0.0%	0	No
STAFFORDSHIRE	6.2 (59)	23%	5	4%	9%	2.4%	5	Yes
WORCESTERSHIRE	6.3 (57)	14%	7	4%	7%	2.0%	2	Yes

### Observations based on the long-term cost efficiency measures

#### Open Funds

- 6.17 Table 6.2 shows those funds that would have given rise to concerns about the long-term cost efficiency of their contributions if the requirements of section 13 were in place as at 31 March 2013.
- 6.18 We will seek a confirmation that these data items are accurate for the section 13 review after the 2016 valuations. We expect that these data will allow us to calculate the average over a three year period, rather than just one year's contributions, to account for any phasing in of contribution rate changes.
- 6.19 Funds that give rise to concern are:
- > Royal County of Berkshire Pension Fund
  - > Somerset County Council Pension Fund

<sup>21</sup> Some measures are identified as N/A because the fund is in surplus on the market consistent basis.



- 6.20 No flags were raised under the surplus retention measure, so we have excluded this measure from table 6.2. At present, all the funds that were in surplus on the standardised market consistent basis were paying sufficient contributions into their funds, which resulted in an increase in the value of the surplus on the standardised market consistent basis.

#### **Adjustment to results for City of Westminster Pension Fund**

- 6.21 As noted in paragraphs 5.19 – 5.22 based on additional information, we recalculated our measures and have reported on this revised basis. The result was that Westminster raised no flags under long term cost efficiency.
- 6.22 Following the 2016 valuation we will request more explicit information and our expectation is that this, together with having highlighted the need for clear and full disclosure and the production of liabilities on the SAB standard basis, will help to improve the overall quality of information provided.

#### **Closed Funds**

- 6.23 No flags have been raised in respect of closed funds under long term cost efficiency, hence we have not shown a table in respect of closed funds.