2016 Formal Valuation: Setting the Funding Target

Executive Summary

The London Borough of Barnet Pension Fund ("the Fund") will undertake a triennial valuation as at 31 March 2016. The valuation is a statutory requirement of the Regulations[1] which facilitates a health check of the Fund against an appropriate funding target and a review of its funding plan. In order to carry out the valuation, actuarial assumptions are required to set an appropriate funding target.

The assumptions are informed estimates about future experience and therefore, over time they may need to be updated to reflect emerging evidence and changes in the regulatory and environmental background. Ahead of the 2016 valuation, we have carried out analysis to help set the assumptions used to set the funding target. The 2016 assumptions and reasoning are summarised below. Please note that these are influenced by the change in actuarial advisor from Barnett Waddingham to Hymans Robertson LLP.

Assumption	2013 assumption	2016 assumption	Reason for change
Discount rate[2] - Methodology - AOA	Weighted average of assumed future investment returns	Gilts plus 1.6%	Change in approach from change of actuarial advisor
Pension Increases - RPI-CPI gap	CPI = RPI – 0.8%	CPI = RPI – 1.0%	Increased gap due to emerging evidence
Salary increases - Inflationary	2 years at CPI then RPI + 1.0%	RPI – 0.7%	Continued public sector pay restraint, closure of final salary scheme to accrual of new benefits
Longevity - Baseline - Future Improvements	110% of S1PA tables 2012 CMI model with long term rate of improvements of 1.5% p.a.	Club Vita analysis 2013 CMI model, peaked improvements, long term rate of improvements of 1.25% p.a.	Change to baseline as Fund is now a Club Vita subscriber Updated CMI model for future improvements
Withdrawal	Reflects recent LGPS experience		
Ill health retirements	Reflects recent LGPS experience		
Promotional salary increases	Removed distinction between genders and extended increases up to age 50 to reflect national trends and equal pay commitments		
50:50 take up option	10%	5%	Reduced to take account of emerging experience
Commutation	No proposed change from 2013 valuation assumption		
Pre-retirement mortality	Reflects recent LGPS experience		
Proportions married	80% / 70% of males / females at retirement	85% / 90% of males / females at age 65	Change to Hymans LGPS assumption

Addressee and Purpose

This paper has been commissioned by the London Borough of Barnet in its capacity as Administering Authority to the London Borough of Barnet Pension Fund (“the Fund”). It has been prepared by Hymans Robertson LLP in our capacity as actuaries to the Fund.

The purpose of this paper is to inform the Pensions Committee of the assumptions to be used to set the funding target for the Fund’s formal valuation as at 31 March 2016.

Background

Pension schemes exist to pay benefits earned by their members during their years of eligible service. In the LGPS, the scheme is split into separate funds which pay benefits earned by employees of participating employers. The London Borough of Barnet Pension Fund is one such fund. The actual cost of paying all the benefits cannot be known with certainty until the final benefit payment is made to the last remaining member. In funded schemes, like the LGPS, the benefits must be paid for out of funds set aside in advance. In order to determine how much money to set aside, it is therefore necessary to make assumptions about the level of the benefits and the returns that will be achieved on the Fund’s assets (financial assumptions) and when benefits will be paid to members (demographic assumptions). These assumptions are agreed by the officers based on advice from its actuary and are used to set the funding target.

The Fund will undertake a triennial valuation as at 31 March 2016. The valuation is a statutory requirement of the Regulations[1] which facilitates a health check of the Fund against an appropriate funding target and a review of its funding plan. In order to carry out the valuation, actuarial assumptions are required to set an appropriate funding target.

The assumptions are informed estimates about future experience and therefore, over time they may need to be updated to reflect emerging evidence and changes in the regulatory and environmental background. Ahead of the 2016 valuation, we have carried out a review of the assumptions used by Barnett Waddingham to set the funding target at the 2013 valuation. The results of our review are summarised below. Where we have suggested a change in assumption from 2013 we have also noted the reason.

The following sections examines the main financial and demographic assumptions in detail.

Financial assumptions

Broadly speaking, financial assumptions relate to the level of benefits (i.e. the amount in £) when they are in payment and their equivalent value in today’s terms.

Discount rate

The discount rate is the name given to the assumed rate of investment returns that the Fund will achieve in the long-term. It determines the money or assets needed today such that future investment returns and contributions will be sufficient to pay members’ benefits.

Whilst considering the discount rate, the Fund should always consider:

- How likely are the Fund’s assets able to return the rate assumed in the discount rate over the long term?
- Does the choice of discount rate tie up with the Fund’s objectives and level of investment risk?
- Does the discount rate reflect the changing nature of the Fund?

Based on analysis we have carried out, the officers have decided to set the discount rate equal to the long-dated UK government bond yield (fixed interest) at 31 March 2016 plus an asset out performance assumption of 1.6%.

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[1] Local Government Pension Scheme Regulations 2013.

[2] See Appendix A for full details of the analysis underlying the recommendation.

This is a change in approach to setting the discount rate from the 2013 valuation, from a weighted average of assumed future investment returns to a gilts plus approach.

The paper previously provided to the officers containing Fund-specific modelling, results and reliances and limitations is available on request.

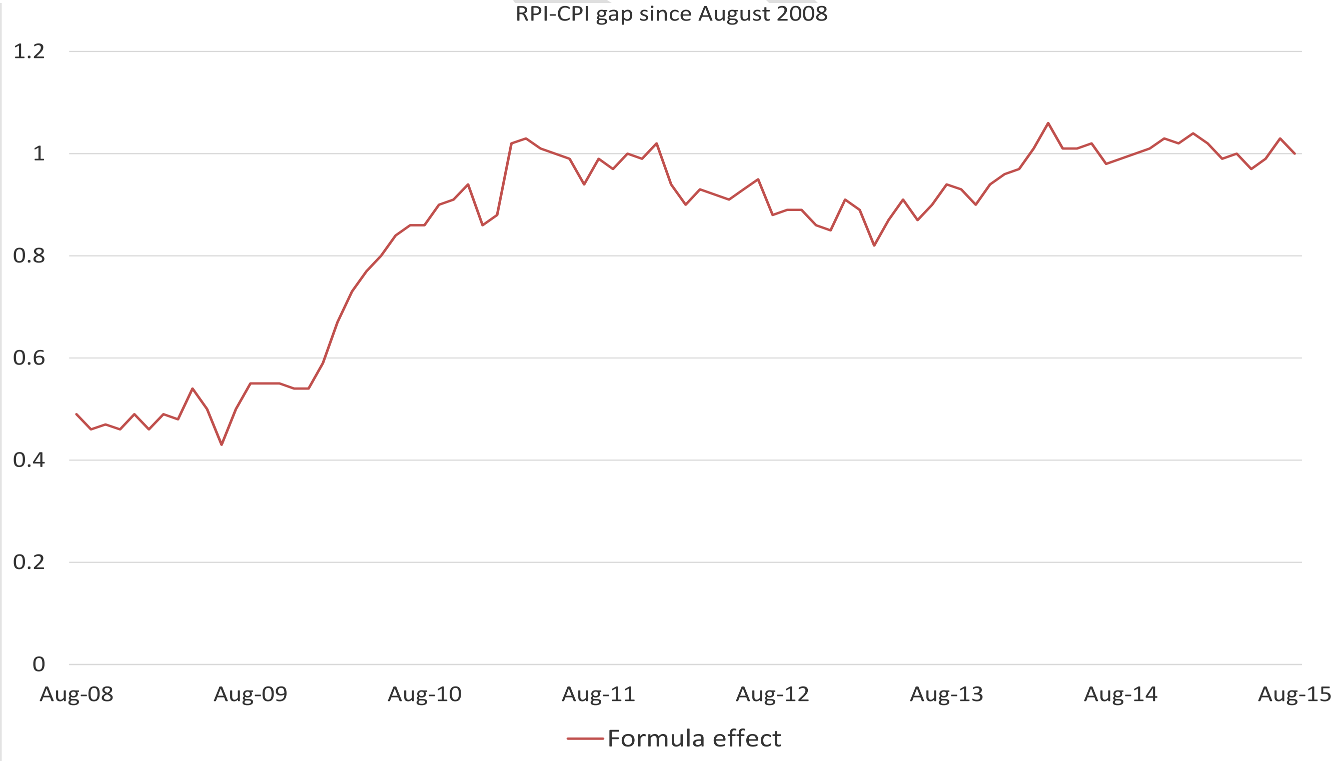
Inflation / pension increases

LGPS benefits increase each year in line with the Consumer Prices Index ("CPI") measure of inflation, which is therefore a key financial assumption for the valuation. The best way to measure future financial values is to use information from the financial markets. As no market in CPI linked bonds exists, we calculate the market-implied value of future RPI ("Retail Price Inflation") increases and adjust it downwards to get an assumption for CPI.

The two main differences between RPI and CPI are:

- The 'basket' of goods that each measure is based on (e.g. CPI doesn't include mortgage payments and RPI doesn't include the cost of new cars); and
- The 'formula effect' which is related to the way the index is calculated from the price changes of the goods in the basket.

At the 2013 valuation, CPI was assumed to be 0.8% less than RPI. At the 2016 formal valuation we are proposing to increase this long-term gap between RPI and CPI to 1.0% p.a. The main reason for the increase in this assumption is the steady increase in the formula effect over the last few years, as monitored and published by the Office for National Statistics on a regular basis. The chart below shows this increase:



Salary increases

All benefits accrued prior to 1 April 2014 are linked to the member's final salary before they leave active service. In calculating the cost of these benefits, it is therefore important to estimate the increase in salaries for active members until they leave active service.

Over recent years, annual pay growth in the public sector has in general been lower than the rate of inflation. In addition, the government has stated that public sector pay growth will be no more than 1% p.a. over the next four years (essentially until 31 March 2020). With members' benefits being linked to their salary at retirement, the salary increase assumption, is derived on a long term view of future salary increases. However, with the introduction of CARE benefits for service earned after 1 April 2014, the final salary element of the Fund's liabilities will gradually lose its importance in future years, as the final salary benefits run off and come in to payment.

The salary increase assumption that we will use for the 2016 valuation of the Fund is 1% p.a. until 2020 then RPI going forward: this was agreed after discussion with the Fund's officers. Taking these factors into account and assuming that half of the Fund's liabilities remain linked to final pay come 2020, the assumption can be expressed as a single blended long term rate of RPI less 0.7%.

Demographic assumptions

Broadly speaking, demographic assumptions relate to the timing of benefits, i.e. when they start and for how long they are paid.

Longevity

Of all the demographic factors, longevity is the one that presents the greatest uncertainty. As the Fund is now a subscriber to Club Vita it will benefit from a greater understanding of longevity risk, in particular the specific risk relative to its own members.

There are two components when setting an assumption for longevity:

1. How long people live for based on current observed life expectancies ('baseline longevity'); and
2. An allowance for possible future improvements to longevity ('future improvements').

We proposed a change to methodology for the 2016 valuations in the form of a move away from the standard SAP tables to ClubVita which, based on their analysis of LGPS Funds and the London Borough of Barnet Pension Fund in particular, sets a bespoke longevity assumptions for the Fund's membership. Details of the underlying tables and model adopted will be discussed with the Officers in due course.

The Fund should note we advocate a long-term approach to funding for longevity improvements in assessing the contributions payable by employers in the Fund. This is a "wait and see" approach: in other words, the assumption adopted for future improvements is not as prudent as most private sector schemes would adopt but is, we believe, a best estimate. This is the most appropriate as:

- The longevity risk faced by funds is mitigated in part by the link between Normal Retirement Age to State Pension Age for future service benefits (which in turn, is expected to increase in the future in line with increases in life expectancy);
- The LGPS 'employer cost cap' is expected to include longevity as a cost control mechanism, thus mitigating the impact of future longevity improvements; and

Local authority funds have a long term time horizon over which to fund improvements in longevity if they emerge.

We will continue to review the appropriateness of this assumption at future valuations.

Other demographics

The starting point for our proposed 2016 valuation assumptions was to analyse past experience over 2010 to 2013 for all the LGPS funds Hymans Robertson advises (40 funds in England & Wales). We use such a large data set to give us a big enough sample size for our analysis to be statistical credible. Some of the experience we analyse is rare, therefore we need a sufficiently large number of events to enable sound analysis.

Assumptions for withdrawals (excluding ill health), ill health early retirements, promotional salary scale, promotions married and pre-retrirement mortality have been set to reflect emerging experience. Each of these assumptions will also reflect a small change due to the change in actuarial advisor in the inter-valuation period.

The assumption for commutation is unchanged from the 2013 valuation.

50:50 take-up option

From 1 April 2014, members have been able to elect to pay half the standard level of contributions for half the accrued benefit (i.e. an accrual rate of 1/98). This benefit is known as the *50:50 benefit*.

At the 2013 valuation Barnett Waddingham assumed that 10% of members would choose to take up the 50:50 option.

In the two years since the option was made available, the Fund, and the LGPS as a whole, has seen take-up levels far below 10% (the nationwide the figure is c. 0.2%). However, it is not clear whether take-up will remain low or increase in future due to the impact of auto-enrolment, cessation of contracting out and lower tax allowances is felt.

We will therefore use an assumption of 5% in the 2016 valuation initial results.

Reliances and limitations

This information is addressed to London Borough Barnet as Administering Authority to the London Borough Barnet Pension Fund. It has been prepared in our capacity as actuaries to the Fund and is solely for the purpose of presenting the 2016 valuation assumptions to the Pensions Committee. It has not been prepared for any other purpose and should not be used for any other purpose.

The Administering Authority is the only user of this advice. Neither we nor Hymans Robertson LLP accept any liability to any party other than the Administering Authority unless we have expressly accepted such liability in writing. The advice or any part of it must not be disclosed or released in any medium to any other third party without our prior written consent. In circumstances where disclosure is permitted, the advice may only be released or otherwise disclosed in its entirety fully disclosing the basis upon which it has been produced (including any and all limitations, caveats or qualifications).

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

- TAS R – Reporting; and
- Pensions TAS.

Peter Summers FFA

For and on behalf of Hymans Robertson LLP

17 October 2016