Government Actuary's Department

Gender Pension Analysis

Update for the Local Government Pension Scheme Advisory Board

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Contents

Summary

This report for the LGPS Scheme Advisory Board ("SAB") provides an initial overview of how pension income and total pension pot size in the Local Government Pension Scheme ("LGPS"), were impacted by gender ("the gender pension gap") as at 31 March 2020.

This report is based on data GAD has collected to conduct an actuarial valuation of the LGPS and to provide renewed evidence for developing government policy on the scheme. It should be read in conjunction with the GAD report Local Government Pension Scheme: England and Wales Membership data Actuarial valuation as at 31 March 2020 ("2020 data report"). Please see the section "important information" for further details on the useability and limitations of the information presented in this report.

Overview

The SAB has asked GAD to help it explore the extent of inequalities of benefit outcomes between male and female LGPS members. This report examines data for members actively contributing to the LGPS ("actives") and members who were receiving pension payments in respect of their previous employment ("pensioners") as at 31 March 2020. The mean amounts of pay received and accrued pension, and in payment and contingent pension for these groups respectively was:

Table 1: Actives' pay and pension by gender as at 31 March 2020

Gender	Proportion by no.	Mean actual pay	Mean total pension
Female	74%	£18,807	£3,198
Male	26%	£27,532	£5,416
Gender gap		31.7%	41.0%

Table 2: Pensioners' pension in payment by gender as at 31 March 2020

Gender	Proportion by no.	Mean pension in pay	Mean partner pension
Female	62%	£4,285	£1,653 (39% of member)
Male	38%	£8,466	£3,834 (45% of member)
Gender gap		49.4%	56.9%

The "Analysis" section of this report includes further summaries and charts.

Additional data processing has been undertaken, as described in the "Data and methodology" section of this report. We have concluded that this means that this data is suitable for the purpose of comparing the benefits received by male and female members.

Next steps

1. **As agreed with SAB we will share a dataset covering the actives and pensioners and can provide further data as the valuation data processing progresses.**

2. **We can provide further analysis including incorporating deferred data and analysis considering the potential drivers of pension entitlement differences.**

3. **SAB should consider which further avenues of investigation it wishes to pursue, including issues raised by this update and our 16 November 2022 cost estimate.**

Analysis

Actives

While women comprise around 74% of employees within the LGPS England and Wales actives data, they have lower mean pay and accrued pensions.

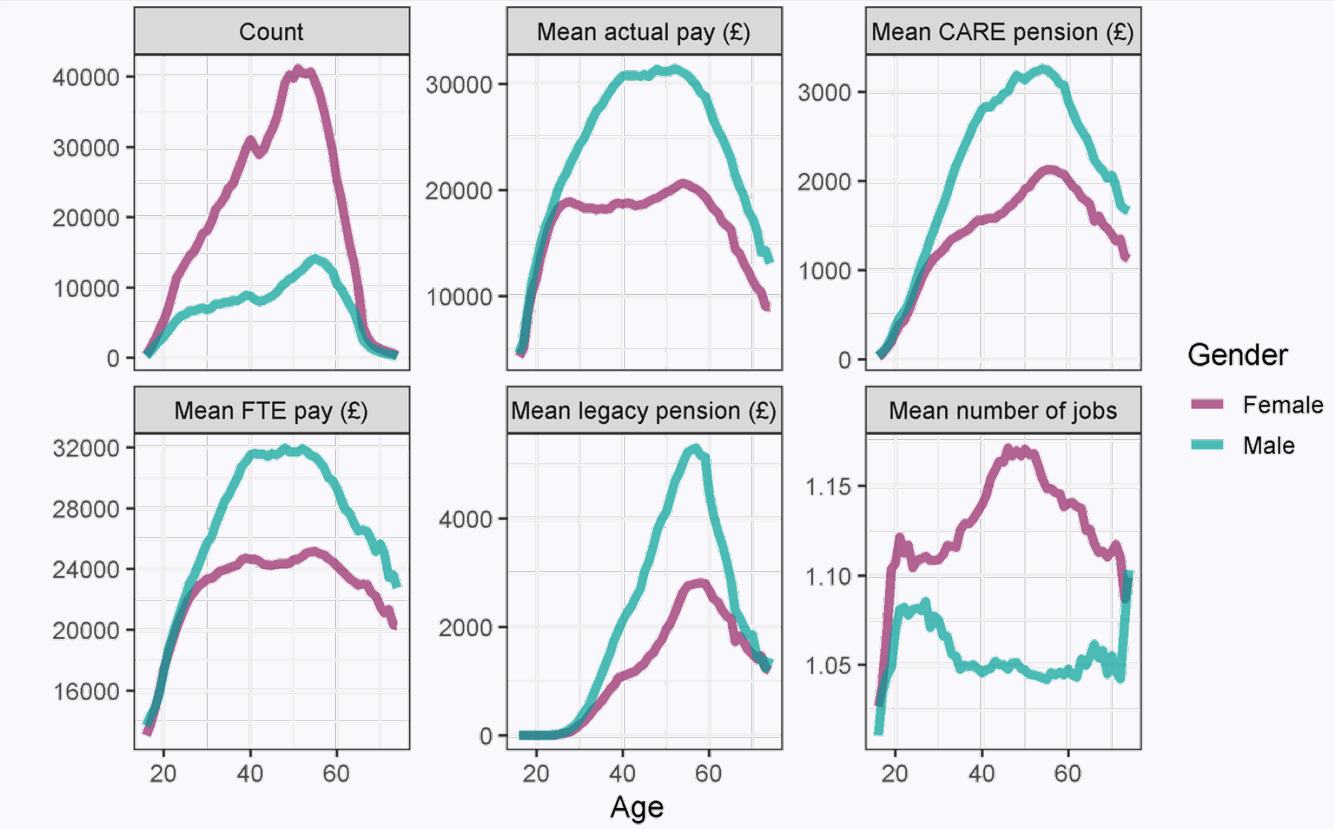
The table below compares several key metrics for male and female actives. Means and counts have been calculated at the level of individuals (see 'Data and Methodology' section for further details). 'Number of jobs' is based on the number of separate records that a given National Insurance number is linked to.

Table 3: Summary of actives data

	Mean FTE pay (£)	Mean actual pay (£)	Mean number of jobs	Mean CARE pension (£)	Mean legacy pension (£)	Mean age	Headcount	Percentage of overall headcount
Females	24,018	18,807	1.14	1,656	1,542	45.46	1,199,566	74.1%
Males	28,874	27,532	1.05	2,536	2,879	45.45	419,888	25.9%
Gender gap	16.8%	31.7%		34.7%	46.4%			

The plots below illustrate the ways in which key variables of interest vary by both age and gender.

Chart 1: Actives gender differences by age



The plots and tables clearly show that there is a substantial pay and pension advantage for males as compared with females among LGPS EW active members. The male advantage appears in the mid- to late- twenties, peaking quickly and remaining broadly stable before beginning to narrow around age 60.

This is consistent with the extensive body of published research on the gender pay gap, which highlights gender disparities in the allocation of childcare responsibilities as a key underlying factor. Females tend to devote more of their time and resources to childcare than males, leaving the latter with more scope to focus on their careers and thus with better prospects for promotion and pay rises.

The charts and the table above show that gender differences in full-time-equivalent ("FTE") pay are lower than differences in actual pay. This suggests that the difference in actual pay is partly attributable to higher levels of part-time working among females. Moreover, the 'mean number of jobs' is significantly higher for females than for males, suggesting that females are more likely to work flexibly for multiple different organisations or on different contracts. This is also consistent with the published literature in highlighting the contribution of male-female differences in working patterns to the gender pay gap.

The mean gender gap for CARE pension is similar to, but slightly higher than, the mean gender gap for actual pay. This might be caused, for example, by females have shorter service or more career breaks than males. The mean gender gap for legacy pension is significantly higher than the mean gender gap for actual pay, which might reflect both the different pension scheme design (final salary) and the different time period (pre 2014 service).

Future salary increases, which may also vary by gender, would also impact on the final value of legacy pension accrued as at 31 March 2020. This is not captured in the summaries above.

Pensioners

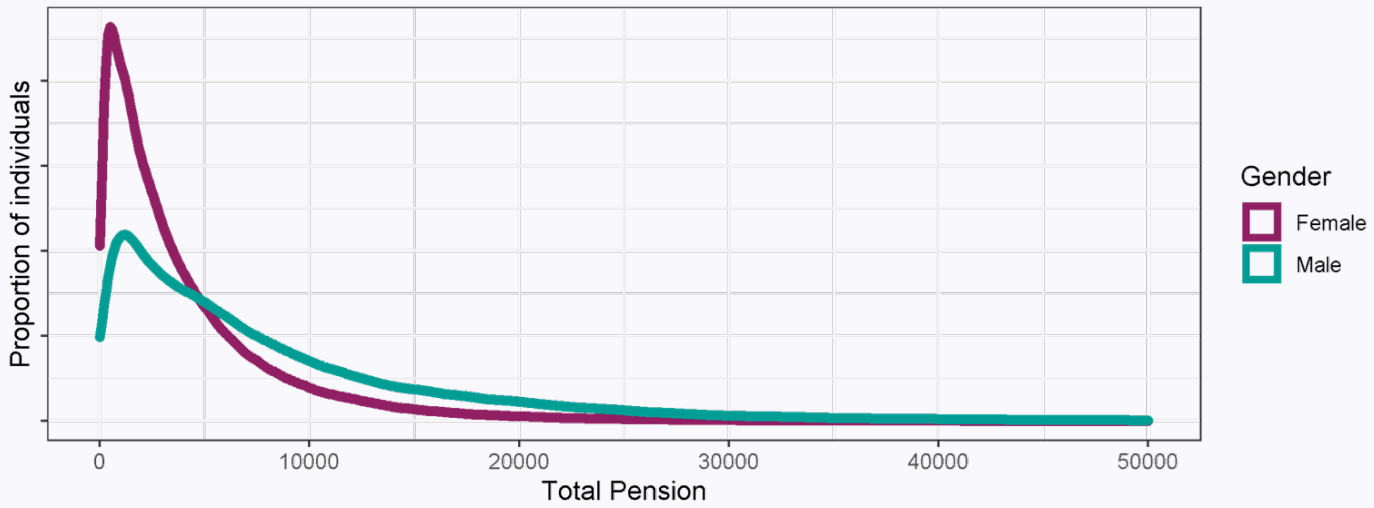
While women comprise around 62% of pensioners within the LGPS England and Wales pensioner data, they have lower pensions than men.

The table below compares individual male and female pensioners data on several key metrics. As with the active data, means and counts have been calculated at the level of individuals (see 'Data and Methodology' section for further details). Note that 'number of pensions' is based on the number of separate records that a given National Insurance number is linked to.

Table 4: Summary of pensioners data

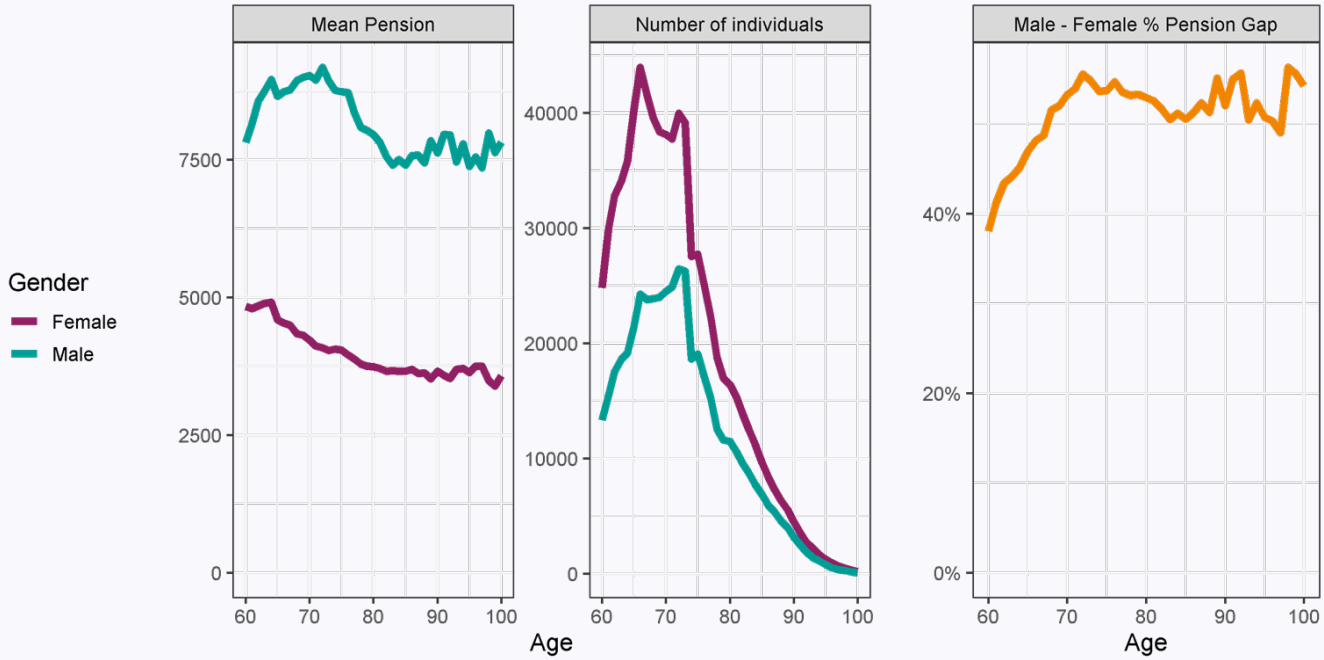
	Mean pension (£)	Mean survivor pension (£)	Mean number of pensions	Mean age	Headcount	Percentage of overall headcount
Females	4,285	1,653	1.15	70.45	833,330	61.9%
Males	8,466	3,834	1.09	71.30	511,332	38.0%
Gender	49.4%	56.9%				

Chart 2: Distribution of pensioners pension amounts



The chart above shows the distribution of total pension sizes, truncated at £50,000. A greater proportion of female members have small pension (<£5,000) than males. This is likely a consequence of their smaller salaries whilst working.

Chart 3: Pensioners gender differences by age



The charts above show the distribution of members and pension with age, truncated at 60 and 100 (there are very few members above this age). Both males and females follow a similar age distribution by number. There is an increase around ages 65 and 66 (State Pension age). At higher ages the numbers fall due to normal mortality.

The gender pension gap is fairly stable between 50% and 55% at ages above 70, however below that age it is lower: around 45% in the mid 60s and 40% at age 60. This might reflect:

- Females with lower pension or males with higher pensions working after age 60, or
- Genuine reductions in the gender pension gap for this younger cohort (in which case we would expect this feature to persist and in time lead to a lower gender pension gap at higher ages too)

Data and Methodology

Gender gaps

Following the approach taken for gender pay gap calculations, all gender gaps in this paper are calculated as follows:

$$\frac{\{value\ for\ males\} - \{value\ for\ females\}}{\{value\ for\ males\}}$$

A positive gap indicates that the pay or pension for males is higher than for females.

Multiple records

The membership data GAD holds are collected from LGPS administrators, which may include multiple records for an individual member. We understand that individual records often correspond to individuals' different, possibly concurrent, employment arrangements. The summaries in this report reflect individuals rather than records. We have used National Insurance Numbers ("NINOs") to link the records in the underlying data used.

The average number of records per individual differs between females and males:

Table 5: Actives' pay and pension by gender as at 31 March 2020

Gender	Mean records per active	Mean records per pensioner
Female	1.14	1.15
Male	1.05	1.09

This difference shows the importance of considering per individual rather than per record. The data processing to consider per individual means that figures in this report may differ slightly from the per record figures included in the 2020 data report.

Actives and pensioners were chosen as the valuation data processing was most complete for these groups at the time of preparing this report. At this stage we have considered each group separately, and have not identified those who also have records in deferred data, or both active and pensioner data (such as members who have dis-aggregated prior service or partial retirees).

Many LGPS EW active members may have other sources of earned income or pension income from non-LGPS employers; this may be more likely for women given their apparently higher tendency to work flexibly. There may also be differences in the amount of state pension being received by male and female members. Consequently, the mean pay and pension figures shown in this report may not provide a comprehensive picture of the pay and pensions of the sample under investigation.

We have largely reused the valuation processing for the analysis in this report, details of which can be found in the 2020 data report. In addition to the processing set out in the 2020 data report,

we have focussed only on the records with reliable NINOs data. Unlike the valuation processing, we have not uprated the data. This is to ensure the averages for individuals are not distorted. Further brief details of the data used are set out in the "actives" and "pensioner" sections below.

Actives

We have carried out some checks and adjustments in addition to those undertaken for the valuation to ensure the data is fit for the purpose of this report. These additions were necessary to produce the individual level information above (aggregating by NINOs). In summary:

- All records that were excluded as part of the valuation processing were also excluded.
- All records with a 'part-time percentage' of 120% or more were excluded as potentially unreliable.
- All records with missing or zero pay were excluded, except where actual pay could be calculated using FTE pay and part-time percentage.
- All records without NINOs or with the same NINO as another record with a different gender or affected by one of the exclusions above were excluded.
- Accrued legacy pension was calculated for each record from the service and FTE pay
- Almost all data in each record was summed to give the total for the particular individual. However FTE pay was taken as the mean of the pre-aggregated record values.

We briefly reviewed the excluded records which strongly indicated that the patterns observed in the outputs were minimally impacted by the set of exclusions and pre-processing steps applied.

As shown in Table 6, analysis in this report uses a high proportion of the original active data.

Table 6: Active data used for the scheme valuation and this gender pension analysis

Active dataset	Records (000's)	Unique NINOs (000's)
Valuation data	2,000	1,676
Used in this report	1,813	1,619

Pensioners

We have carried out some checks and adjustments in addition to those undertaken for the valuation to ensure the data is fit for the purpose of this report. These additions were necessary to produce the individual level information above (aggregating by NINOs). In summary:

- All records that were excluded as part of the valuation processing were also excluded.
- All records without NINOs or with a different gender to another record with the same NINO were excluded.
- Data in each record was summed to give the total for the particular individual.

We briefly reviewed the excluded records which strongly indicated that the patterns observed in the outputs were minimally impacted by the set of exclusions and pre-processing steps applied.

As shown in Table 7, analysis in this report uses a high proportion of the valuation pensioner data.

Table 7: Pensioner data used for the scheme valuation and this gender pension analysis

Pensioner dataset	Records (000's)	Unique NINOs (000's)
Valuation data	1,594	1,347
Used in this report	1,514	1,345

Important information

The limitations set out in the GAD 2020 valuation membership data report ("the data report"), apply equally to this document. In addition:

Reliance

In preparing this report, GAD has relied on data and other information supplied by the administrators of the LGPS. GAD has not sought independent verification around its general completeness and accuracy. Any checks that GAD has made are limited to those described in this report and the data report. However, our checks do not constitute a full audit of the data and our adjustments, although reasonable in our view, may not mean that the dataset adopted accurately reflects the true data of the scheme. This means that there is residual data uncertainty.

However, in large and complex data sets this uncertainty is normal and is not usually a cause for concern. In our view, the residual uncertainty present in this data is not significant enough to prevent SAB from using this report to explore the extent of inequalities of benefit outcomes between male and female LGPS members, and to make decisions on further analysis.

Sharing

This report has been prepared for the use of the SAB and must not be reproduced, distributed, or communicated in whole or in part to any other person without GAD's prior written permission.

Other than the SAB, no person or third party is entitled to place any reliance on the contents of this report, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this report.

This report will be made available to the Department for Levelling Up, Housing and Communities.

Compliance

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