

## Accounting reporting as at 31 March 2016

This note outlines some of the changes to the key financial assumptions that are used in preparing the IAS19 and FRS102 accounting numbers since the last reporting date as well as information on asset performance over the period.

This year FRS17 has been replaced with FRS102 to align it with IAS19. We have set out the key changes in Appendix 1 to this report for your information.

In the FRS102 disclosures we prepare, we will include full comparators, setting out last year's disclosures under FRS17 and the disclosures had FRS102 applied.

### How has the accounting position changed?

As LGPS Funds are usually invested in a range of asset classes, the performance of the assets may be quite different from that of the accounting liabilities (which are linked to corporate bonds, as set out below) and so the results can be very volatile from year to year.

As we will not know the assumptions that will be adopted for accounting disclosures until 31 March 2016, we have utilised the latest market statistics available. The following analysis uses market statistics as at 31 January 2016.

The responsibility for setting assumptions ultimately rests with each employer and therefore if an employer were to request alternative assumptions then we would be happy to consider using these in producing our report for the employer.

The change in the balance sheet position over the year is mainly dependent on the answers to three key questions and this report is split into these three sections:

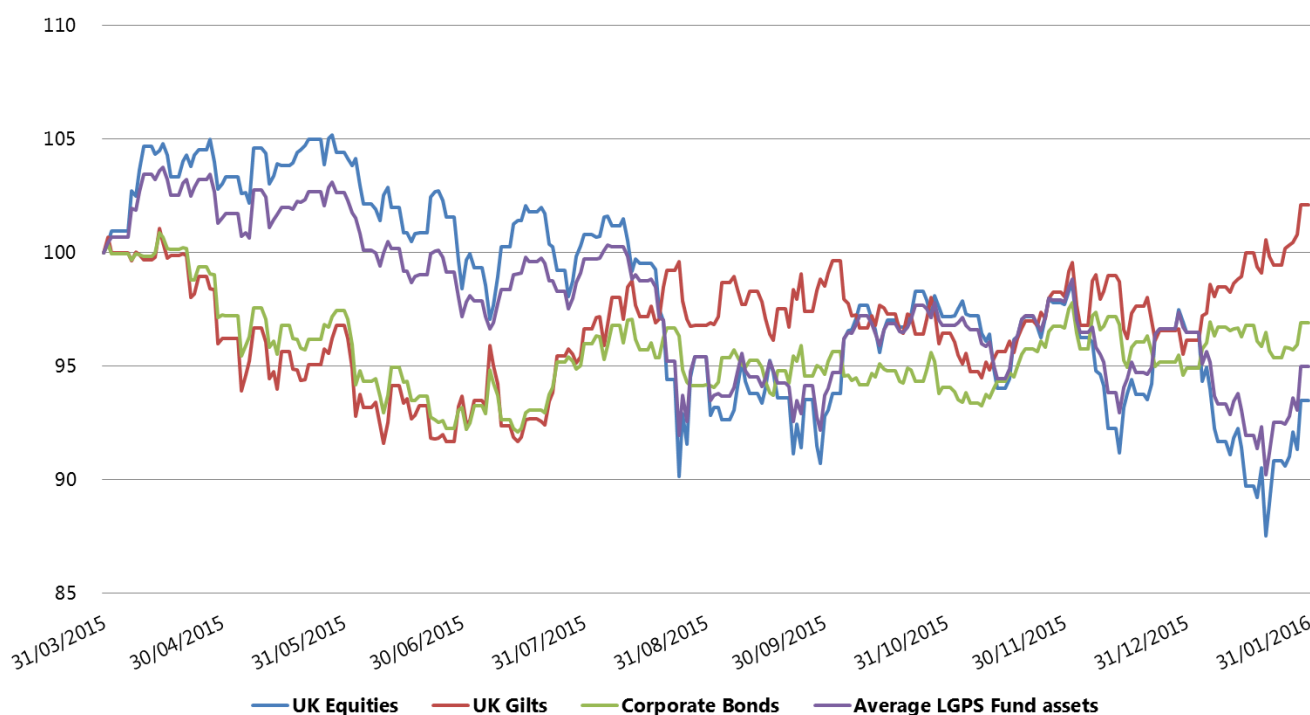
- What were **asset returns** for the twelve months to 31 March 2016?
- What were **corporate bond yields** as at 31 March 2016?
- What were **market expectations of inflation** as at 31 March 2016?

We appreciate that some of the terminology in this report may not be familiar and therefore we would recommend also reading our Glossary and FAQs document for a more detailed explanation on some of the jargon used here. This document has been circulated with this briefing note but please get in touch with the Fund if you would like a copy.

Please let your usual contact know if you have any queries.

## Asset returns

The following chart plots returns from the major asset classes since 31 March 2015 alongside the expected return achieved by an average LGPS Fund with assets invested 75% in equities, 20% in corporate bonds and 5% in gilts.



As we see, there has been volatility in the returns over the year in all asset classes with only UK gilts producing an overall positive return over the period. Equities performed well at the start of the year with significant falls over the late summer as a result of the financial crisis in China and a further fall in the past month following a slight recovery.

Based on the performance to 31 January 2016 and the allocation outlined above, a typical LGPS Fund might have achieved a negative return of around 5% for the year but this could vary considerably depending on each Fund's investment strategy. This estimate ignores Fund experience and deficit contributions.

If Fund returns have been around this mark this will have led to an actuarial loss on the assets which would worsen the accounting position but whether this has increased the accounting deficit depends mainly on the assumptions used to calculate the liabilities. This is discussed in the next section.

## Changes to accounting assumptions

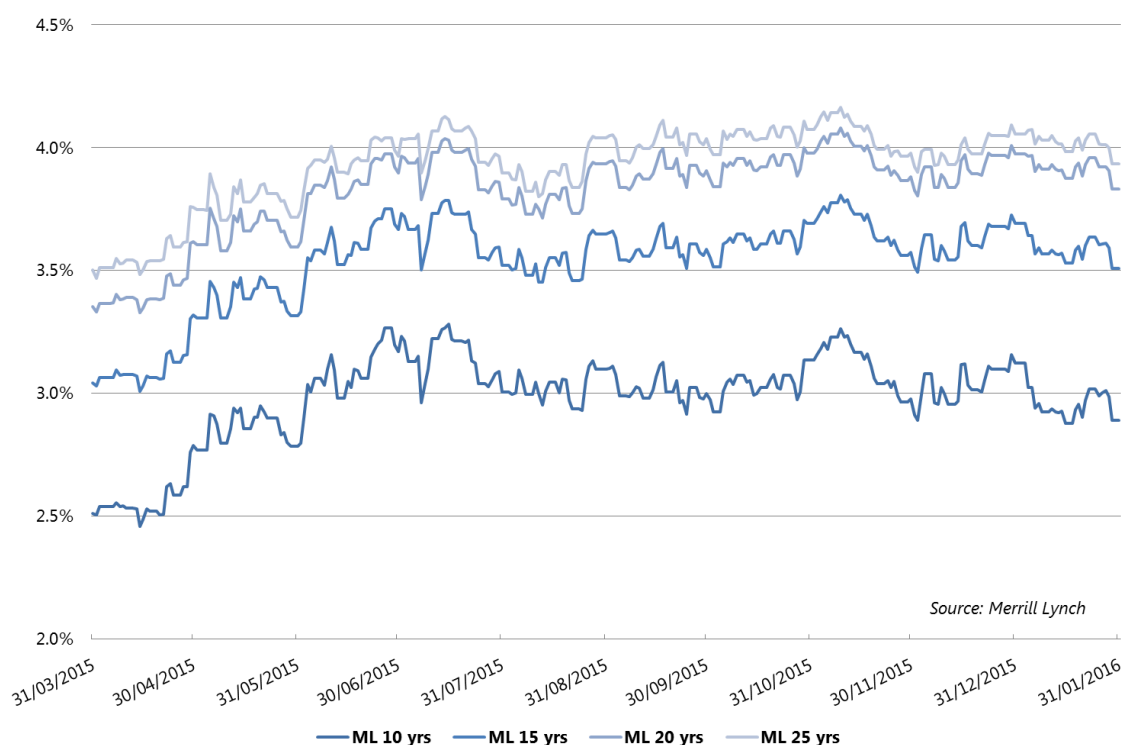
The key financial assumptions required for determining the pension liabilities under either accounting standard are the discount rate, linked to corporate bond yields, and the rate of future inflation. These assumptions are discussed in this section.

### Corporate bond yields

The liabilities are valued using a discount rate based on corporate bond yields that match the duration of the employer's liabilities. In deriving the financial assumptions for an individual employer as at 31 March 2016, we will estimate the duration of the employer's liabilities and then use the point on the Merrill Lynch AA-rated corporate bond yield curve which corresponds to this duration. This is the same approach as last year.

The duration of an employer's liabilities is the weighted average time to pay the future expected cashflows for every member. This is estimated based on the data from the last actuarial valuation.

The following chart shows the change in corporate bonds yields over the last year as measured by the Merrill Lynch AA-rated corporate bond yield curve based on durations of 10, 15, 20 and 25 years.



As we see bond yields have also been volatile over the period. Corporate bond yields have increased over the period at all durations which would result in a decrease in liabilities, all else being equal. The following table shows the effect of the changes in discount rate over the period to 31 January 2016 for sample employers with durations of exactly 10, 15, 20 and 25 years.

Duration (years)	Effect of change in discount rate on employer's liabilities
10	An estimated 4% decrease in liabilities
15	An estimated 7% decrease in liabilities
20	An estimated 7% decrease in liabilities
25	An estimated 9% decrease in liabilities

## Inflation expectations

Whilst the change in corporate bond yields is an important factor affecting the valuation of the liabilities, so too is the assumed level of future inflation as this determines the rate at which benefits increase in deferment and in payment.

IAS19 suggests that in assessing future levels of long-term inflation we should look to the gilt market to give us an indication of market expectation. FRS102 simply refers to a best estimate of the financial variables used in the liability calculation.

The Retail Prices Index (RPI) increase assumption is set based on the difference between conventional gilt yields and index-linked gilt yields at the accounting date using data published by the Bank of England (BoE). Specifically, the point on the BoE's market implied inflation curve which corresponds to the duration of the employer's liabilities.

### Difference between CPI and RPI

Pension increases in the LGPS are expected to be based on the Consumer Prices Index (CPI) rather than RPI. As there is limited market information on CPI-linked assets, we take the implied RPI assumption mentioned above and make an adjustment.

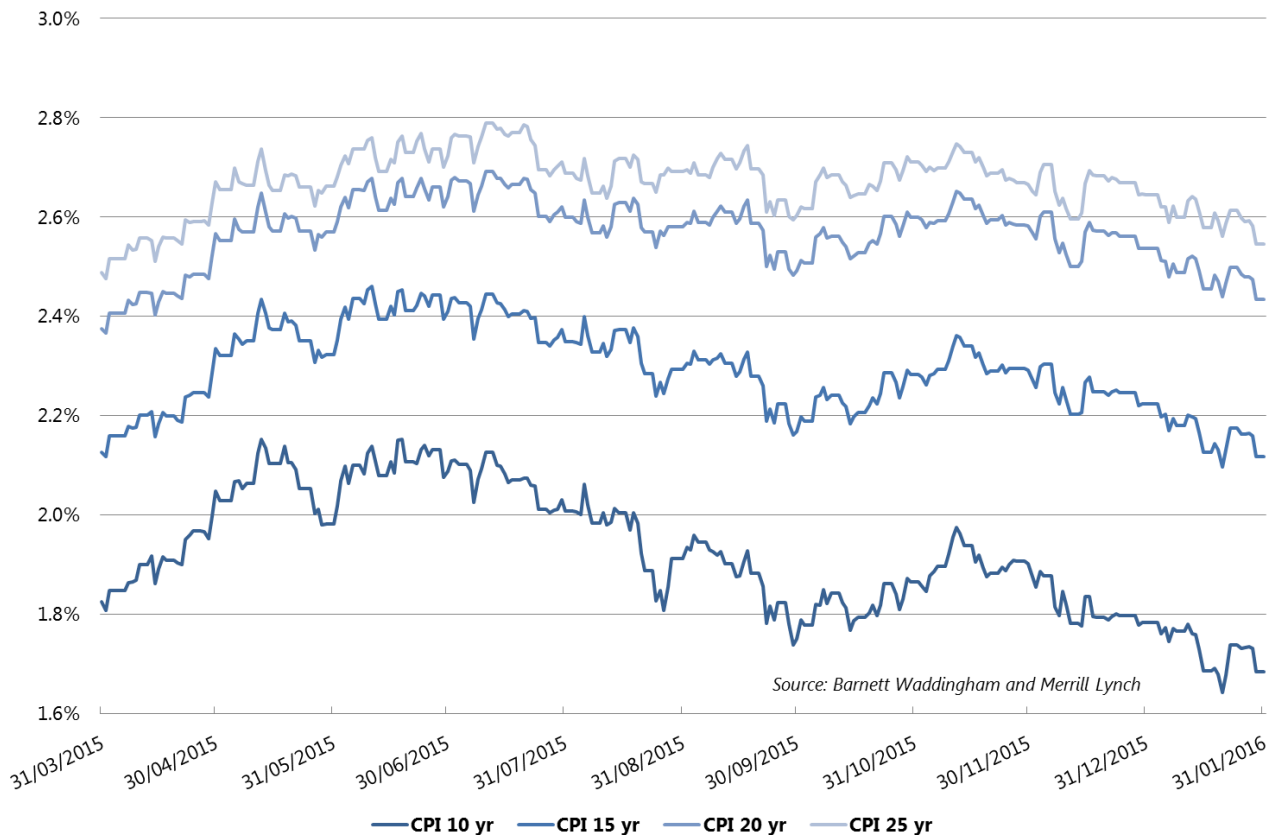
Over 20 years to 2010 CPI was on average around 0.7% p.a. lower than RPI. Of this, 0.5% p.a. could be attributed to the 'formula effect' resulting from technical differences in the way the two indices are calculated, and the remaining 0.2% p.a. could be attributed to differences between the compositions of the two indices. In 2010 a change was made to the way the indices were calculated and at the time this was expected to increase the difference between CPI and RPI going forward. The 'formula effect' since 2010 has been observed to be between 0.8% p.a. and 1.0% p.a.

In March 2015, the OBR (Office for Budget Responsibility) issued a report outlining their current views on the differences between RPI and CPI. The report suggests the gap to be about 1.0% p.a. while the Bank of England central long-term estimate suggests 1.3% p.a.

Taking into consideration the comments above as well as analysis into this assumption as a firm, we have therefore decided to revise our standard assumption about the difference between RPI and CPI as we believe that there is sufficient evidence to justify a slightly wider gap although we would also still accept a range of CPI assumptions.

We have therefore assumed that CPI inflation will, on average, be 0.9% lower than RPI and this is slightly higher than the 0.8% difference assumed last year resulting in a slightly lower CPI assumption.

The below graph plots the progress of the CPI inflation assumption since 31 March 2015.



The following table shows the effect of this for sample employers with durations of exactly 10, 15, 20 and 25 years. In estimating the effect we have made an assumption regarding the proportion of membership with pensions benefits linked to CPI at each duration.

Duration (years)	Effect of change in pension increases on employer's liabilities
10	An estimated 1% decrease in liabilities
15	Estimate little effect on the liabilities
20	Estimate little effect on the liabilities
25	Estimate little effect on the liabilities

As we can see the effect of the change in pension increases is an estimated small decrease to the liabilities at short durations and very little effect at longer durations. These figures exclude any effect from the change in the real salary increase assumption.

As you can see from the chart above there has been more volatility in the inflation rates over the period but future expectations of inflation levels are currently at a broadly similar position to last year.

## Salary increases

Although future benefits are not linked to final salary, benefits accrued up to that date will continue to be linked to the final salary of each individual member.

For all Funds, we intend to use the salary increase assumption from the last triennial funding valuation and this will typically range between 1.5% and 1.8% above CPI. In some cases this will include a short-term overlay to reflect the current economic climate. This will be consistent with the approach adopted last year.

The effect of the changes in salary increase are summarised in the table below for sample employers with durations of exactly 10, 15, 20 and 25 years. In estimating the effect we have also made an assumption regarding the proportion of membership with pensions benefits linked to salary increases at each duration.

Duration (years)	Effect of change in salary increases on employer's liabilities
10	Estimate little effect on the liabilities
15	Estimate little effect on the liabilities
20	Estimate little effect on the liabilities
25	Estimate little effect on the liabilities

Future expectations of long term salary increase levels are currently at a broadly similar position to last year and therefore, there is very little effect on the liabilities at all durations.

This is the assumption that employers are most likely to request a specific assumption in line with their own expectations and we are happy to discuss this as required.

## Overall effect of the changes to the financial assumptions

### What does this all mean when we bring it all together?

The first caveat is that no employer is average and so any prediction of what might apply to an average employer may not necessarily apply to every, or indeed any, employer.

The effect of the changes in the financial assumptions on an employer's liabilities are dependent on what point of the bond yield curve and inflation spot rate curve is adopted, and thus dependent on the duration of their liabilities. The table below describes the likely effects for sample employers at liability durations of exactly 10, 15, 20 and 25 years.

Duration (years)	Effect of changes in financial assumptions on employer's liabilities
10	An estimated 7% decrease in liabilities
15	An estimated 7% decrease in liabilities
20	An estimated 7% decrease in liabilities
25	An estimated 9% decrease in liabilities

As you can see, there is likely to be a decrease on the liabilities at all durations as a result of the change in assumptions over the year, mainly as a result of the increase in the discount rate assumption. The final results will depend on market conditions as at 31 March 2016.

If we assume that Fund returns are as in the asset return section of this report, we believe that this decrease in the liabilities will be largely offset by a decrease in the asset value.

Therefore we expect most employers could see a relatively stable year in terms of the funding level (the assets divided by the defined benefit obligation) or even a small improvement but this will depend on each Fund's asset returns and how mature their liabilities are and how much they have paid in deficit recovery contributions.

### Adjustments to fees

The Fund will communicate fees to employers however we would like to make you aware that there may be additional fees if there are particular features or events for an employer which need to be taken into account. As examples of this:

- where an employer chooses to nominate their own assumptions;
- if there are additional calculations to be done if a surplus is revealed;
- when there are significant staff transfers/movements to allow for;
- if additional disclosures are required; or
- employers request to receive their report by a particular deadline.

Please get in touch with the Fund for further information on fees.

## Appendix 1    **FRS 102 Standard**

The FRS102 standard applies to employers who have an accounting year beginning on or after 1 January 2015 although earlier adoption was permitted. From that time FRS17 will no longer apply.

The key changes under the new FRS102 standard are as follows:

- The “expected return on assets” figure is no longer be used. Instead, the “finance cost” which was the difference between the interest on liabilities and expected return on assets will be replaced by a “net interest cost”, calculated using the discount rate applying at the start of the period;
- Discount rates are no longer specifically pegged to AA-rated bonds, only to “high quality corporate bonds”, although it is not expected that this change will have much of an impact.
- More disclosures will be required about the risks posed by the Fund;
- Various components within the disclosures will be relabelled;
- A change in the way surpluses are restricted which may allow a surplus to be recognised where it was not under FRS17.
- The cost of a defined benefit scheme will be divided into four elements, the first three of which will be included in profit/loss, the fourth in other comprehensive income:
  1. Change in liability due to employee service during the reporting period (service cost)
  2. Net interest on the net liability
  3. Benefit changes, curtailments and settlements (past service costs)
  4. Re-measurement of the liability (comprising actuarial gains and losses and the return on the Fund assets (excluding the net interest amount))
- FRS 102 refers to the “fair value” of assets rather than specifically requiring the use of bid values;
- Treatment of expenses - administration costs, other than those relating to investment management, will need to be expensed as they are incurred.

The introduction of FRS102 may also affect how employers disclose their liabilities from unfunded schemes as the standard requires information on the contributions payable to these schemes and further narrative on the scheme and its associated risks.