

# **Discount Rates in the Local Government Pension Scheme**

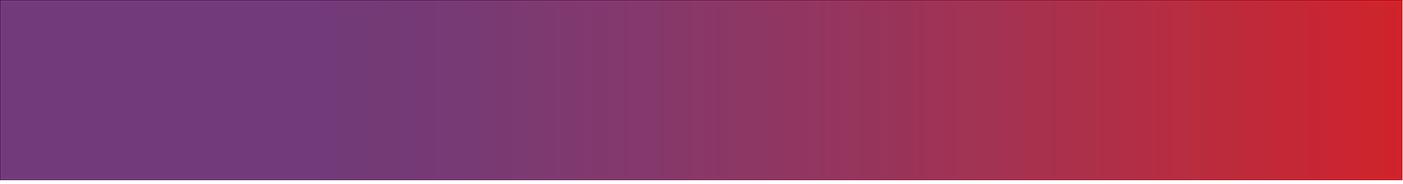
**An intergenerational fairness perspective**

**By Daryl Boxall**

**for the Intergenerational Foundation**



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The Intergenerational Foundation ([www.if.org.uk](http://www.if.org.uk)) is an independent, non-party-political charity that exists to protect the rights of younger and future generations in British policy-making. While increasing longevity is to be welcomed, our changing national demographic and expectations of entitlement are placing increasingly heavy burdens on younger and future generations. From housing, health and education, to employment, taxation, pensions, voting, spending and environmental degradation, younger generations are under increasing pressure to maintain the intergenerational compact while losing out disproportionately to older, wealthier cohorts. IF questions this status quo, calling instead for sustainable long-term policies that are fair to all – the old, the young, and those to come.

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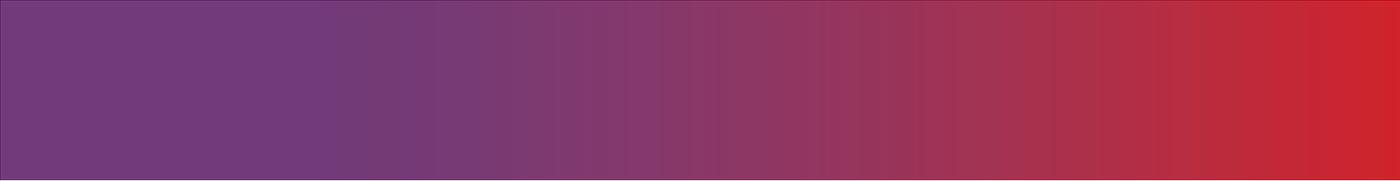
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## Foreword

The subject of pensions in general, and public sector pensions in particular, has never been far from the limelight in recent decades. As life expectancy has improved, and State pension ages have been increased to contain the cost of the State pension, so attention has turned to the cost of providing pensions for the millions of hard-working employees in the public sector – NHS staff, teachers, civil servants, and many more.

Local authority employees have sometimes been less subject to scrutiny than other groups because their key pension scheme – the Local Government Pension Scheme – is funded. That is to say, investments are built up to support the liability to pay pensions to these employees after their retirement. This is different from the State pension, and also the public sector pension schemes for the NHS, teachers and civil servants, where no funds are built up.

In this paper, Daryl Boxall examines current contribution rates for the Local Government Pension Scheme and asks whether they are adequate to meet the pension promises which have been made. He concludes that they are not, and that much of the burden of these pension promises is in fact being shifted to future generations of taxpayers.

With the imminent publication of the results of the 2019 actuarial valuation results for the Local Government Pension Scheme, this paper is an important and timely contribution to the debate over funding of this pension scheme, taken from the perspective of intergenerational fairness rather than simply questioning the generosity of the promises which have been made.

## Peter Thompson

**Actuary and former Chair, National Association of Pension Funds (now the Pensions and Lifetime Savings Association)**

# 1. Summary

This paper sets out the extent to which the value of the deficit in the UK's Local Government Pension Scheme (LGPS) is being misrepresented through systematic use of inappropriately high discount rates used to value liabilities.

The author estimates that the value of the LGPS deficit at the date of the last actuarial valuation, 31 March 2016, based on market consistent valuation principles, is £185bn compared to the published actuarial deficit at the same date of £38bn. The cost and funding risk of the additional £148bn is being forced on future generations.

At the current deficit recovery contribution levels of c.£2bn p.a., and taking a long-term view of asset returns, it will take 27 years to repay this deficit – much longer than the average working lifetime of most of the Scheme's current members – and does not include any shortfalls in relation to newly accruing benefits.

A more generationally fair alternative would be for the UK government to fund the LGPS deficit in a fiscally responsible way, recognising the value of the LGPS liabilities in a market-consistent manner, aligned with other government debt obligations, and restoring the shortfall in a reasonable timeframe to ensure this burden is not forced onto future generations.

However, this approach would have a stark impact on already stretched public finances, requiring a six-fold increase in the current level of deficit contributions from £2bn p.a. to c.£12bn p.a. which constitutes c.12% of the total local government revenue expenditure.

This paper recommends a range of remediation actions the government could take to alleviate the impact on future generations, including:

- **Close the LGPS to future accrual and create a new DC pension plan for LGPS staff;**
- **Encourage a higher level of transparency in relation to data and disclosure;**
- **Increase sharing of best practice between the LGPS and other industries with similar liabilities;**
- **Make intergenerational fairness an explicit criterion when assessing discount rate and funding policy for long-term government liabilities.**

## 2. Introduction

### a) Background to the Local Government Pension Scheme

The Local Government Pension Scheme (LGPS) provides pensions in retirement for a range of public sector workers, including local council staff, police, fire and rescue staff and education workers. The LGPS is one of the largest pension plans in the world with 5.6 million members and, as at 31 March 2016, combined assets of £217bn.<sup>1</sup>

Critically – and differently from other Public Sector pension schemes in the UK – the LGPS is a **funded scheme**, which means that the contributions collected from members and employers are invested in a ring-fenced fund with the sole purpose of meeting the promised pensions in the future. The combination of this ring-fenced pool of assets and the implied security of the UK government means that the LGPS is often regarded as the ultimate gilt-edged pension plan.

The LGPS is structurally administered in 91 separate funds,<sup>2</sup> each with its own **Administering Authority** – the body that is responsible for administering and managing that fund. Together in aggregate, the individual funds make up the Local Government Pension Scheme. Crucially, the benefits are the same in all 91 separate schemes.

While the Administering Authority is responsible for the management of the fund, there are over 14,000 employers that contribute to the LGPS.<sup>1</sup> There are two forms of employers:

**Scheduled Bodies** – employers that are explicitly required to offer membership of the LGPS to their staff, as set out in the LGPS Regulations 2013.<sup>3</sup> These are typically councils, colleges, universities or police and fire services, for employees that do not have entitlement to another public sector pension scheme.<sup>4</sup>

**Admission Bodies** – employers that do not automatically qualify for membership but are allowed to join if they satisfy the relevant regulatory criteria. These commonly involve private sector firms under public-private partnerships (PPPs) or non-government organisations (NGOs) that provide local services, where staff may have been transferred from the public sector under a Transfer of Undertakings (Protection of Employment), or “TUPE” transfer.

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<sup>1</sup> 31 March 2016 Actuarial Valuation Report: [https://www.lgpsboard.org/images/Valuations2016/2016\\_LGPS\\_actuarial\\_valuation.pdf](https://www.lgpsboard.org/images/Valuations2016/2016_LGPS_actuarial_valuation.pdf)

<sup>2</sup> There were 91 separate funds at the date of the 31 March 2016 Valuation – since then the South Yorkshire Passenger Transport fund has merged into the Greater Manchester Pension Fund, and the Richmond upon Thames and Wandsworth Funds have also merged.

<sup>3</sup> <http://lgpsregs.org/schemeregs/lgpsregs2013.php>

<sup>4</sup> For example, the NHS Pension Scheme or the Police Pension Scheme.



Section 62 of the LGPS Regulations 2013 sets out the requirement of the Administering Authority to obtain an actuarial valuation of the assets and liabilities of the respective Fund as at 31st March 2016 and triennially thereafter. These valuations are used to set **contribution rates** – the amount that each employer is required to pay into the scheme to cover its portion of the benefits being accrued.

Participation in the LGPS can be temporary for certain admission bodies – for example, a firm with a fixed-period contract with a local council would expect its staff to be admitted to the LGPS for the duration of the contract.

## **b) A history of modernisation**

The LGPS is a **defined benefit** scheme: this means that the formula for calculating the benefits paid to members in retirement is defined in advance and contractually agreed. It is this contractual agreement that makes defined benefit pensions highly prized by members and highly risky for the sponsoring companies; if members live longer than expected or there are insufficient assets to pay pensions, – the shortfall must be met by the employer. In recent years the formula for how LGPS benefits are accrued has changed several times in an attempt to modernise the Scheme and react to the changing cost of providing pensions, but the impacts have been widely criticised as being ineffectual.

Prior to 1 April 2008, LGPS members accrued 1/80th of their final salary<sup>5</sup> for each year they worked, plus a lump sum worth three times their annual pension. For example, someone with four years' service and a salary before retirement of £25,000 would have accrued an pension of:

$$1/80th \times 4 \text{ years} \times £25,000 = \text{£1,250 p.a.}, \text{ plus a cash lump sum on retirement of £3,750.}$$

In 2006, the Department for Communities and Local Government (DCLG) published a consultation on LGPS reform called *Where next? Options for a new-look Local Government Pension Scheme*. As a result of the consultation, with effect from 1 April 2008 the lump sum benefit was eradicated, and the accrual rate increase to 1/60th per year of service<sup>6</sup> to compensate. Under the new arrangement, the same member would have accrued a pension of:

$$1/60th \times 4 \text{ years} \times £25,000 = \text{£1,666 p.a.}$$

Part of this higher pension can be converted into a lump sum in return for a lower pension.

In March 2011, the Independent Public Service Pensions Commission (IPSPC) issued a report by Lord Hutton of Furness,<sup>7</sup> outlining recommendations for future reforms to the LGPS. The most material recommendation from the report was to replace accrual based on **final salary** with **career average salary**.

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<sup>5</sup> <https://www.lgpsmember.org/more/pre-2008.php>

<sup>6</sup> <https://www.lgpsmember.org/more/2008-2014.php>

<sup>7</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/207720/hutton\\_final\\_100311.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/207720/hutton_final_100311.pdf)

This was implemented under the Public Service Pensions Act 2013, and with effect from 1 April 2014 members accrue benefits equal to 1/49th of their salary for each year of service.<sup>8</sup>

Using a similar example as above where a member has four years' service, retiring on salary of £25,000, and had received pay increases of £1,000 p.a. in prior years, he or she would accrue the following pension (assuming 2% Cost of Living Adjustment in all years):

**Table 1: Example Career Average Pension Calculation**

Year	Salary	Pension Accrued	Cost of Living Adjustment	Total Pension Accrued
2015	£22,000	$1/49 \times £22,000 = £449$ p.a.	-	£449
2016	£23,000	$1/49 \times £23,000 = £469$ p.a.	$£449 + 2\% = £9$	$£449 + £9 + £469 = £927$
2017	£24,000	$1/49 \times £24,000 = £490$ p.a.	$£927 + 2\% = £19$	$£927 + £19 + £490 = £1,436$
2018	£25,000	$1/49 \times £25,000 = £510$ p.a.	$£1,436 + 2\% = £29$	$£1,436 + £29 + £510 = £1,975$
<b>Total Pension Accrued</b>				<b>£1,975</b>

In addition to the main members' benefits there is a generous surviving spouse's pension of 1/160<sup>th</sup> of final pay for each year of member's service.<sup>9</sup> Additional amounts are payable if the member dies within ten years after retirement and before age 75.

The changes suggested in the Hutton Report were deemed welcome from the perspective of member fairness: the career average approach was more beneficial to the average member at the cost of being less favourable to a small number of high-earners. However, as is demonstrated in the simple examples above, **the modernisation changes do not fundamentally change either the amount of benefits being accrued or the nature of the risk: the UK taxpayer still holds the ultimate funding risk of these benefits, regardless of whether they are determined based on final salary, or the average over a career.**

<sup>8</sup><https://www.lgpsmember.org/arm/already-member-how.php>

<sup>9</sup> <https://www.lgpsmember.org/toj/thinking-joining-how.php>

### c) Private sector actions on defined benefit pensions

It is worth comparing the changes to the LGPS with the response of the private sector to the same risks and cost increases borne by final salary pension schemes.

The early 2000s saw a large number of private sector schemes close their doors to new members<sup>10</sup> and future accrual – as few as 12% of schemes remain open to new members. Consider two comparable companies competing in the same industry: one has an obligation to repay the deficit of its defined benefit pension scheme, the other has fully funded its obligations and has no such requirement. All else equal, compared to its unburdened competitor, the company with the pension scheme deficit will face several challenges to competitiveness:

**Higher borrowing costs:** A pension plan deficit is a contractual liability and ranks pari-passu with other unsecured creditors in the event of a default. A firm with a significant deficit will face higher borrowing costs, as lenders recognise the recoverability of their capital is impaired by the claims of the pension scheme, and that pension contributions will be paid before interest payments.

**Drag on distributable profits:** Cash contributions required to reduce pension scheme deficits take precedence over payment of dividends, causing a direct drag on shareholder returns.

**Cost reductions:** In order to remain competitive in spite of the challenges mentioned above, many companies will need to cut costs elsewhere – staff salaries, inward investment are typically places where companies look to lower their costs in these events, so staff of deficit-laden firms can expect lower pay rises, and the company itself will be less able to innovate and grow in the future.

These increasing cost pressures and financial risks are well understood by board members, share and debt holders, so company management are strongly incentivised to maintain good financial discipline with regards to defined benefit pension schemes.

As a result, the vast majority of the private sector have moved their staff onto defined contribution pension arrangements, whereby the amount paid into a retirement account is guaranteed, but the benefits that can be purchased with the value of that account at the point of retirement are not.

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<sup>10</sup> PPF Purple Book 2018: [https://www.ppf.co.uk/sites/default/files/file-2018-12/the\\_purple\\_book\\_web\\_18.pdf](https://www.ppf.co.uk/sites/default/files/file-2018-12/the_purple_book_web_18.pdf)

There are some clear downsides to this as there is less certainty about income in retirement for members. This has been partly mitigated through the removal of compulsory annuitisation, and other product innovation as a result of the 2015 “Pension Freedom” changes. There is however a societal advantage, in that a defined contribution pension can never be over-promised or under-funded: if life expectancy increases and the associated cost of an annuity becomes more expensive, this cost is borne by the member rather than passed on to others.

#### d) Value to members and funding the LGPS

It is commonly expected that members of a pension scheme contribute towards their own retirement – these contributions are usually determined as a proportion of salary. Table 2 below shows the LGPS member contribution rates applicable from April 2018.<sup>11</sup>

**Table 2: LGPS member contribution rates**

Pensionable Salary	Member Contribution Rate
Up to £14,100	5.5%
£14,101 to £22,000	5.8%
£22,001 to £35,700	6.5%
£35,701 to £45,200	6.8%
£45,201 to £63,100	8.5%
£63,101 to £89,400	9.9%
£89,401 to £105,200	10.5%
£105,201 to £157,800	11.4%
£157,801 or more	12.5%

Compared to the 5% minimum contribution for staff under the government’s auto-enrolment scheme, NEST,<sup>12</sup> the LGPS contribution rates are clearly more expensive to members, but this is only one side of the value equation. What about the amount received in retirement? Consider the following example:

- 35-year-old male, looking to retire at age 65
- Current salary of £30,000 p.a. and can reasonably expect pay increases of 2.5% p.a. over his career

<sup>11</sup> <https://www.lgpsmember.org/toj/thinking-joining-how.php>

<sup>12</sup> All staff in the UK aged between 22 and state pension age, earning over £10,000 p.a. in the 2019/20 tax year must be enrolled in a pension plan. NEST is the government’s plan. Figure shown is minimum pension contribution from 6/4/2019 onwards.

- On retirement, receives an inflation-linked pension, guaranteed for 10 years, with 30% spouses' pension on death (i.e. similar benefits to those offered under the LGPS)
- Assume that post-retirement life expectancy is the UK average of 22 years. At death he is survived by a spouse who survives him for a further four years.

Table 3 shows the cost and benefits paid out under the LGPS and under the NEST defined contribution plan.

**Table 3: Cost and benefit comparison for LGPS and NEST**

	LGPS	NEST
Annual cost to member as % of salary	7.5%*	5%
Total cost over future working life	£105,900	£69,000
Pension pot accrued at the point of retirement	n/a	£117,000**
Annual pension at the point of retirement	£28,150***	£2,660****
Total pension received during retirement	£869,500	£82,500

\* Average over the member's working lifetime

\*\* Calculated using NEST Calculator<sup>13</sup>

\*\*\* Based on 1/49<sup>th</sup> accrual on career-average basis

\*\*\*\* Approximated for 30% spouse pension by pro-rata of 50% and single life annuity<sup>14</sup>

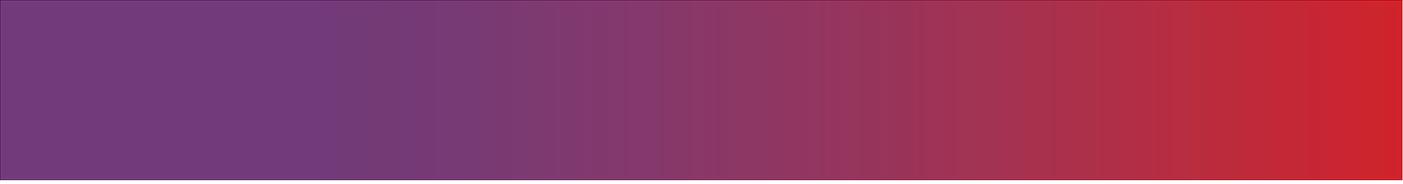
The example in Table 3 shows that LGPS members can pay more than 50% higher pension contributions than their counterparts in private sector defined contribution schemes; however, due to the generous defined benefit accrual, the pension received in retirement can be over ten times higher.

This is an incredibly generous benefit for LGPS members – but where does this extra money come from? Both of the projections above include some element of investment return; one could make the case that the LGPS is a wiser investor of funds than NEST, which has assumed a return of around c.3% p.a., but this only explains a relatively small part of the difference: increasing the assumed investment returns for NEST to 6% p.a. would increase the pension pot at retirement only to c.£170,000. So differences in investment returns are not the principal driver of the difference – so it must come from employer contributions in some form or another.

Member contributions are funded out of salaries, but their payroll is managed by local authorities. Employer contributions are paid either directly by the relevant local authority or are paid by private sector participants in the LGPS, but

<sup>13</sup> <https://www.nestpensions.org.uk/schemeweb/next/members/my-nest-pension/what-could-i-get.html>

<sup>14</sup> <https://www.moneyadviceservice.org.uk/en/tools/annuities>



funded from fees they charge to local authorities to provide services. In one way or another, all sources of contributions are funded (directly or indirectly) by local authorities, and their overall spending is principally funded from three sources:<sup>15</sup>

1. Central Government Grants – revenue support grant, funded through central government taxation (i.e. Income Tax, NI contributions, VAT, etc)<sup>16</sup>
2. Council Tax; and
3. Business rates retention.

Some councils supplement their revenue through investment income, rents, and other supplementary fees and charges (for example, permit parking fees), but local authority expenditure is mainly funded by the UK taxpayer.

**The pension promises that appear to be such an excellent benefit for LGPS members could be seen as a correspondingly expensive benefit provided by the UK taxpayer.** Because of the length of time that passes between accrual of benefits during a member's working life and the realisation of the cost of those benefits in retirement many years later, **the cost to taxpayers is spread over generations. Current taxpayers are funding contributions for benefits accruing now as well as meeting the cost of existing deficits in respect of benefits accrued in the past.**

This may sound relatively innocuous – after all, why incur a huge cost now if it can be spread into the future? But this has two significant negative consequences. Firstly, the concept of fiscal responsibility suggests that a government should raise revenue to cover its expenses as they accrue – financing day-to-day expenditure by taking on large amounts of long-term debt is not a sustainable way to run an economy.

Secondly, it violates the implicit generational contract that keeps society functioning. Society and the intergenerational contract work because people contribute to, and benefit from, society's resources at different points of their lives.

<sup>15</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/266886/LGFS\\_Guide.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/266886/LGFS_Guide.pdf) – DCLG A guide to the local government finance settlement in England, December 2013

<sup>16</sup> At £186bn, £130bn and £129bn respectively, Income Tax, NI and VAT contributed almost 75% of total UK tax revenues in 2017/18: <https://www.gov.uk/government/publications/hmrc-annual-report-and-accounts-2017-to-2018/hmrc-annual-report-and-accounts-2017-to-2018-executive-summary>



People are happy to be net contributors at certain points in time, under the implicit trust that they may benefit in the future when they need to. Considering LGPS pensions in this context, it is clear that the implicit contract is broken: future generations of taxpayers shoulder the burden of paying generous pensions which they are highly unlikely to receive.

## e) Valuation of pension liabilities

It is important first to acknowledge a defined benefit (DB) pension is a complex liability and calculating a value for one is not a trivial exercise. It involves long-term predictions of complex and volatile financial and demographic metrics over long time periods.

The most critical assumptions for valuating liabilities are:

**Discount Rate:** Money placed on deposit earns interest – the longer it is on deposit the more it earns. This is the “time value” of money. As a result, the amount of money required to be put aside today to cover payments due in the future can be reduced by the amount of interest that money will earn in the interim. The amount of interest assumed is called the Discount Rate.

**Mortality:** Benefits are payable for the life of the member and any surviving spouse. Assumptions about life expectancy are required to calculate how long benefits are likely to be in payment.

**Inflation:** Pensions increase with inflation, so it is important to make an assumption about long-term levels of inflation to assess the future value of payments.

**Salary Increases:** The accrual of benefits is linked to salaries, so it is important to understand the level of future salary increases as this impacts the level of pension in retirement.

All of these are ultimately unknowable at the time the valuation is carried out, and will be impacted by economic markets and government policy over long time periods. The true cost of providing pensions can't be known with certainty until the death of the very last member.

Estimates for these metrics can be made from a combination of market data and expert judgement. Table 4 below shows a comparison of key assumptions<sup>17</sup> between the LGPS 2016 Actuarial Valuation<sup>18</sup> and data for private sector DB Schemes with a similar valuation date.<sup>19</sup>

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<sup>17</sup> Salary increases have not been shown here as these are highly specific to the sponsor of the scheme, and it is difficult to draw a direct comparison.

<sup>18</sup> Source: [http://lgpsboard.org/images/Valuations2016/2016\\_LGPS\\_actuarial\\_valuation.pdf](http://lgpsboard.org/images/Valuations2016/2016_LGPS_actuarial_valuation.pdf)

<sup>19</sup> Source: The Pensions Regulator (TPR) Scheme Funding Statistics 2018: <https://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/scheme-funding-2018.ashx>. Tranche 11 refers to Schemes with actuarial funding dates between 22 September 2015 and 21 September 2016.

**Table 4: Comparison between assumptions – LGPS 2016 Actuarial Valuation and private sector data**

Assumption	LGPS 31 March 2016	Pension Regulator Scheme Funding Results
Discount Rate	4.4%	3.2%
Mortality		
Life Expectancy for Male aged 65	87.7	87.6
Life Expectancy for Female aged 65	90.0	89.6
CPI Inflation	2.2%	2.1%*

\*See Footnote<sup>20</sup>

There are some small differences in inflation and life expectancy assumptions between the private sector and the LGPS; however, the main difference arises in the discount rate used to value the liabilities – for a given future cashflow, a higher discount rate means a lower present value of liability.

## f) Discount Rates: An art or a science?

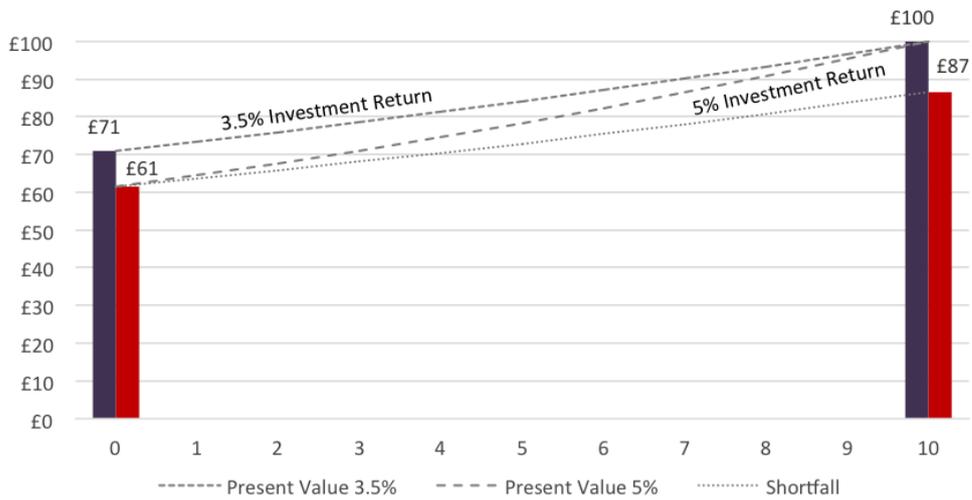
In order that local authorities can reasonably plan and budget their expenditure, it is helpful for actuaries to convert an uncertain future funding position into stable contribution rates.

Given this, and the requirement to establish a well-funded plan for members, actuaries usually employ a certain amount of prudence in their assumptions and err on the side of caution – better this than employers who can't plan their expenditure, or who have wildly fluctuating fund valuations. However, this approach introduces some subjectivity to the choice of the discount rate.

Chart 1 demonstrates the issues caused when an overly optimistic discount rate is not borne out in practice. Considering a cash obligation of £100 due in 10 years' time, applying a discount rate of 5% would require £61 set aside today in order to meet the obligation. Using a lower discount rate of 3.5% would require a higher amount of £71 to be set aside today to meet the same future payment.

<sup>20</sup> The Consumer Price Index (CPI) is the main measure of inflation in the LGPS. There are very few CPI-linked instruments, so it is common to estimate CPI relative to the Retail Price Index (RPI), allowing for the long-term gap between the two measures. On average across the four actuarial firms that produce valuations for the LGPS funds, the average CPI-RPI gap is 1.0%. This has been applied to the average RPI rate shown in the TPR Scheme funding results to estimate the equivalent CPI measure for comparison purposes.

**Chart 1: How discount rates can contribute to deficits**



So if we were to set aside £61 in expectation of 5% investment returns, but the returns we experience are lower, what happens? We gather less interest than expected and arrive at a shortfall of £13 by the time we expect to pay the liability; we have underfunded our obligation and need to fund the shortfall when it is due to be paid, rather than when the liability is created.

The debate around the correct approach to calculating discount rates is a common and divisive topic. Broadly speaking, there are two schools of thought on the matter:

### 1. Discount rate set with reference to the asset portfolio

The amount in cash needed to be set aside today in order to meet a future obligation depends on the interest rate that a cash deposit can earn until the obligation needs to be paid.

If you were to invest in an asset with a higher return, for example equities which I expect to return 6% p.a., then if that comes true I clearly needed to have set aside less money now than if I were to invest the same deposit in 10 year Gilt yielding 1.3%.

### 2. Discount rate set independently of the asset portfolio

A liability is a promise for future payment. Changing the assets which are set aside to meet this promise doesn't change the nature of the promise itself.

**The vital piece missing from this approach is risk. An investment in equities might give you a higher expected return, but this is compensation for additional risk taken on. Use of an asset-based discount rate implicitly links the risk of the underlying assets to the ability to meet the cash flow in the future. For example, if the median expected return on equities is 6% p.a., and this is the discount rate used to value the liabilities, there is a 50% probability of the depositor not being able to meet the future payment in full.**

Under this approach, actuaries adopt an approach called “market consistency” to value complex liabilities: where there is no observable price, they look for interest rates on traded assets (or a combination of assets) that have comparable features and risks, and use this to apply a comparable value to the liability.

So which approach is correct? There is lively debate around this topic, but one way is to consider how the beneficiary values their pension promise. It is highly unlikely that LGPS members view the likelihood of receiving their pension as being tied to performance of risky assets. Rather, an employee with an LGPS pension will likely view it as being *guaranteed* to be met, as it has the backing of the UK government. Using the market-consistent approach, they would therefore value their pension asset using a return comparable with the UK government’s other long-term obligations, e.g. UK Gilt rates.

Furthermore, the consensus approach in other industries concerned with the valuation of similar liabilities, such as private sector defined benefit plans and the insurance industry, has shifted towards a market-consistent approach in recent years.

In the private sector, many pension plans have adopted a liability-driven investment approach to matching their liabilities with comparable assets (i.e. government bonds and interest rate / inflation swaps); this necessitates that you value liabilities on a market consistent basis. In addition, accounting metrics specified by International Financial Reporting Standards (IFRS) used by firms to value their pension liabilities stipulate a discount rate based on “high quality” bonds – recognising that pension payments are bond-like in nature and that there is a reasonably low possibility of them not being paid, tied to the bankruptcy of the sponsoring employer.

In the insurance industry most valuation metrics have shifted to be based on long-term low risk interest rates such as gilts or interest rate swaps,<sup>21</sup> with some adjustments to match the characteristics of the liabilities – most notably for the regulatory balance sheet under Solvency II and the new accounting metrics for insurance, IFRS 17.

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<sup>21</sup> An interest rate swap is a contract to exchange a payment based on a fixed interest rate for one based on a variable rate. They are collateralised and considered low risk, not dissimilar to government debt.

**In this regard, the LGPS is an outlier in its approach to setting discount rates** – it still adheres to the “artistic” school of thought, where consensus in other industries has moved toward the “scientific”. **The impact of this is that the government recognises a much lower liability on the national balance sheet than if the same liabilities were held in the private sector or an insurance company. So where does this mismatch in valuation go? Quite simply, it is pushed out in time, to be paid by future generations.**

## g) Current funding position of the LGPS

The LGPS is currently in deficit. At the 2016 Actuarial Valuation it reported assets of £217bn and liabilities of £254bn – this leaves a funding deficit of £38bn.

This deficit has arisen from several sources in the past. Key amongst these are:

- **Interest Rates:** Discount rates are set with reference to long-term government borrowing rates – plus an addition relating to the expected return of assets. Long-term interest rates have fallen fairly consistently since the mid-1980s<sup>22</sup> and as a result the present-day value of pension liabilities has increased considerably.
- **Longevity:** Life expectancy has increased significantly since the 1970s<sup>23</sup> as these benefit promises have accrued. As a result, the contribution rates set at the time were far too low to fund the cost of providing pensions required in the future.
- **Asset Performance:** The LGPS schemes have invested heavily in riskier assets in order to generate higher returns. Over certain periods of time where assets outperform expectations this approach has been beneficial, but there are periods of time where funding has dramatically fallen as a result of adverse market movements.

With the benefit of hindsight, we can say that certain assumptions made in the past meant that insufficient contributions were paid in at the time. Deficits exist today through the build-up of these underfunded historic promises, but given the complexity of liabilities and the interdependencies across the factors that influence their valuation, it is difficult to attribute exactly how they have arisen.

Furthermore, as these events occurred in the past there is little recourse available to restore them from the correct sources. Instead, contributions must be paid in the present, by today’s taxpayers, in respect of benefits that were underfunded in the past.

<sup>22</sup> <https://data.oecd.org/interest/long-term-interest-rates.html>

<sup>23</sup> Life Expectancy at age 65 England and Wales, 1841 to 2011: <https://www.ons.gov.uk/peoplepopulationandcommunity/births-deathsandmarriages/lifeexpectancies/articles/howhaslifeexpectancychangedovertime/2015-09-09>

### 3. Covenant

One key rationale in support of the higher discount rates used in the LGPS has been in relation to the strength of covenant.

The Pensions Regulator defines covenant between a Pension Scheme and the employer to be “the extent of the employer’s legal obligation and financial ability to support the Scheme now and in the future.” This is crucial for trustees to assess:

- The amount and timing of contributions: Trustees need to work with the sponsoring employer to assess a fair balance of the use of profits between internal investment, incentives to staff, payments to financial stakeholders such as bond and shareholders, and to the Pension Scheme. It would be in nobody’s best interest for the Pension Scheme to demand an unaffordable level of deficit contributions, which might deprive the company of crucial internal investment. However, Trustees have ultimate responsibility to the Scheme members, and a profitable company paying outsized shareholder dividends, or taking risky strategic gambles while the Pension Scheme remains in deficit, is not likely an appropriate balance either.
- The appropriate amount of risk in the Scheme’s investment strategy: An employer with a comparatively weak covenant may raise concerns to the Trustees about its ability to make significant contributions to the Pension Scheme in the future. In this case, it would be sensible for the Trustees to pursue a lower-risk investment strategy to avoid the scenario where risky investments have underperformed and the employer is not able to make good on the additional shortfall. Vice versa, an employer deemed to have a strong covenant could potentially support a higher-risk investment strategy, as it may be in a healthier position to make additional one-off cash payments in the future if riskier investments don’t bear fruit.

There are some admission bodies to the LGPS where a relatively weak covenant may be an issue, but ultimately the UK government bears financial responsibility for the LGPS, so the covenant is very strong. After all, the government has the ability to increase tax revenues in the future to cover any shortfalls arising.

Whilst this is correct, the question should be whether it is fair to impose it on them. The strength of the UK government covenant comes from its ability to raise tax revenues for future generations – this being used as a rationale to support lower cash contributions being paid in the present (thus increasing the likelihood that the funding burden is passed on to future generations) feels like an unfortunate self-fulfilling prophecy.

## 4. A fairer assessment of LGPS liabilities

We have explained above that the LGPS discount rates are set with reference to the Fund’s expected asset returns, which is at odds with other industries with the same liabilities (private sector pensions and insurance), who place more credibility in a market-consistent valuation. We can however take the results of the 2016 LGPS Actuarial Valuation and calculate an equivalent liability value more aligned with a market-consistent valuation. We present results based on two views:

### Gilt-based discount rate:

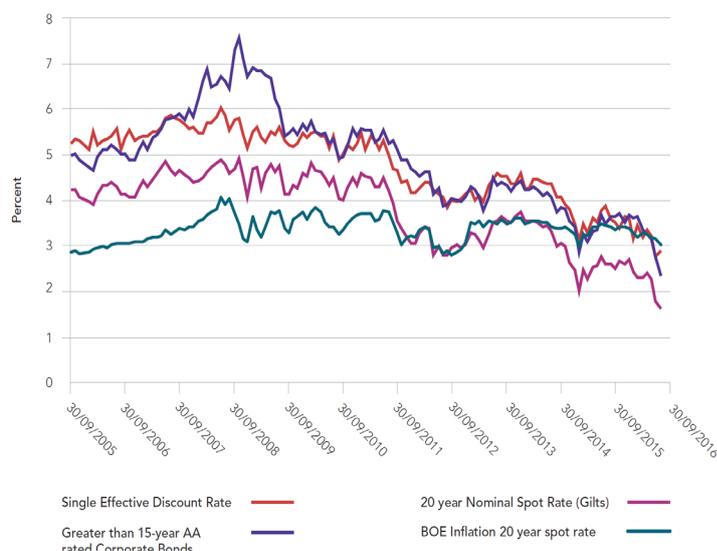
This is aligned with a market-consistent view, valuing the liabilities on a similar basis to other debts owed by the UK government. Gilt rates implicitly reflect the market’s view of the security of the UK government as a long-term borrower.

### Private sector equivalent rate:

This approach is a proxy for how the private sector may value the same liabilities. It is not a pure market-consistent view, as private sector benefits have a higher perceived risk of not being paid, as a company is more likely to go bankrupt and not being able to make good on a deficit – and the discount rates used commonly reflect this higher risk. However, this represents a useful metric for comparison purposes.

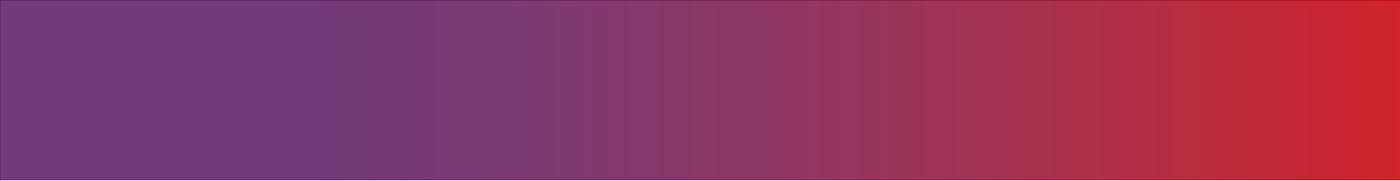
In the UK, The Pensions Regulator (TPR) collects data comparing the private sector single effective discount rate to a number of financial market reference yields. Chart 2 is reproduced from TPR data.<sup>24</sup>

**Chart 2: Median nominal single-equivalent discount rate compared with various market reference rates**



Source: Reproduced from Figure 8 TPR Scheme Funding Statistics, June 2018

<sup>24</sup> <https://www.thepensionsregulator.gov.uk/-/media/thepensionsregulator/files/import/pdf/scheme-funding-2018.ashx>



Since 2009, the median discount rates used in private sector funding valuations have tracked closely with the yield on the over 15-year AA rated corporate bond index. Accordingly, in our results we have assumed that the over 15-year AA rated corporate bond index yield is a suitable market proxy for the private sector equivalent discount rate.

When calculating an appropriate discount rate, it is critical to reflect the timing of liability cashflows. Under normal market conditions, long-term interest rates are higher than short-term interest rates – investors are compensated for parking their money for longer periods of time. This also means that when valuing liabilities, cash flows that are more distant in the future are discounted at higher rates.

It is possible to calculate the “duration” of either an asset or a liability – in this context the duration is the timing of a single cashflow, which is a representative of the average payment timing. Duration also gives a way to understand the sensitivity to changes in interest rate – for a liability with a duration of 20 years, a change in discount rate of 1% changes the valuation by c.20%.

In order to calculate liability durations, data was taken from the actuarial valuation reports from each of the 91 individual LGPS Funds<sup>25</sup> covering:

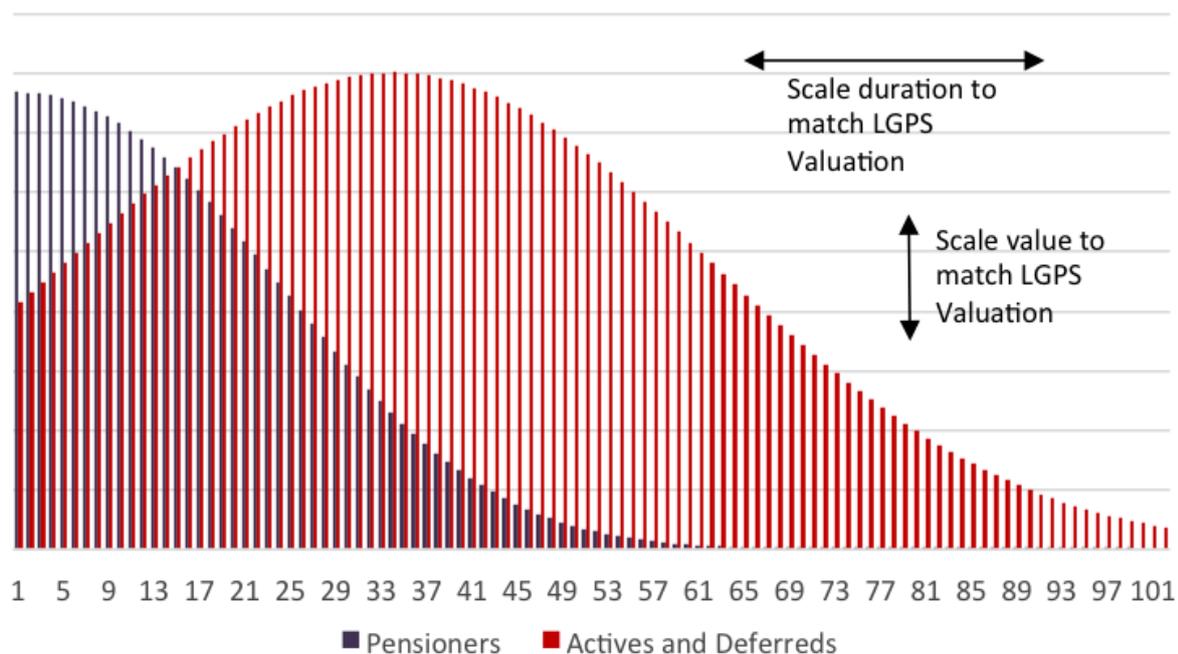
- Asset and liability values as at 31 March 2016
- Liabilities by member class (Active / Deferred / Pensioner)
- Asset allocation by asset class
- Discount rate, CPI and salary increase assumptions
- Sensitivities to changes in discount rates

The various individual Fund valuation reports use a range of methods of presentation to show sensitivities to changes in discount rates; change to the Fund liability value, changes to the deficit value, or changes in the asset/liability ratio. Where these sensitivities are shown in terms of deficit or funding ratio, it is not always clear whether the offsetting impact of assets is reflected. In these cases, the implied liability duration both including and without asset sensitivity has been calculated, and judgement has been applied to assess which is the most appropriate value, based on the likely ranges established from the other LGPS Funds.

A set of representative pension fund cashflows has been created, which have the characteristics of pensions in payment and pre-retirement members, including the effect of inflation. As shown in Chart 3 below, the pattern of these cashflows is adjusted to match the calculated duration of the individual LGPS Funds and scaled so that the discounted value of cashflows match the published LGPS actuarial valuation. These scaled cashflows are then determined to be a reasonable proxy for the expected cashflows of the individual LGPS Funds. The proxy cashflow approach is a more accurate estimate of the impact of changes in discount rates to the liability value, compared to using a single representative cashflow at the liability duration.

<sup>25</sup> <http://www.lgpsboard.org/index.php/fund-valuations-2016>

**Chart 3: Generating representative Scheme cashflows**



New valuation discount rates are then applied to these representative cash flows, using the Gilt Basis and Private Sector Equivalent Basis outlined above, with the following method:

**Gilt Basis:**

A discount curve is taken from the Bank of England UK nominal government liability data as at 31 March 2016, for a range of maturity points. The interest rate is taken appropriate to the duration of each individual Fund.

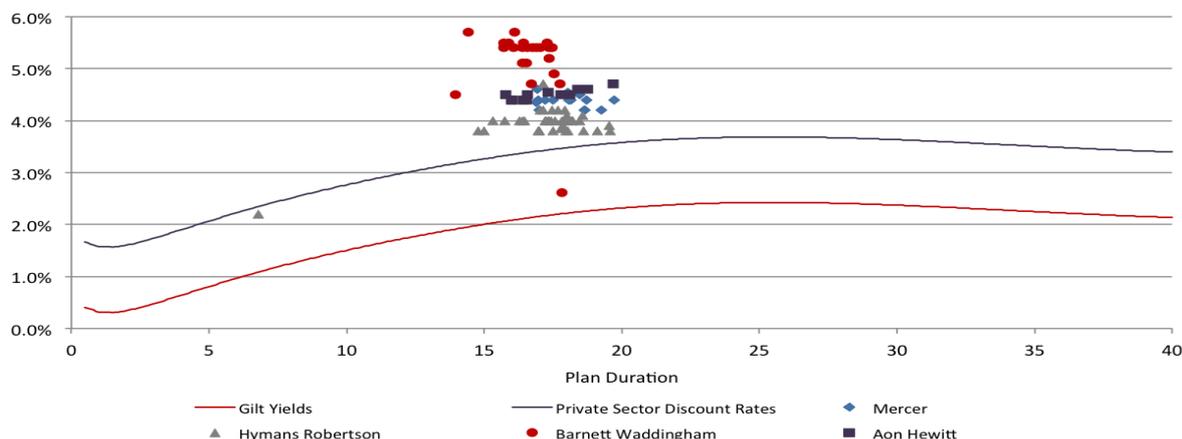
**Private Sector Equivalent Basis:**

Calculated by taking the observed option adjusted spread of the Bank of America Merrill Lynch Sterling 15Yr+ AA Corporate Index<sup>26</sup> as at 31 March 2016, of 1.22% and adding this to the Bank of England UK nominal government liability curve.

Chart 4 shows how the valuation discount rates of the LGPS Funds compares to the Gilt and Private Sector Equivalence Bases.

<sup>26</sup> Option Adjusted Spread is the additional yield of the index above UK gilts with a comparative duration. Index Reference UC28.

**Chart 4: Comparison of LGPS discount rates with Gilt and Private Sector Equivalent discount rates**



The aggregate discount rate across the LGPS fund as at 31 March 2016 actuarial valuation date was 4.40%<sup>27</sup> compared to the private sector median of 3.20% for Schemes with the same valuation date of 31 March 2016.<sup>28</sup>

Chart 4 shows that whilst the Funds generally have a range of duration between 15 and 20 years, there is a significant range of discount rates being used to value liabilities with a comparable duration, highlighting the subjectivity inherent in using an asset-based discount rate approach.

There are two distinct outliers. The first is the Environment Agencies Closed Pension Fund, which was transferred into the LGPS as part of the Water Act 1989 – this scheme has been closed to new accrual since then and has been superseded by the Environment Agencies Active Pension Fund. The Fund is operated on a “Grant-in-Aid” basis by the Department for Environment, Food and Rural Affairs (Defra). As a result of having only deferred and pensioner members, it has a much shorter duration of c.7.5 years, compared to other LGPS Funds which remain open to new members. As there are no new members contributing, it has been funded on a more prudent basis than the other funds, hence the comparatively lower discount rate.

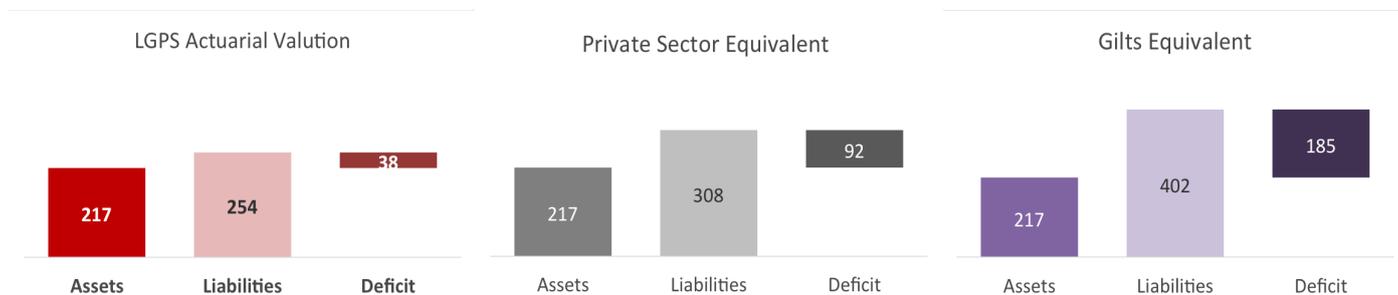
The other outlier is the South Yorkshire Passenger Transport Fund. This Fund has adopted a split discount rate for pre- and post-retirement, and the post-retirement discount rate is more conservative than the approach taken for other LGPS Funds.

Converting all the individual LGPS Funds to a Private Sector Equivalent Basis and the Gilts Basis, results in valuations of £308bn and £402bn respectively, compared to a published LGPS figure of £254bn. Chart 5 below shows the recalculated deficits on the comparative bases for the whole LGPS.

<sup>27</sup> [http://lgpsboard.org/images/Valuations2016/2016\\_LGPS\\_actuarial\\_valuation.pdf](http://lgpsboard.org/images/Valuations2016/2016_LGPS_actuarial_valuation.pdf)

<sup>28</sup> TPR: Scheme funding statistics valuations and recovery plans of UK DB and hybrid pension schemes, page 15

**Chart 5: Deficits under market-consistent valuation approaches for the LGPS**



These estimates of alternative liability valuation highlight the issue: **as a result of using high asset-based discount rates, the LGPS reports a valuation position which is c.£150bn lower than how the same liabilities might be valued on a Gilts Basis.**

Chart 6 overleaf shows a breakdown of the 20 individual LGPS Funds with the largest difference between the liability measure on the alternative funding bases and the LGPS actuarial basis. Results for all individual LGPS Funds are included in Appendix A.

The most undervalued LGPS Fund in monetary terms is the West Midlands Pension Fund with a reported actuarial valuation deficit of £2.7bn. On a Private Sector Equivalent Basis, this Fund had a deficit of £6.5bn as at 31 March 2016, and on a Gilts Basis the deficit would be £12.3bn.

The differences between these 20 Funds explain £34bn of the total £54bn increase in deficit on the Private Sector Equivalent Basis compared to the actuarial valuation and £84bn of the total £148bn deficit increase on the Gilts Basis

**Chart 6: Top 20 LGPS funds with largest difference between the alternative valuation bases and actuarial valuation**



## 5. Impact on deficit contributions

Three key factors determine the amount of deficit reduction contributions due to a pension scheme:

- the size of the deficit;
- the length of time allowed in the recovery plan;
- return on assets in excess of liabilities.

**One of the principal consequences of undervaluing the LGPS liabilities is that it allows the employers to make lower deficit reduction contributions to the Scheme;** by presenting a lower deficit, the amount required to be made good through contributions and asset returns is smaller. Using the Private Sector Equivalent and Gilt deficit measures described above we calculate an alternative contribution schedule which is more representative of the true cost.

In doing this we calculate two metrics:

- A truer estimate of the length of recovery plan, based on the current contribution schedule, and the deficit measured on the Gilt and Private Sector Equivalent valuation basis. This demonstrates the intergenerational impact of undervaluing the LGPS liabilities, as contributions continue further into the future.
- An estimate of what the current contribution level should be, were the target length of the recovery period restricted to a more fiscally responsible timeframe aligned with the average private sector recovery plan.<sup>29</sup> This approach demonstrates the annual monetary shortfall in contributions as a result of the undervaluation of the LGPS liabilities.

To calculate these metrics, it is required to make assumptions about the growth of Fund assets – asset outperformance can be a significant contributor to recovery plans. In doing so, we have taken long-run annual return assumptions for broad asset classes from Schroders' annual 30-year return forecast report<sup>30</sup> as set out in Table 5.

<sup>29</sup> 7.8 years: Figure 8 TPR Scheme Funding Statistics, June 2018

<sup>30</sup> <https://www.schroders.com/en/il/professional-investor/insights/economics/30-year-return-forecasts-2019-update/>

**Table 5: Annualised 30-year return forecasts**

Asset Class	Long-Run Total Return
UK Equities	7.9%
Overseas Equity	6.2%
Real Estate	5.1%
Other Growth Assets	5.3%
Gilts	3.1%
IL Gilts	2.1%
Other Bonds	4.1%
Cash	2.3%

In order to project future asset values, we have calculated an expected long-term annual return for each individual Fund based on the assumptions above, and their asset allocation as at 31 March 2016. In addition, both assets and liabilities have been adjusted for presumed payment of the benefits to members, using the representative cashflows described in Section 4 above.

### a) Calculation of recovery period

Table 6 below shows the calculated recovery plan length for the LGPS Scheme as an average of the individual Funds, assuming contributions set at the 2016 LGPS valuation continue to be paid at current levels.<sup>31</sup>

**Table 6: Comparison of implied recovery plan on different valuation bases**

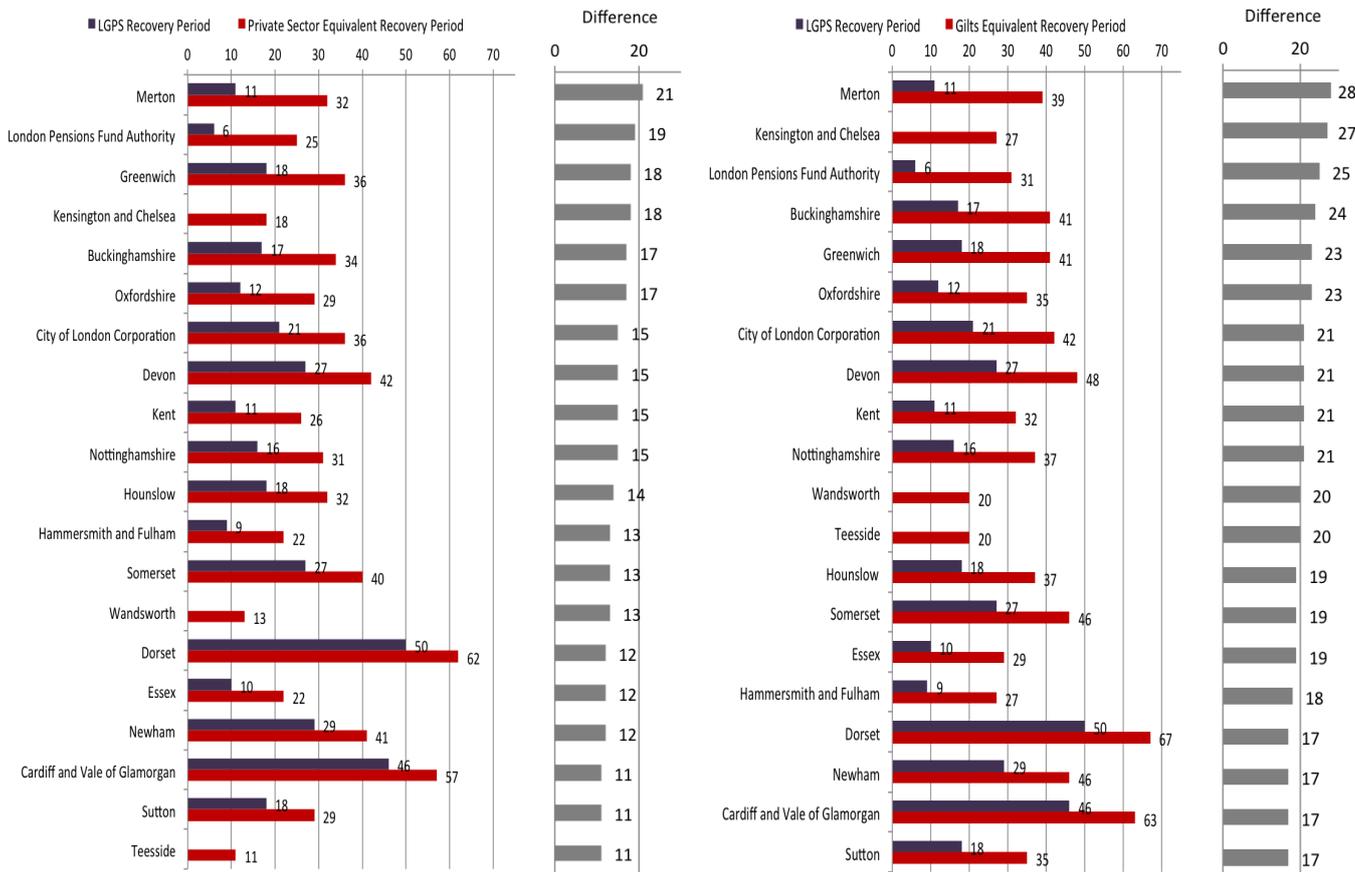
Basis	Length of recovery period
LGPS Actuarial Basis	15 years
Private Sector Equivalent Basis	22 years
Gilt Equivalent Basis	27 years

This assessment shows that even on the under-estimated measure of the deficit given by the LGPS actuarial basis, **the LGPS has almost double the length of recovery plan than the private sector average of 7.8 years.** When measuring the deficit on a more market consistent basis, the recovery plan extends further; **measuring the LGPS liabilities on a Gilts Basis and continuing with the current level of pension contributions would mean that the LGPS will remain underfunded for another 27 years, assuming asset returns perform as expected.** Any asset underperformance would further increase this period of underfunding.

<sup>31</sup> "Current levels" taken as the average of the prescribed secondary contributions for 2017-2020 in the individual Fund actuarial valuations.

This clearly demonstrates the intergenerational impact of undervaluing the LGPS liabilities – funding the Scheme on a more market consistent basis, means that reduction contributions continue to be paid much into the future. The average age<sup>32</sup> of current active LGPS members is 48.7, so continuing to fund the Scheme at the current contribution rates will mean that the existing deficit will still be being paid off for over a decade after current members are expected to retire. Chart 7 below shows the 20 LGPS funds with the largest difference between the length of their recovery plan on the LGPS basis and the equivalent under the Private Sector Equivalent and Gilts measure of deficit. Results for all individual LGPS Funds are included in Appendix B.

**Chart 7: Comparison of LGPS recovery period length, compared to Private Sector Equivalent and Gilt Basis recovery period**



On a Private Sector Equivalent Basis, London Borough of Merton has the largest difference in recovery period between the LGPS Basis and the Private Sector Equivalent Basis. On the LGPS Basis, London Borough of Merton has a high reported funding ratio of 94%. Correspondingly, contribution rates are set to be fairly low, and the recovery plan also fairly long, at 11 years. A more market consistent assessment of the liabilities reduces the assessment of the funding ratio to 63%. Combining this shortfall with the low contributions means that the Fund is expected to remain in deficit for 32 years – a much longer period than published.

<sup>32</sup> <http://www.lgpsboard.org/index.php/2016-valuations-report>

A similar dynamic is seen for other Funds with the largest differences in recovery period, a high reported funding level on the LGPS Basis, and also being allowed a relatively long recovery period, resulting in extremely low contributions being paid.

There are several Funds which report being fully funded, or a small surplus on the LGPS Basis (Royal Borough of Kensington and Chelsea Pension Fund, London Borough of Wandsworth Council Pension Fund and Teesside Pension Fund) which means they pay no, or minimal, deficit reduction contributions. Measuring these liabilities on a more market consistent basis reveals a higher liability valuation and a deficit which is currently hardly being paid back at all.

The longest recovery period of the LGPS Funds is Royal County of Berkshire Pension Fund. The Fund reports a reported deficit on the actuarial basis of £597m using a discount rate of 5.5%. The estimated return on assets for the Fund is also 5.5% – on this basis the scheme will run out of assets before all the liabilities are fully discharged.

## b) Calculation of deficit contributions

We have also assessed the difference between the current level of deficit recovery contributions and the level of contributions required were the government to fund the LGPS in a fiscally responsible way. This means fully funded, on a market consistent valuation basis, in a timeframe that minimises the impact on future generations. For this purpose, a reasonable timeframe for a recovery period has been determined to be ten years – this is slightly longer than the average private sector recovery plan, but also within the expected future working lifetime of current active LGPS members.

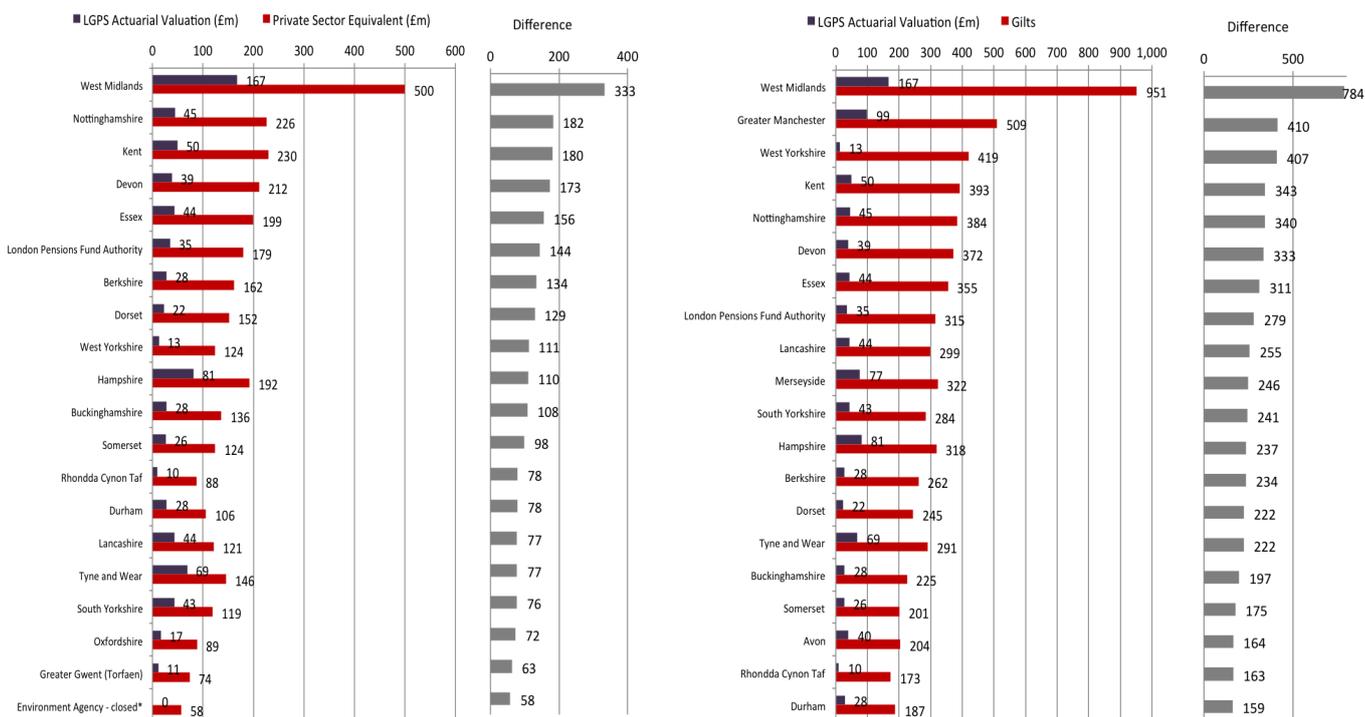
**Table 7: Comparison of deficit recovery contributions**

Basis	Average Annual Contributions
LGPS Actuarial Basis	£2.1bn
Private Sector Equivalent Basis, 10Yr recovery period	£5.7bn
Gilt Equivalent Basis, 10Yr recovery period	£11.9bn

**This assessment shows that the current level of contributions is almost £10bn p.a. short of the amount required to fund the deficit in a fiscally responsible timeframe, with a valuation basis consistent with the government's other long-term liabilities.**

Chart 8 shows the 20 individual LGPS funds with the largest difference between the fiscally responsible deficit reduction contributions, and the current contribution level. Results for all individual LGPS Funds are included in Appendix B.

**Chart 8: Comparison of LGPS contributions compared to Private Sector Equivalent and Gilt Basis contributions on a fiscally responsible basis**



West Midlands Pension Fund has the highest deviation of current contributions, compared with a fiscally responsible level of contributions. To make good the deficit on a Private Sector Equivalent measurement of the liabilities in a responsible timeframe would require an additional £333m per annum and £784m per annum to do so on a Gilts Basis. This represents a 3x and 5.7x increase in the current level of deficit recovery contributions respectively.

Greater Manchester Pension Fund, West Midlands Pension Fund, and the West Yorkshire Pension Fund are the three largest individual funds in the LGPS, so it is reasonable to expect them to have a proportionately large impact on the total shortfall in contributions.

The Avon Fund's average contribution was £40m, based on a single large one-off contribution made in 2017. Since then, the Fund has paid an average of £14m over 2018/19 and 19/20. In order to make good the deficit in a responsible timeframe on a Gilts Basis, a contribution of £204m p.a. would be required – so it currently has a shortfall of £190m per year.

## 6. Impact on local government finances

As discussed above, the funding for these contributions currently comes from the taxpayer. In this section we seek to identify the impact on local government finances, were the LGPS Funds to be funded in a more intergenerationally responsible way, as identified above.

2017-18 local government revenue and expenditure data for England is provided by the Office for National Statistics,<sup>33</sup> split out at the Local Authority level. Under this level of granularity there are 445 separate Local Authorities consisting of:

- Unitary Authorities
- London Boroughs
- Shire Counties
- Shire Districts
- Metropolitan Districts
- Fire and Rescue Authorities
- Police and Crime Commissioners
- Chief Constable offices
- National Park Authorities
- Combined Waste Authorities

Equivalent statistics are provided by the Welsh Government, splitting by 32 separate authorities consisting of:

- Unitary Authorities
- Police Authorities
- Fire Authorities
- National Park Authorities

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<sup>33</sup> <https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2017-to-2018-final-outturn>



In order to establish how much of the Local Government Revenue is used to fund the LGPS deficit contributions, it is necessary to aggregate and map these 477 bodies to the relevant LGPS Fund.

The LGPS Administering Authorities broadly match the county councils and the London boroughs following the 1974 local government reorganisation.<sup>34</sup> These boundaries have changed over time, and the coverage of the LGPS is no longer directly comparable to the current shire boundaries; some of the funds refer to historic areas that have since been redrawn into several shire counties – for example, Avon is the area that would now correspond to Bath and North East Somerset, parts of Somerset and South Gloucestershire. In addition, there are a number of cases where services cover multiple shire or district regions but are notionally covered by a single LGPS Fund.

To approximately aggregate and map district councils to their relevant LGPS funds, the following approach has been taken:

- Look-up files from the Office for National Statistics Open Geography Portal<sup>35</sup> have been used to aggregate in the following way:
  - “Lower Tier” local authorities (i.e. Local Authority Districts, Unitary Authorities, Metropolitan Districts, London Boroughs) to “Upper Tier” local authorities (counties, metropolitan counties, inner and outer London, unitary authorities); and
  - These “Upper Tier” local authorities can also be mapped to District and Metropolitan Counties.
- It is possible to identify neighbouring local authorities by their corresponding “E-Number” in the National Statistics revenue data. This has been done to broadly aggregate counties and authorities into areas that correspond to LGPS Funds. This was then verified with the list of contributing employers in the Rate and Adjustment Certificates in LGPS Fund actuarial valuation reports.
- For employers which have a coverage area which spans numerous LGPS areas (for example, Fire and Rescue, Police and Crime Commissioners) the respective budget has been mapped to the relevant LGPS Fund according to the fund where they appear in the Rates and Adjustment certificate. There were several authorities where it is not possible to attribute their budget to a corresponding LGPS Fund from publicly available data. The revenue and expenditure corresponding to these entities has been excluded from the analysis.
  - Greater London Authority
  - East London Waste Authority
  - North London Waste Authority
  - Western Riverside Waste Authority

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<sup>34</sup> Local Government Pension Scheme Investments – House of Commons Library Briefing Paper No. 07309

<sup>35</sup> <http://geoportal.statistics.gov.uk/datasets/lower-tier-local-authority-to-upper-tier-local-authority-december-2017-lookup-in-england-and-wales>

- West London Waste Authority;
- Lee Valley Regional Park Authority.

The expenditure associated with these entities represent £5bn of the total local government expenditure of £98bn for England and Wales over 2017-2018, so our analysis of the remainder covers 95% of the total Local Government expenditure for England and Wales.

In addition, some of the LGPS Funds do not have local authority budgets that map directly to them. These have been considered on a case-by-case basis:

**Environment Agency Pension Fund (Active and Closed):** These two schemes are in respect of the Environment Agency which is a nationwide body and funded separately from the local government. These have been excluded from the Fund-by-Fund analysis.

**London Pensions Fund Authority:** A combination of several London Boroughs, and information required to attribute expenditure is not available in the actuarial valuation report. This has been excluded from the Fund-by-Fund analysis.

**Transport Authorities:** Since the 2016 actuarial valuation, the South Yorkshire Transport Authority Pension Fund has merged with the Greater Manchester Pension Fund. We have combined the two for the purposes of this analysis. Similarly, the West Midlands Transport Authority Pension Fund has been combined with the West Midlands Pension Fund.

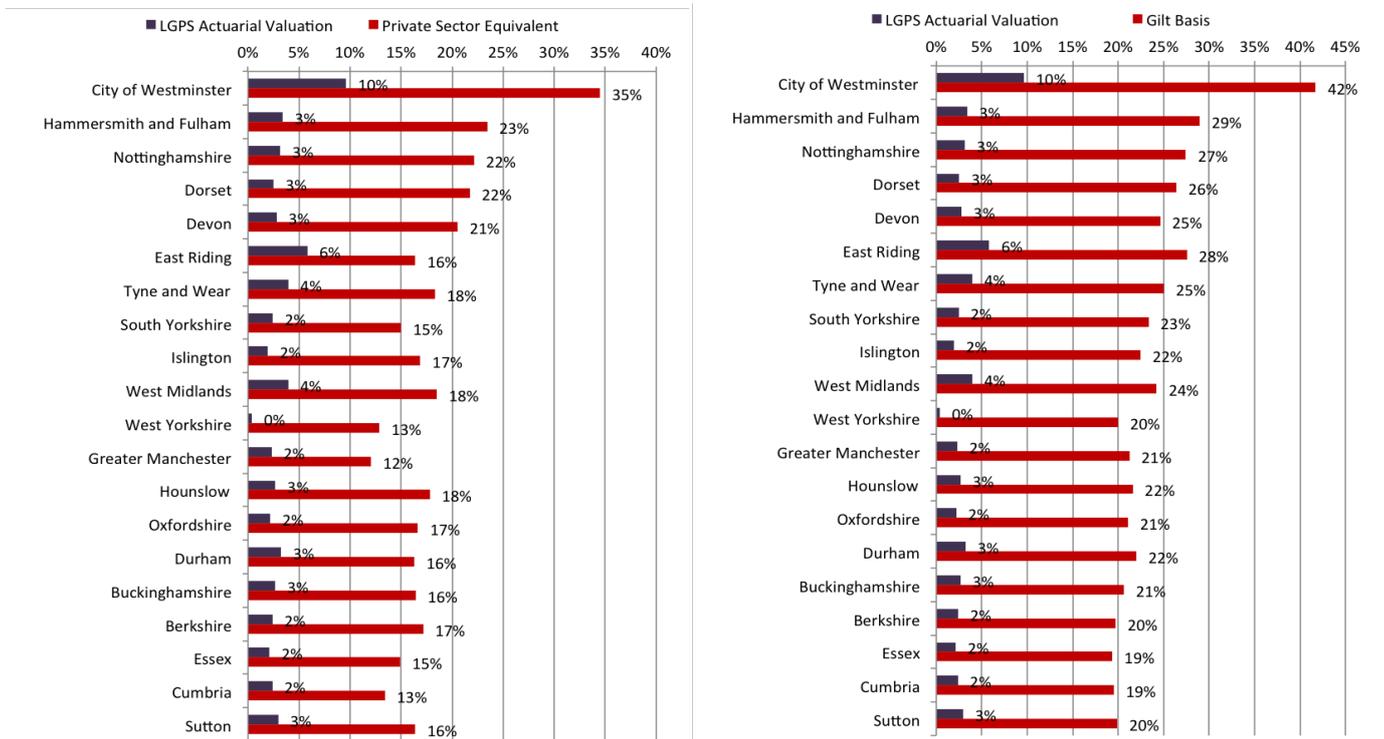
Total LGPS deficit contributions over the years 2017–2020 are 2.1% of the total Local Authority Spending for England and Wales. Table 8 below shows what proportion this would be were the Scheme funded in a more intergenerationally responsible way using a market consistent valuation and a more fiscally responsible recovery period.

**Table 8: Proportion of total local government expenditure for England and Wales for different funding and contribution approaches**

	Total LGPS Deficit	Implied Recovery Plan	Average Annual Deficit contribution	Proportion of Local Government Expenditure
LGPS Valuation Basis	£38bn	15 Years	£2.1bn	2%
Private Sector Equivalent Basis	£92bn	10 Years	£5.7bn	6%
Gilts Basis	£185bn	10 Years	£11.9bn	12%

Chart 9 shows the 20 largest increases in LGPS deficit contributions as a proportion of local authority budget, mapped to the individual LGPS funds. A full list of the Funds is included in Appendix D.

**Chart 9: Comparison of LGPS deficit contribution as a proportion of local government expenditure, compared to fiscally responsible funding requirements under the Private Sector Equivalent and Gilt Basis**



City of Westminster has the largest gap between the existing LGPS deficit contributions and what it would pay under a fiscally responsible funding requirement: the deficit contributions would increase from 10% of expenditure to 35% under the private sector equivalent and 42% under the Gilt Basis.

**It is clear from this analysis that funding the LGPS in a fiscally responsible way would put severe additional pressure on local government finances, diverting an average of 12% of their expenditure away from the vital services they provide to the local community.**



This would be a death-blow for local governments, who have already seen their funding reduced by 60%<sup>36</sup> as a result of a decade of austerity policies and have reverted to having to sell £9.1bn<sup>37</sup> of public assets to make ends meet.

The recent effective bankruptcy of Northamptonshire County Council<sup>38</sup> is a case study of the real-world impact on local communities when local government budgets are not run effectively. The National Audit Office (NAO) has warned that 22 of the 150 councils with social care responsibilities had a 50% drop in their usable reserves in the past five years,<sup>39</sup><sup>40</sup> which is a similar sign of distress exhibited by Northamptonshire County Council in the run up to their recent section 144 notice.<sup>41</sup>

It is clearly not possible for local governments to absorb this increased cost in their existing expenditure levels without increasing their revenues.

As set out in Section 3 above, local government expenditure is principally financed by income taxes through the Revenue Support Grant, or via council tax receipts. On average, across England and Wales council tax receipts would need to increase by 36% in order to fund the LGPS in an intergenerationally responsible manner.

Chart 10 shows the 20 LGPS Funds that would require the highest increase in council tax receipts to fund their deficit in a fiscally responsible way.

Certain Welsh authorities face a particular issue here – namely Cardiff, Rhondda Cynon Taf, and Swansea. The deficits of these funds are large relative to their council tax revenues, so funding the deficits in a fiscally responsible manner on the Gilts Basis would require council tax receipts to increase by almost three times.

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<sup>36</sup> <https://www.local.gov.uk/parliament/briefings-and-responses/lga-briefing-debate-local-government-funding-house-commons>

<sup>37</sup> <https://www.thebureauinvestigates.com/stories/2019-03-04/sold-from-under-you>

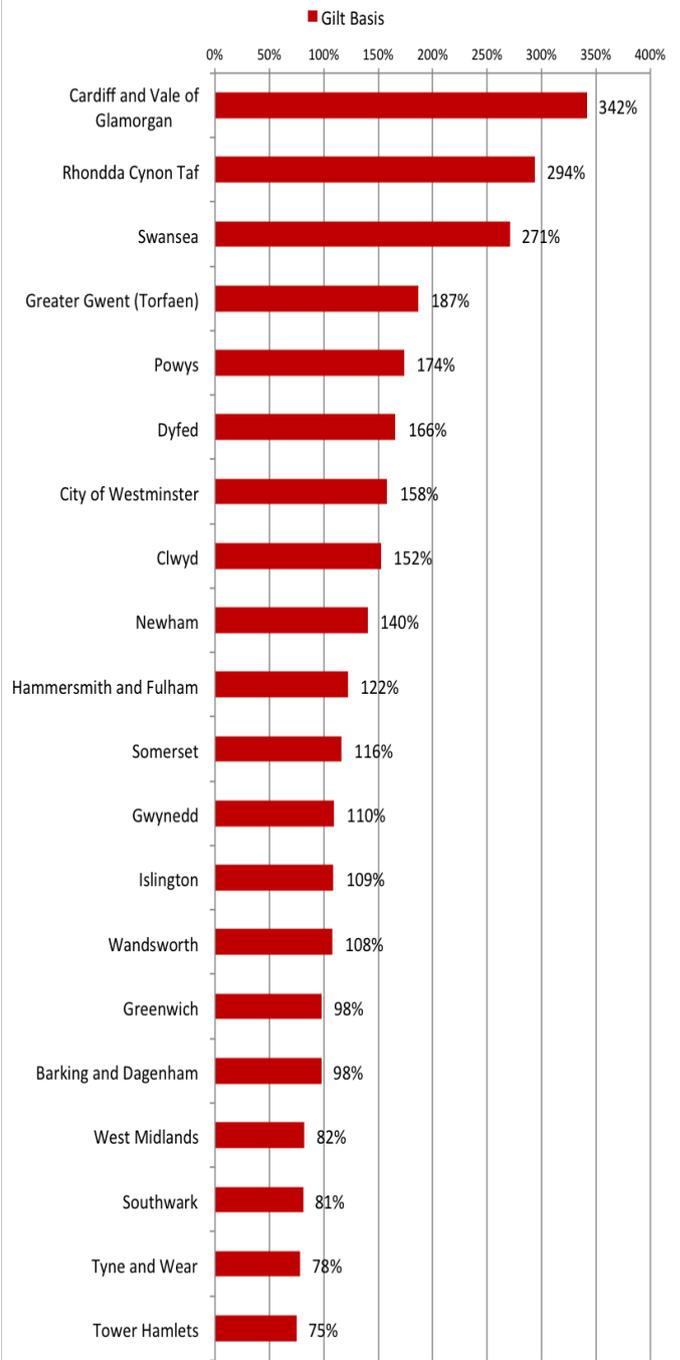
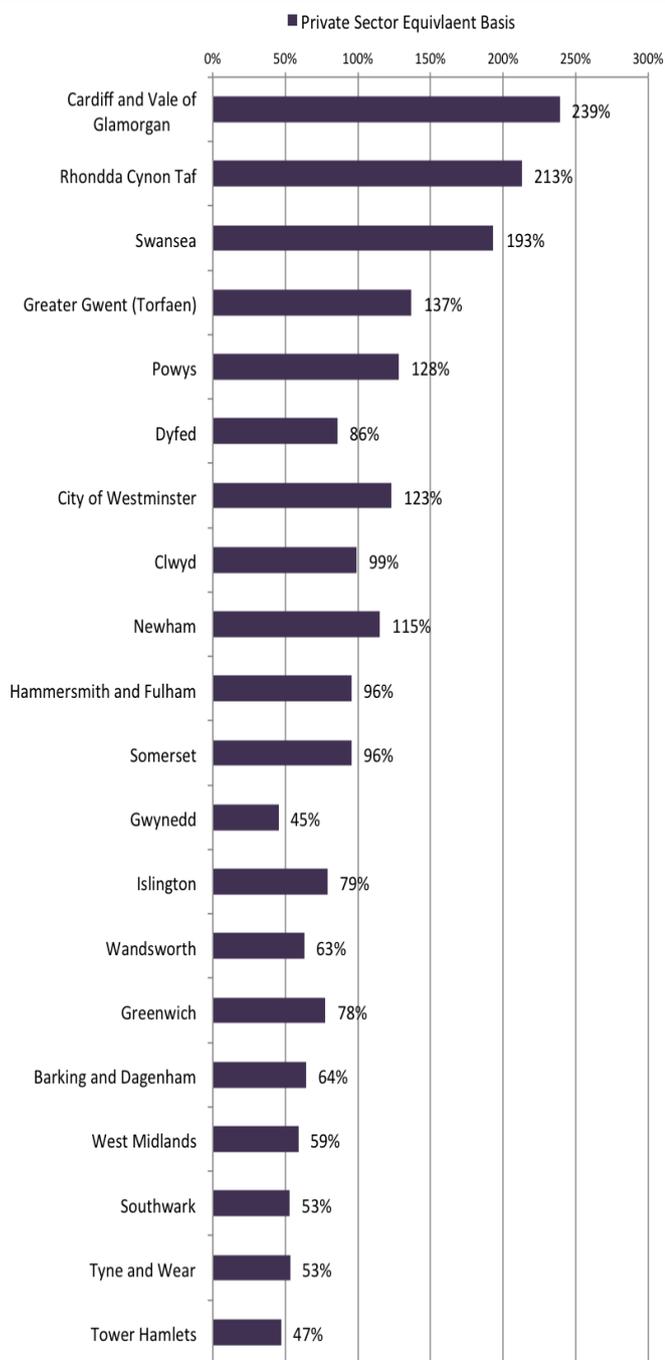
<sup>38</sup> <https://www.gov.uk/government/news/first-progress-report-of-commissioners-at-northamptonshire-county-council-published>

<sup>39</sup> <https://www.thebureauinvestigates.com/stories/2018-03-08/councils-in-crisis-three-more-named-as-showing-signs-of-financial-distress>

<sup>40</sup> <https://www.nao.org.uk/wp-content/uploads/2018/03/Financial-sustainability-of-local-authorities-2018.pdf>

<sup>41</sup> A Section 144 Notice is the equivalent of a local authority entering bankruptcy proceedings.

**Chart 10: Increase in council tax receipts required to fund LGPS deficit in a fiscally responsible manner**



## 7. Conclusions

In highlighting the discrepancy between the discount rates used to value the LGPS with the approach used to value similar liabilities in the private sector or consistent with other government debt, this paper argues that the obligations of the LGPS are being systematically undervalued. This has drastic consequences for future generations who will be required to fund this shortfall as benefits are paid in the future.

**This paper argues that the funding shortfall being placed on future generations – calculated as the difference in deficit on the LGPS Actuarial Basis and a Gilts Basis as £117bn – is a huge financial burden, which is being pushed onto future generations.**

**At the current LGPS deficit reduction contributions rate of £2bn p.a., this will still be being paid by the children and potentially even the grandchildren of current taxpayers.**

This funding requirement will potentially impact future generations in three ways:

**Income Tax:** The £2bn p.a. deficit reduction contributions current being paid is equivalent to a 0.4% increase in each income tax band in the UK. In other words, future generations will pay 0.4% higher income tax than would otherwise be required, to fund deficits accrued through underfunding that occurred many years before they were born.

**Council Tax:** Current deficit reduction contributions are 7% of the council tax receipts for England and Wales. Future generations will continue to pay 7% higher council tax than they otherwise would in order to fund deficits accrued through underfunding of the LGPS that occurred many years before they were born.

**Reduced Services:** Rather than increase tax revenue, it is likely that future generations will also bear at least part of the cost of the underfunding of these benefits through degradation in the quality and quantity of local government services.

**A more generationally fair alternative would be for the government to fund the LGPS in a fiscally responsible way, by recognising the value of the LGPS liabilities on Gilts Basis, in line with other government obligations, and restoring the shortfall in a reasonable time frame where the cost is borne by the cohort that accrued these benefits.**



However, this approach would have a stark impact on already stretched public finances. It would require a seven-fold increase in the current level of deficit contributions from £2bn p.a. to £12bn p.a. which would constitute 12% of the total local government budget.

Funding for local government is already highly stretched as a result of a decade of austerity policies. This increase would clearly be untenable for local government to bear without additional revenue.

There are several steps that the UK government could take to improve the impact of the underfunding of the LGPS on future generations:

### **1. Close the scheme to future accrual. Provide a new DC pension plan for eligible LGPS staff**

As set out in Section 2, previous modernisation changes to LGPS benefits recommended by various consultations have not fundamentally changed the nature or quantum of the funding risk of the LGPS to future generations of UK taxpayers.

**It is clear that a defined benefit pension is no longer an appropriate form of pension for the public sector – either from the perspective of staff, who are unwilling to pay a fair cost for the benefits they receive, or for the future taxpayers left to bear the risk of funding shortfalls.**

- Local government staff and unions have objected heavily to various cost-sharing proposals in recent years. The intention has been that in recognition that they receive much more generous pension than the private sector, in return the members bear a fairer proportion of the risks and cost. This reaction would suggest that scheme members themselves don't appreciate the value of the pension benefits they receive, and might well be happier switching to low-cost retirement options, in return for more generous pay increases.
- The risk and funding burden placed on future generations of taxpayers is very high. At the time benefits are accrued, it is not possible to know their total future cost and whether the amounts set aside will be enough to meet them. It is not reasonable to expect future generations to forgo their income through higher taxes or reduced services in order to repay debts on excessively generous pensions that they themselves likely won't receive.

**A Public Sector Defined Contribution plan should be created to fairly distribute the funding risk and make sure it is borne by the cohort of people earning the benefits rather than being passed on to future generations.** This could be managed effectively across a range of staff requirements by offering a fairly low base contribution requirement to cater for staff that would prefer a low-cost retirement option. By offering generous matching contributions to those members that make additional payments you could also honour those members that value their benefits and are willing to pay for them.

This would stop the current funding problem from worsening with additional accrual and create a fixed pool of liabilities that will run off over time. This is a much better situation than the currently expanding liability base.

## **2. More transparent data and disclosure**

Given the scale of the LGPS and the impact on public finance, it is clearly in the public interest to increase transparency on the LGPS funding position and contribution rates.

The 2013 Pension Act mandated that LGPS Funds carry out triennial actuarial valuations and annual funding updates. Since then, there have been significant developments in technology solutions that enable pension schemes to have more regular funding valuations of assets and liabilities, to give a real-time perspective. There are several tools available in the market at a very reasonable cost – many private sector funds utilise these on a daily basis to facilitate decision-making on investment and risk.

**More regular and transparent publication of the funding position would improve accountability to taxpayers.** The government could mandate that LGPS Funds adopt real-time funding tools to provide a more regular and transparent valuation position of the LGPS which is published publicly.

### 3. Open up external links with other industries

It is clear from the deviations in best practice, that LGPS managers and their advisors could improve links with other related industries, such as private sector pensions, the insurance industry and broader finance and risk professionals, to allow industry developments in best practice and innovation to percolate in the LGPS.

Discount rates, market consistent valuation of liabilities, liability-driven investment, risk management and employer covenant are all issues that private sector pensions and the insurance industry have developed significantly over the last ten years, and the LGPS is a clear outlier in terms of considering and adopting updated best practice.

Increasing the transparency of data in the public domain would significantly help to stimulate industry debate and best practice.

### 4. Make intergenerational fairness an explicit criterion when assessing discount rate and funding policy for long-term government liabilities.

It is clear that there is little thought given to future generational interests when considering the way that long-term government liabilities are accrued. This is not unique to the LGPS; it also applies to extremely long-dated debt issued by the government in recent years – e.g. gilts maturing in 2060 – where debts will be repaid long after the decision-makers are accountable.

A progressive approach would be to establish a government department with responsibility to consider the impact on future generations in relation to long-dated government obligations. The Intergenerational Foundation paper on “A New Intergenerational Contract”<sup>42</sup> sets out the principles and philosophies of how such a body may set its terms of reference.

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<sup>42</sup> “A New Intergenerational Contract”, by Thomas Tozer, Intergenerational Foundation (2019): <http://www.if.org.uk/research-posts/a-new-intergenerational-contract>

# Appendix A

Figure 1: Comparison of discount rates used in 31 March 2016 actuarial valuation compared to the Private Sector Equivalent Valuation Basis as set out in Section 4

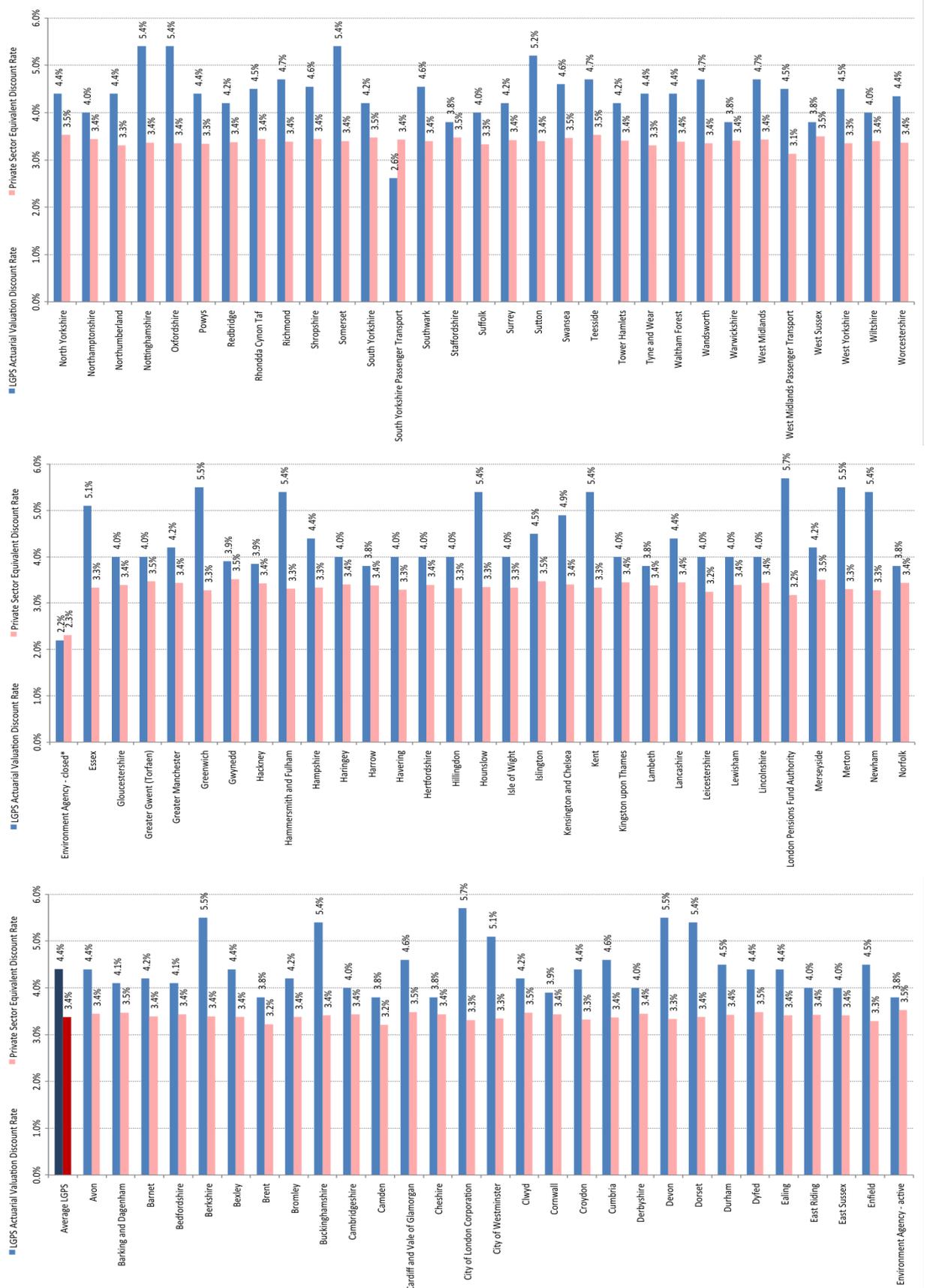
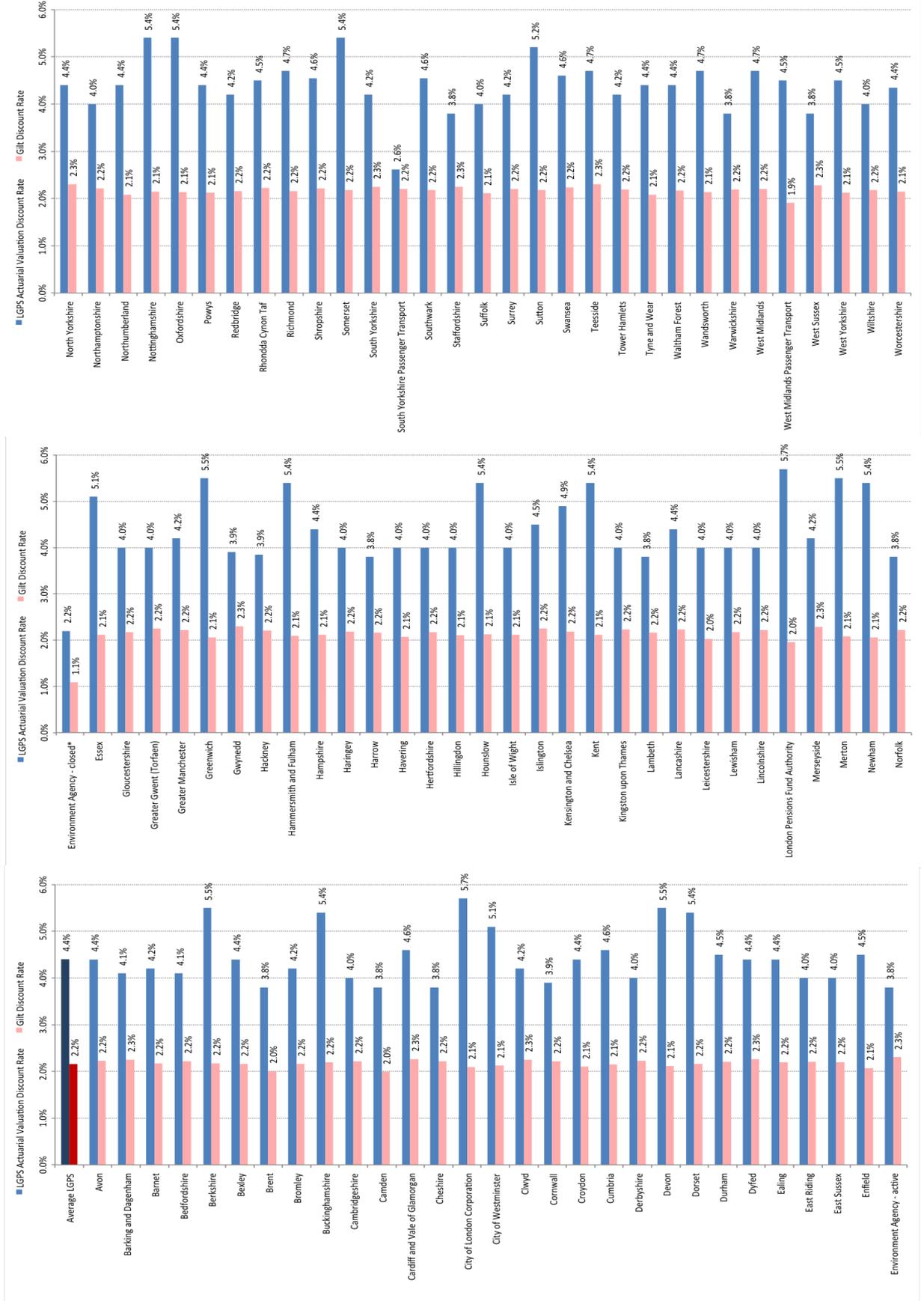
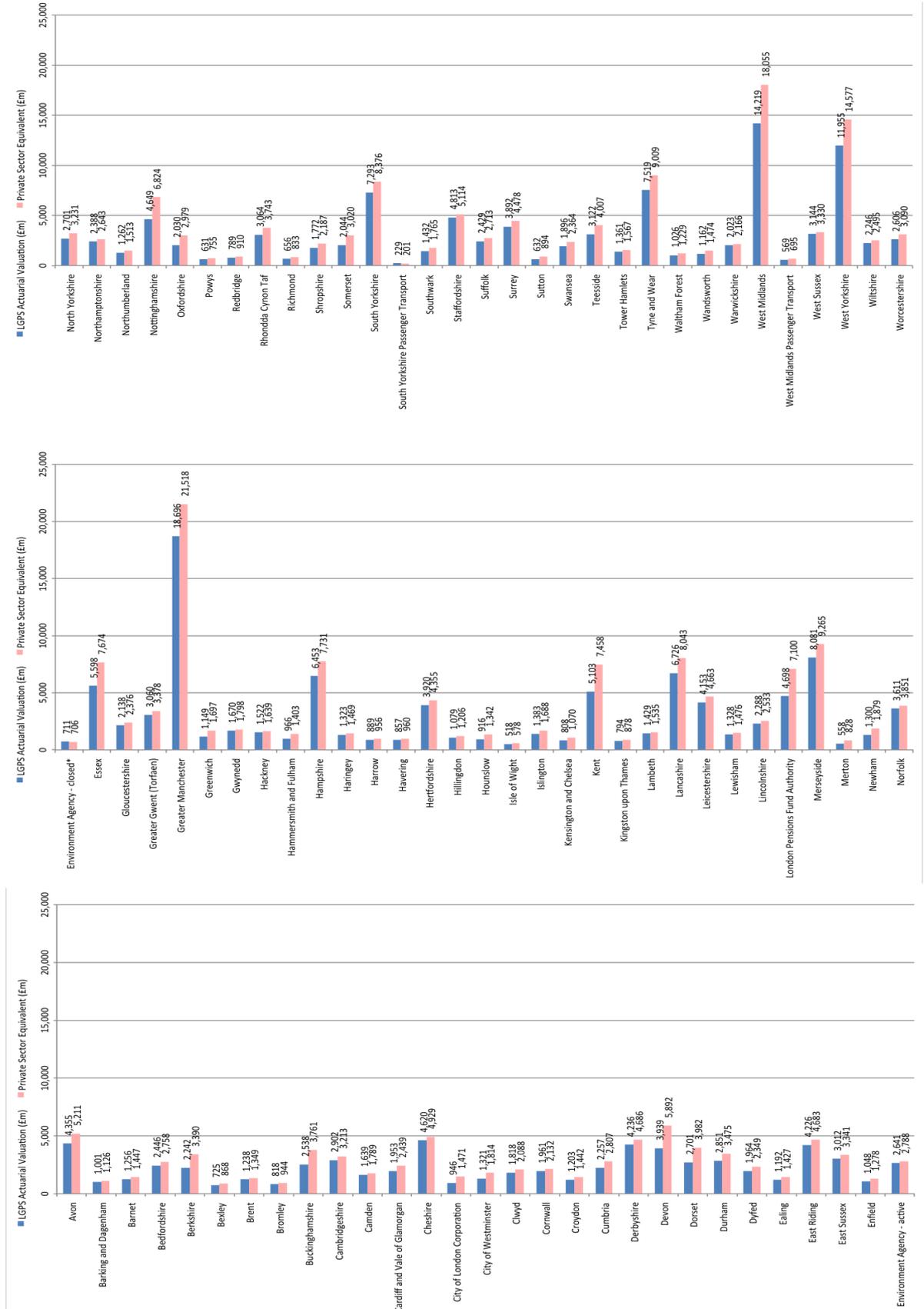


Figure 2: Comparison of discount rates used in 31 March 2016 actuarial valuation compared to an equivalent Gilts Basis as set out in Section 4

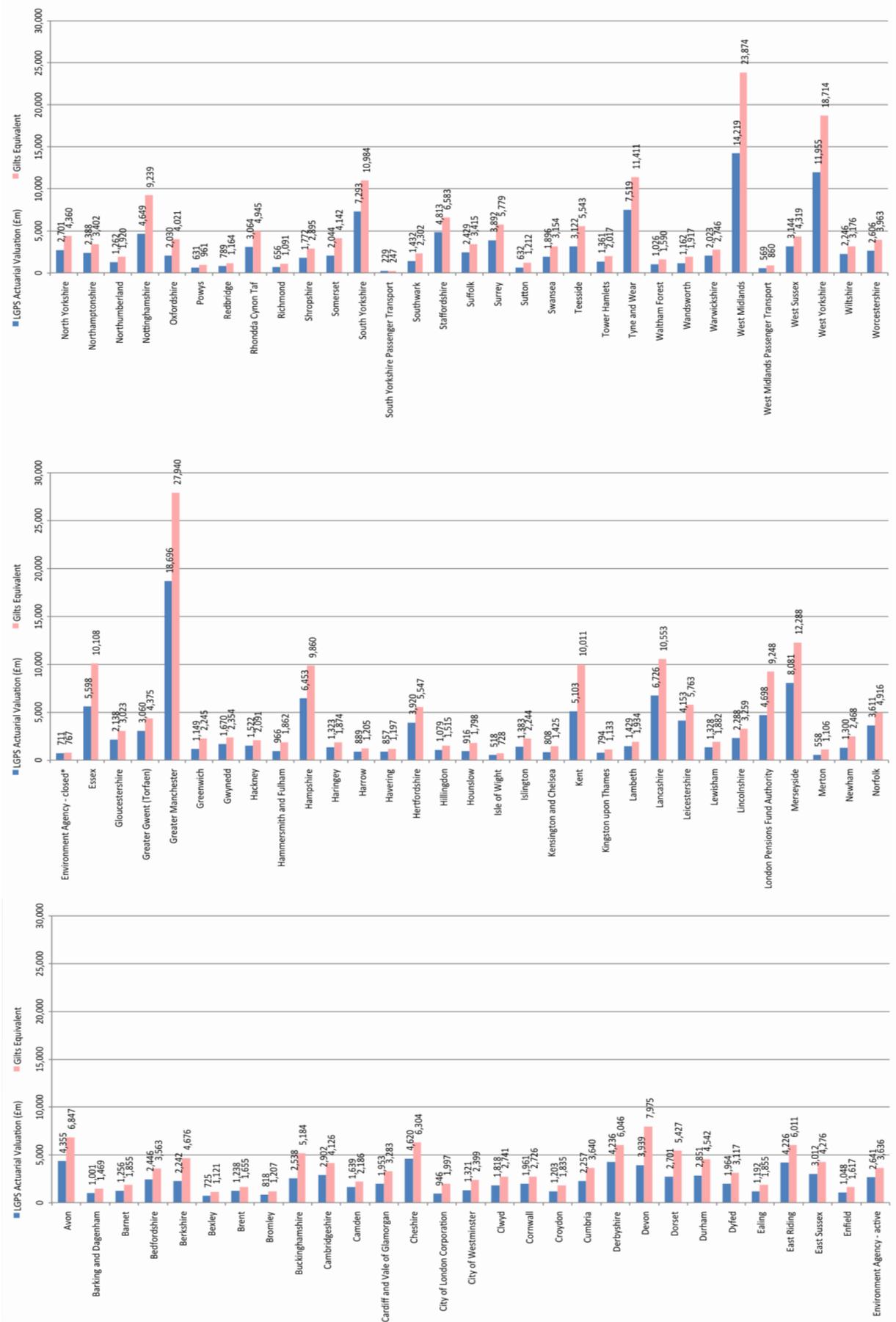


# Appendix B

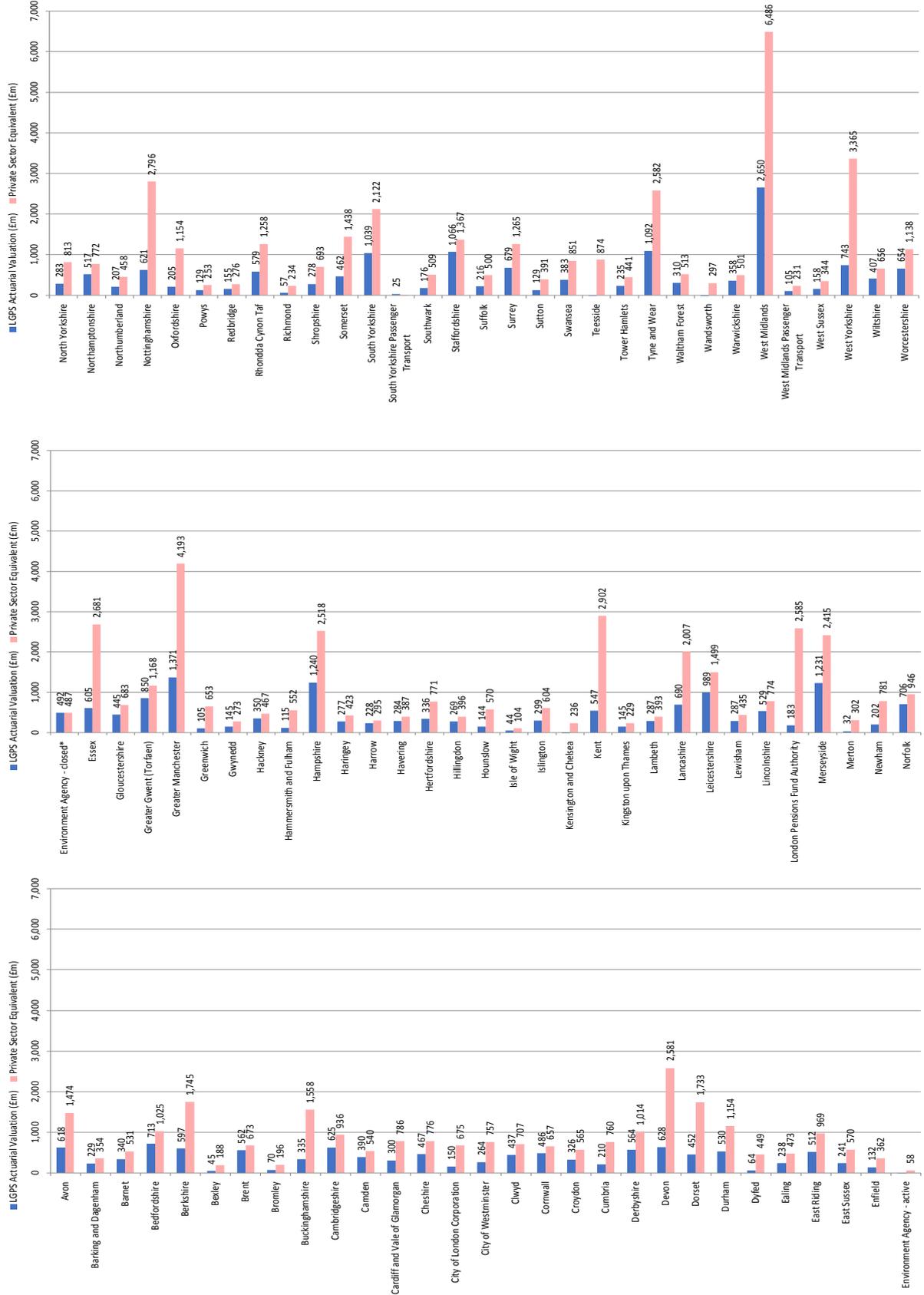
## Comparisons of liability value of LGPS Funds as at 31 March 2016 actuarial valuation compared to the Private Sector Equivalent Basis as set out in Section 4



## Comparison of liability value of LGPS Funds as at 31 March 2016 actuarial valuation compared to the Gilts Basis as set out in Section 4



Comparison of LGPS Fund deficits as at 31 March 2016 actuarial valuation compared to the Private Sector Equivalent Valuation Basis as set out in Section 4



# Appendix C

Comparison of LGPS Fund deficits as at 31 March 2016 actuarial valuation compared to the Gilts Basis as set out in Section 4

