

LGPS Spotlight: 2016 Actuarial Valuations

February 2018

The actuarial valuation and how employer contributions are set is arguably the defining feature of the Actuary's relationship with the Administering Authority. Despite being carried out under a single set of Regulations (albeit those in Northern Ireland are slightly different), material differences in how the results are calculated and presented remain. In this Spotlight we consider some of the key differences and what these mean in practice.

Introduction

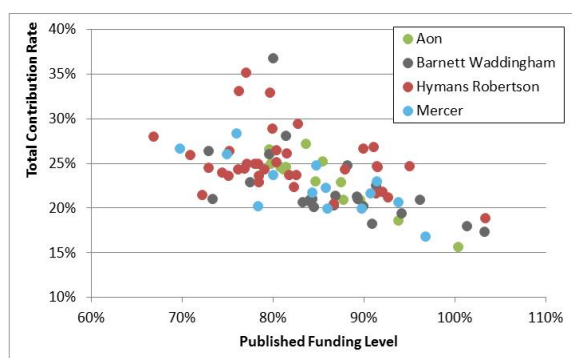
Almost a year ago, there was a collective sigh of relief as the last of the 2016 LGPS valuations in England, Wales and Northern Ireland were signed off and the revised Rates and Adjustments certificates came into force.

Since then the Scheme Advisory Board (SAB) has published all the valuation reports on its website, together with an overview of the valuations as a whole. The Government Actuary's Department has also been analysing the valuation results for the purpose of its review under Section 13 of the Public Sector Pensions Act 2013.

At Aon we have also been analysing the valuation reports and our observations can be found below.

How much are employers paying?

It shouldn't surprise anyone that generally speaking employer contributions to the better funded funds are lower than those to less well funded funds.



When we compare the average total contribution rate of employer's payable over the scheme years starting in 2017, 2018 and 2019 with the funding

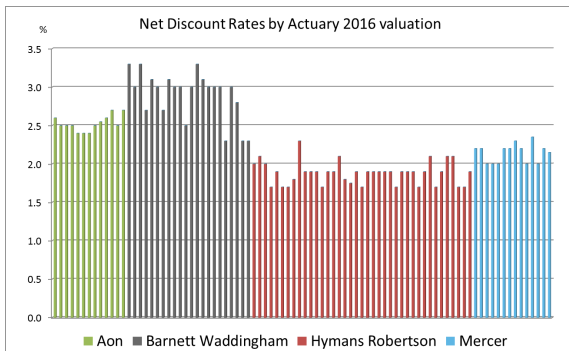
level, the downward trend is very apparent. In addition:

- a large cluster of funds have average employer contributions of 25% of pay (generally associated with a funding levels of c70% - 80%)
- a lot of funds have average employer contributions of around 20% of pay (generally associated with a funding levels of c85% - 95%)
- there are a small number of funds paying materially higher contributions than average, most of whom are London Boroughs advised by Hymans Robertson. These aren't the funds with the lowest funding levels.

Of course the funding level (and to a lesser extent contributions payable) is highly dependent on the choice of funding assumptions and especially the discount rate. The chart above would look quite different if the funding levels were calculated using a single set of assumptions.

Variability in net discount rates

The net discount rate is arguably the most important assumption in the valuation. Given increasing divergence in investment strategy and the different methods used within the LGPS to determine the discount rate, readers will not be surprised that there is a reasonable amount of variability within the net discount rate adopted (the discount rate in excess of the CPI inflation assumption).



The chart above shows the net discount rate of all the funds split by advisor. This is the discount rate applicable to the main Councils or London Borough in each fund after allowing for the CPI assumption, and shows the past service discount rate only.

The patterns within the chart suggest that the key driver of discount rates is the actuary's preferred method for setting the discount rate. We understand that only Hymans continues to use the dominant approach in the private sector of setting the discount rate by reference to gilt yields. This meant Hymans-advised funds adopted the lowest net discount rates at the 2016 valuations, despite an increase in the fixed adjustment applied to gilt yields ("asset outperformance assumption") in many cases (from 1.6% in 2013 to an average of 1.8% in 2016).

Mercer continue to use a different (higher) net discount rate for future service compared to past service, leading to an immediate deficit on the past service basis emerging on benefits accruing unless an improvement in investment markets makes up the gap.

There continues to be a disconnect between the reported funding level and contributions payable, particularly for Hymans-advised funds. This is down to smoothing techniques which are adopted to try to limit contribution changes and keep contributions more affordable for the main employers. We discuss this further below.

Effect of smoothing

In order to try to quantify the effect of the smoothing of employer contributions we have calculated two metrics:

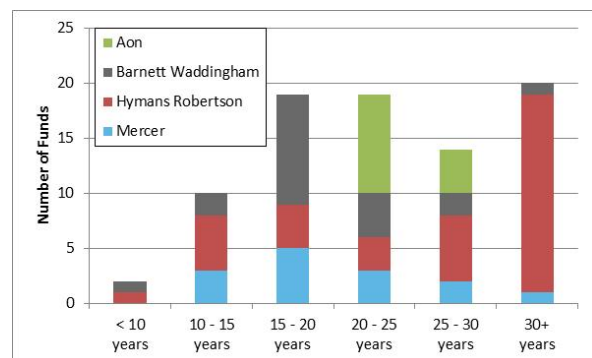
- the period by which the fund would achieve 100% funding based on the reported funding level, the contributions certified (assuming

these increase in line with the long term pay growth assumption, ignoring the effect of any short term pay constraints) and assuming investment returns are in line with the discount rate - "the time to pay off the deficit"

- the investment return required to achieve 100% funding by the end of a 20 year period based on the reported funding level and the contributions certified (assuming these increase in line with the pay growth assumption) - "the required investment return"

Time to pay off the deficit

Most funds have a stated recovery period (or surplus spreading period for those in surplus) of between 15 and 25 years. However Hymans Robertson have not disclosed the recovery period in their valuation reports. Our "time to pay off the deficit" calculation attempts to enable a comparison between funds allowing for the contributions payable as well as the reported funding level.



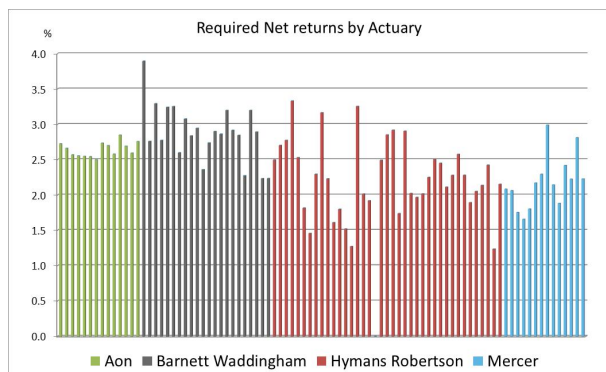
As the chart above shows, a significant proportion of funds would not expect to be fully funded within 30 years if the assumptions used to determine the liabilities were borne out in practice. There are also a small number of funds which wouldn't be fully funded within fifty years. This suggests that for those funds the contribution plan relies on investment returns being achieved which are materially higher than the discount rate used to calculate the funding level. If those investment returns are not achieved, contribution increases will be required in future if solvency is to be achieved within a "reasonable" period.

In the private sector the Pensions Regulator has begun to investigate schemes which materially "back-end load" contributions. Whilst we don't believe that the Government Actuary's Department

will necessarily find that the contributions for these funds are insufficient to satisfy the regulatory objectives of achieving solvency and long-term cost efficiency, it is not clear that these funds can be considered as targeting solvency on the basis quoted in the valuation report.

Required investment return

Our "required investment return" calculation estimates what the discount rate would need to have been in order for the fund to achieve 100% funding at the end of a 20 year period based on the contributions certified and assuming that these increase after the certification period in line with the long term salary increase assumption.



If you compare the above chart with that showing the reported net discount rate by actuary (on page 1) you will see that the required returns look quite different where contributions are not set using the disclosed past service assumptions.

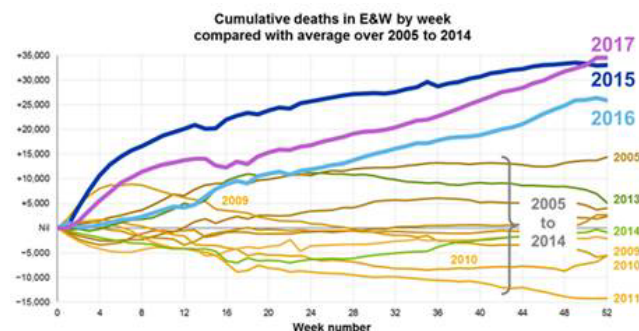
There are a number of funds requiring returns of more than 3% above CPI to achieve full funding in 20 years despite some actuaries reporting the SAB results in the valuation reports as a "best estimate" basis (which suggests a discount rate of CPI plus 3% contains no prudence).

Mortality assumptions

The allowance for post-retirement mortality is the most influential of the demographic assumptions. Comparing the post retirement mortality assumptions should be approached with caution - regional variations are well-known and at Aon we recommend basing an assumption for current mortality on analysis of each fund's own mortality experience, augmented by analysis based on the socioeconomic characteristics of individuals' postcodes. This means that there should be a

reasonably wide variation in current mortality assumptions chosen. In practice we understand that some assumptions proposed by other LGPS actuaries place little or no emphasis on the fund's own experience

The choice of how to allow for future mortality improvements involves more judgement. Between 2000 and 2011 there was a reasonably sharp increase in life expectancy. However, more recent analysis (over 2015 to 2017) suggests increases in life expectancies have slowed.

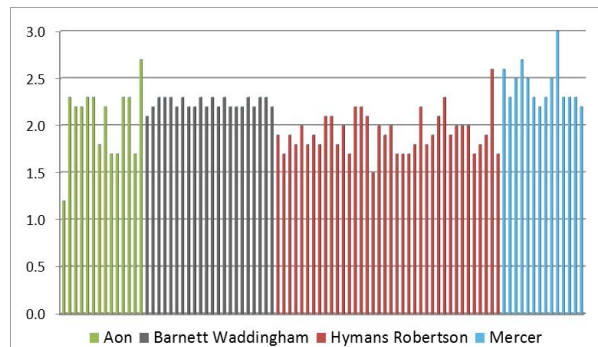


The chart above shows the cumulative number weekly of deaths for each year and compares them to the average over 2005 and 2014.

There are generally two elements to the improvement assumption – short-term improvements and the expected long term trend of life expectancy increases.

As improvements tend to be expressed as a % of current mortality rates the overall effect depends upon the baseline assumption adopted and the profile of the membership.

The chart below shows the average number of extra years a member currently aged 45 is expected to live over a member currently aged 65, if they both retired at age 65, based on the 2016 valuation assumptions adopted.



It can be seen that additional life expectancy generally varies between 1.5 years and 2.5 years with Hymans adopting a lower long-term improvement assumption than the other 3 firms.

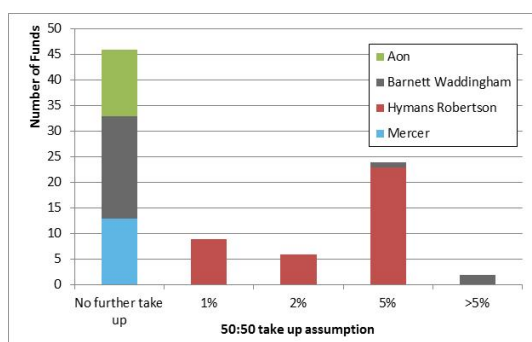
As the chart shows, one of the Aon advised funds is an outlier. The reason for the apparent discrepancy is that the in-depth "post code" longevity analysis carried out by our longevity experts for the administering authority suggested that the fund's non-pensioners were quite different in profile to those already retired or close to retirement.

50:50 Option take up

The 50:50 option was introduced as part of the 2014 scheme as a means of encouraging low paid scheme members who might otherwise opt out on affordability grounds to remain in the scheme.

In the absence of any data, the Government Actuary's Department ("GAD") originally assumed 10% of members earning below £21K would elect the 50:50 scheme. The fund actuaries largely replicated this assumption in the 2013 valuations (albeit generally adopting a simplified version), GAD have since confirmed that this assumption is broadly equivalent to around 5% of all members taking up the option. However, take up of the option has been considerably lower than originally assumed and those who have taken it up are often the higher paid reacting to reductions in the annual and lifetime allowances.

At the 2016 valuations most funds assumed no further take up of the 50:50 option, simply assuming members would accrue benefits in line with the section they were in at the valuation date. However, a significant minority (41) continue to assume savings will be made due to members electing the 50:50 section in future.



The chart across shows that over 25 funds adopted an assumption that 5% of all members will be in the 50:50 scheme in future. Given that current take up of the 50:50 scheme is around 1% these funds are, in effect, pre-banking assumed savings from a sharp increase in the uptake of the 50:50 scheme.

Whilst we understand that the Scheme Advisory Board plans to increase awareness of the option following its recent survey on members' knowledge of the 50:50 scheme we are surprised that so many administering authorities have elected to take the risk that primary contributions are insufficient if a material increase in take-up does not materialise.

Conclusion

One of the main findings of the Dry Run Section 13 report was lack of consistency between the local valuations. Whilst the Fund Actuaries collaborated to agree the presentation of the primary and secondary contributions, our initial view is that material differences in valuation methods remain. We would argue that those differences will be (at least partially) explained by different employer profiles, risk appetites and investment strategies and that there is no regulatory requirement that administering authorities and their actuaries have to take a consistent approach. We would also point out that the outcome, in terms of local authority contributions, is less inconsistent than the published valuation assumptions would suggest. Whether the Government Actuary's Department agrees remains to be seen!

Want to know more?

The analysis included here, is done at a high level based on the summary data provided in the valuation reports. Therefore the information shown here will not exactly replicate the results produced by your Actuary. We would be happy to provide extra details if you would like to understand more.

Additionally, If you would like to know where your fund sits within the charts set out above, or would value further information on Aon's approach to the 2016 valuations and how we can help you develop your approach for the 2019 valuation, please do get in touch.

Contact Information

Chris Emmerson

Associate Consultant

+44 (0)117 945 3521

chris.emmerson@aon.com

Chris Archer

Principal Consultant

+44 (0)117 900 4402

chris.archer@aon.com

Alison Murray

Head of Public Sector Actuarial

+44 (0)117 900 4219

alison.murray@aon.com

About Aon

[Aon plc](#) (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

Aon Hewitt Limited
Registered in England & Wales No. 4396810
Registered office: The Aon Centre | The Leadenhall Building |
122 Leadenhall Street | London | EC3V 4AN

Copyright © 2018 Aon Hewitt Limited. All rights reserved.
Aon Hewitt Limited is authorised and regulated by the Financial Conduct Authority.
Nothing in this document should be treated as an authoritative statement of the law on any particular aspect or in any specific case. It should not be taken as financial advice and action should not be taken as a result of this document alone.
Consultants will be pleased to answer questions on its contents but cannot give individual financial advice. Individuals are recommended to seek independent financial advice in respect of their own personal circumstances.

Modelling information

We have made a number of assumptions and simplifications when calculating the total contribution rates and recovery periods for the funds.

To calculate the contributions due from employers in each fund, we have taken the average contributions due over 1 April 2017 to 31 March 2020. This has been done to smooth out the effects of any phasing in of contributions or reductions for pre-payment of contributions.

When calculating the recovery periods and required returns to pay off the deficit over 20 years from 1 April 2017, we have also assumed that, there is no change in deficit over the year following the valuation date. We have also assumed that primary contribution rate plus employee contributions are equal to benefit outgo.

We have also not allowed for any increase in deficit due to employers paying primary contributions which are lower than the cost of accrual on a past service basis. This will particularly affect funds which have different discount rates for past and future service.