Government
Actuary's
Department

Local Government Pension Scheme (LGPS)

Actuarial valuation as at 31 March 2020
Initial advice on assumptions for the SAB cost management process

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Contents

Background

Public service pensions cost control

The Public Service Pensions Act 2013 and associated HM Treasury Directions introduced a cost control mechanism for public service pension schemes, referred to here as the Employer Cost Cap (ECC).

Unlike other public sector schemes, the LGPS Scheme Advisory Board (LGPS SAB) has established a second cost control mechanism, implemented through scheme regulations, referred to here as the SAB cost management process (SAB process).

The Public Service Pensions (Valuations and Employer Cost Cap) Directions 2023 (the Directions) require an ECC calculation for the LGPS as at 31 March 2020. Therefore, the SAB process is also required as at 31 March 2020.

Since the last ECC and SAB process as at 31 March 2016, changes[1] have been made such that the ECC process now only relates to the reformed scheme with a wider corridor around the employer cost cap and an economic check, which allows for changes in the SCAPE discount rate before confirming any cost cap breach. Consequently, the SAB agreed to update the SAB process to allow for the reformed scheme only (but retaining allowance for the underpin), to widen the corridor and to adopt a discount rate reflecting changes in conditions.

This report has been commissioned by the LGPS SAB and provides advice on the assumptions required for the SAB process as at 31 March 2020. It is intended to aide discussion on the assumptions to adopt and refers to the approach adopted for the SAB process as at 31 March 2016.

Assumption requirements

The Directions specify numerous assumptions for the ECC process and require others to be determined by the responsible authority as best estimates. The SAB process is less prescriptive and provides the LGPS SAB with greater flexibility about the assumptions to adopt. However, the approach has been to maintain consistency with the ECC process where appropriate and only deviate where there are legitimate LGPS specific reasons. The SAB process at the previous valuations adopted the EEC process assumptions, unless there was good reason not to. At the 2016 scheme valuation, the SAB process assumptions differed from the EEC process in the following areas:

- Discount rate
- pay growth
- commutation
- 50:50

[1] https://www.gov.uk/government/consultations/public-service-pensions-cost-control-mechanism-consultation

In addition to these assumption differences, the SAB process also adopted a different methodology to the EEC process in the following areas:

- cost of revaluation in first year of retirement
- cost of club transfers assumptions

These latter differences relate to policy positions rather than actuarial judgement and I do not consider them further in this paper.

Financial assumptions

There are a variety of financial assumptions required to calculate costs for the ECC and SAB process. Table 1 below summarises the ECC assumptions (where known) and indicates whether they are LGPS specific or set in Directions. Where assumptions for the ECC are LGPS specific, there is unlikely to be a strong justification for the SAB process to adopt a different assumption. Therefore, the comments below on the various assumptions are mainly in relation to assumptions that are set in Directions for the ECC process.

Table 1: Summary of financial assumptions for the LGPS England & Wales 31 March 2020 valuation

Assumption	% per annum	LGPS specific / Directed
Discount rate	CPI + 2.4% to 31 March 2023, CPI + 1.7 thereafter	Directed
Pay increases	Year to 31 March 2021 7.6 Year to 31 March 2022 4.7 Year to 31 March 2023 2.8 Year to 31 March 2024 2.5 Year to 31 March 2025 1.6 Year to 31 March 2026 1.6 Year to 31 March 2027 1.9 Year to 31 March 2028 2.7 Thereafter 3.8	Directed
Promotional pay scale	Separate male and female scale between ages 20 and 50 (the same as for 2016)	LGPS specific
Pension increases	Official pension orders where known, then 8 April 2024 4.1 7 April 2025 0.6 6 April 2026 0.0 12 April 2027 0.8 10 April 2028 1.7 Thereafter 2.0	Directed

Discount rate

The discount rate for the ECC is a Directed assumption and uses up-to-date SCAPE rates. The effect of changes in the SCAPE rate, since the employer cost cap was set, are then excluded from the ECC check, but considered as part of the new economic check.

The 2016 SAB process adopted a discount rate that allowed for the change to the SCAPE rate applicable at 1 April 2016 (CPI + 2.8%). The reduction in the discount rate, since the employer cost cap was set, was broadly equivalent to the reduction in discount rates used in Fund valuations between 2013 and 2016.

Tables 2 and 3 below show the change in the SCAPE rate and the average Fund real discount rate over the period since the 2016 valuations.

Table 2: SCAPE rate changes since 31 March 2016

Date	SCAPE Rate
1 April 2016	CPI + 2.8%
1 April 2019	CPI + 2.4%
1 April 2023	CPI + 1.7%

Table 3: Average LGPS Fund real discount rate since 31 March 2016

Date	Fund real discount rate
31 March 2016	2.2%
31 March 2019	1.8%
31 March 2022	1.5%

Both the SCAPE rate and average real Fund discount rates have fallen in the period since 31 March 2016, with reductions in the SCAPE rate greater than those in Fund discount rates.

If the SAB follows a consistent process as 2016 and allows for the change to the SCAPE rate applicable at 31 March 2020 the discount rate to adopt would be CPI + 2.4% pa. This would act to increase the cost cap cost relative to the 2016 SAB process by the order of 2-3% pa based on the sensitivities disclosed as at 31 March 2016, but may be higher or lower when scheme experience and other assumptions changes are allowed for.

Alternative approaches could be:

- Maintain the 2016 rate, which would not change the cost relative to the 2016 process
- Allow for CPI + 2.4% pa from 31 March 2020, reducing further to CPI + 1.7% pa from 1 April 2023 in line with the latest changes to the SCAPE rate, which would increase the cost by 4-5% pa relative to the 2016 process

- Allow for the average real Fund discount rate, either 1.8% or 1.5% pa, which would increase the cost by more than 5% pa relative to the 2016 process

It is also worth noting that since 31 March 2022, market yields have increased considerably. Real gilt yields are around 3% pa higher than they were at 31 March 2022. Therefore, the real discount rates Funds might adopt at the current time would likely be higher than they were at the last Fund valuations, which would act to reduce costs. Hence, there may be arguments not to allow for the full reduction in discount rates illustrated in tables 2 and 3.

As described above, the discount rate has a material influence on the results of the SAB process, and there are a variety of reasonable options that could be adopted.

Pay increases

The pay increase assumption has a relatively small impact on the cost of providing ongoing benefits, since these are provided on a Career Average Revalued Earnings basis, and are revalued in line with CPI. However, the LGPS statutory underpin means that pay increases can affect the SAB process outcomes. The recent period of high inflation compared to salary growth reduces the cost of the statutory underpin and hence limits the significance of the pay increase assumption.

Assumptions need to reflect long term expectations up to the point of retirement for member accruing benefits in 2014-22, which covers a long period that is difficult to anticipate. However, the LGPS SAB should consider whether the Directed short term assumptions and the long term assumption of CPI + 1.8% pa are reasonable for the membership of the LGPS. For comparison the 2016 SAB process adopted a single assumption for both the short and long term of CPI + 1.5% pa.

Promotional pay increases

A scheme specific assumption is adopted for the ECC. This assumption is largely based upon experience in the LGPS and expectations for future promotional progression, consistent with the assumption adopted in 2016. Therefore, this should reflect a reasonable best estimate and there should be no reason to adopt anything different for the SAB process.

Pension increases

The LGPS provides pension increases in the same way as other public service pension schemes, predominantly providing increases in line with the change in CPI. The Directed pension increase assumptions are intended to reflect changes in CPI and there is nothing unusual about the LGPS which would suggest any reason for deviating from these. However, it will be important to check the overall consistency of all the financial assumptions when settling on a basis for the SAB process.

Overall effect of financial assumptions

The overall effect of financial changes to the SAB process assumptions relative to 2016 will be largely dependent on the choice of discount rate. Therefore, this could be anything from close to no change in the assessed cost to upwards of a 5% pa increase relative to 2016.

Demographic assumptions

Table 4 below sets out the majority of demographic assumptions required to carry out the valuation calculations.

Table 4: Summary of demographic assumptions for the LGPS England and Wales 31 March 2020 valuation

Assumption			LGPS specific / Directed
Post-retirement base mortality rates (males / females)	Normal health	99% S3NMA_M / 96% S3NFA_M	LGPS specific
	Ill health	117% S3IMA / 133% S3IFA	
	Dependants	96% S3DMA / 97% S3NFA_H	
Post-retirement mortality improvement rates	ONS-2020 population projections		Directed
Retirement decrements (years) (males / females)	CRA 60 CRA 65	61.5 / 60.5 65.1 / 64.6	LGPS specific
Withdrawal (likelihood of leaving service before 65 for member now 45) (males / females)	Males Females	52.0% 59.4%	LGPS specific
Proportion married/partnered (at death)	Males Females	63% 37%	LGPS specific
Age difference (years)	Males less females Females less males	3 -2	LGPS specific
Commutation (of pension)	Pre-2008 service: 10% Post-2008 service: 20%		LGPS specific
50:50 option	Cost cap past service - reflect actual cost Cost cap future service - ignore		Directed
Club transfer allowance	No expected impact		LGPS specific

LGPS specific assumptions

The LGPS specific assumptions above used in the 31 March 2020 ECC valuation reflect a best-estimate approach (do not include margins for prudence or optimism) and are based on analysis of LGPS scheme experience and other information, where relevant. There is no specific reason to adopt an alternative approach for the SAB process and hence I would recommend these assumptions are maintained for the SAB process.

Note the assumption for commutation of pension for cash in respect of post-2008 service was previously directed by HMT but is now scheme specific.

Directed assumptions

Mortality improvements

HMT directs the mortality improvement assumption for the ECC valuation process and has directed the use of the ONS-2020 population projections. This is the latest ONS model and includes estimated adjustments in respect of the impact of Covid-19 on mortality rates in the short term. This results in lower mortality improvements than were assumed for the 2016 SAB process.

Fund actuaries typically use a mortality improvement model produced by the CMI to set future mortality improvements, which is similar but not the same as the ONS projections. However, the Funds do not all use the same version of the CMI model or the same parameters to determined future mortality improvements.

For the 2016 SAB process it was agreed to adopt the ONS model, consistent with the ECC process, which applies consistent mortality improvements across all Funds. There is no specific reason to change this approach for the 2020 SAB process.

50:50 option

The 50:50 benefit option is also directed by HMT. For the 2020 ECC valuation process the cost cap future service cost continues to be calculated as if no member has or ever will opt for 50:50 benefits to ensure that the take up has no impact on the cost cap future service cost. For the past service cost, there is a slight change in the technical implementation of the 50:50 policy in that the cost cap liabilities and assets will now reflect the actual take up of the 50:50 option, so that 50:50 take up does not lead to cost cap surpluses or deficits, and ensure that the take up of 50:50 has no impact on the cost cap past service cost.

For the 2016 SAB process an allowance was made for the 50:50 option, despite information at the time showing very few members had taken up the option. There are three possible approaches for the 2020 SAB process:

- Maintain the 2016 assumption, regardless of experience
- Follow the ECC process to ignore the impact of 50:50
- Update the analysis of take-up of the option to support an updated assumption

The impact of the 50:50 assumption will be relatively small as regardless of which approach is adopted it only applies to a small proportion of the membership.

Overall effect of demographic assumptions

The impact of adopting the demographic assumptions in table above would be to reduce the cost cap cost relative to the 2016 SAB process. This is because the mortality improvement rates are lower than for the 2016 process and hence future life expectancy is reduced. It is estimated at this stage that the impact on the cost cap cost would be a reduction of the order of 1% pa.

Conclusion

The majority of assumptions required for the SAB process are LGPS specific when used in the ECC and therefore it seems appropriate to maintain these assumptions. For the assumptions that HMT directs for the ECC, the most significant is the discount rate. There are multiple possible options to set the discount rate, which would lead to a wide range of potential SAB process costs.

The financial assumption options are likely to lead to an increased SAB cost estimate relative to the 2016 SAB process. Conversely, the demographic assumptions are likely to lead to a reduction in the SAB cost estimate relative to the 2016 SAB process. The overall outcome will depend upon the choice made for the discount rate. It is therefore important to consider the achievable objectives from the SAB process and its interaction with the ECC before settling on the assumptions to adopt.

Reliance

This work has been carried out in accordance with the applicable Technical Actuarial Standards: TAS 100 and TAS 300 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

This document should be read in conjunction with the Advice on Assumptions Report in respect of the Actuarial Valuation as at 31 March 2020.

This report has been prepared for the use of the LGPS England and Wales Scheme Advisory Board in relation to the 31 March 2020 SAB cost cap valuation. The assessment of the impact of assumption changes on the SAB process costs are approximate guides to help inform consideration of the process. Accurate figures will be required on proposed assumptions before the SAB process can be finalised. The information and advice in this report should not be relied upon, or assumed to be appropriate, for any other purpose or by any other person. In particular, this report does not provide any advice on employer contribution rates or funding.

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