



National Audit Office

**REPORT BY THE  
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# The cost of public service pensions

# Summary

- 1** This report is about pensions paid to retired public servants such as teachers, civil servants, doctors, nurses and members of the armed forces. It covers all UK public service ‘pay-as-you-go’ pension schemes, sometimes known as ‘unfunded’ schemes, which are part of the cost of providing public services and are ultimately funded by the taxpayer. Pay-as-you-go pension schemes contrast with funded schemes, in which contributions are used to create assets in a pension fund, by using today’s contributions from current employees and employers to pay today’s pensions.
- 2** The report does not discuss public service funded pension schemes, of which the local government pension scheme is the largest. It does not cover the schemes of nationalised industries, like the Royal Mail, or of bodies that receive substantial public money but operate independently, such as universities. Also outside the scope of this report is any calculation of the tax effects of public service pensions, which include tax relief on employee contributions and tax paid by pensioners, or of the extent to which public service pensions reduce alternative taxpayer demands, notably on Pension Credit. We have recently published a separate report on the Pension Protection Fund, which pays compensation to members of private sector defined benefit pension schemes in certain cases where employers become insolvent.
- 3** There has been much public debate about the affordability and fairness of public service pensions. The aim of this report is to bring greater transparency to, and understanding of, the costs of public service pensions. We will publish a second report later this year examining recent changes to the terms and conditions of UK public service pay-as-you-go pension schemes, which are designed in part to reduce costs.
- 4** This report looks at past pension payments over the last ten years and projected payments over the next fifty years. The analysis of past payments covers the four largest schemes, which represent over three quarters of all UK public service pay-as-you-go pension payments. The analysis of projected payments covers all UK public service pay-as-you-go pension schemes. An appendix discusses the representation of pension obligations as a single liability figure, which is especially relevant to funded (as opposed to pay-as-you-go) pension schemes.
- 5** The report does not draw an overall value for money conclusion or make recommendations. Our second report, to be published later this year, will do both these things.

## On payments over the last ten years

**6** Total payments to the 2.13 million pensioners in the four largest UK public service pay-as-you-go pension schemes were £19.3 billion in 2008-09, which is a real-terms increase of 38 per cent since 1999-2000. Most of the increase is due to a 23 per cent rise in pensions in payment over the period. This is driven by more employees retiring each year, which is a substantially more significant factor than longer lifespans.

**7** Employee contributions to the four largest UK public service pay-as-you-go pension schemes were £4.4 billion in 2008-09, a real-terms increase of 56 per cent since 1999-2000. The increase is the result of higher contribution rates and more staff making contributions. Employee contributions reduce the cost of public service pensions to the taxpayer, because they take back into public funds a proportion of gross salaries already paid out.

**8** The total cost to the taxpayer of the four largest UK public service pay-as-you-go pension schemes in 2008-09 was £14.9 billion, net of income from employee contributions, a real-terms increase of 33 per cent since 1999-2000. It was met through a combination of £12.5 billion in employer contributions generally paid by taxpayer funded organisations, such as NHS Trusts and government departments, as part of the normal cost of employing staff, and £2.5 billion directly from the Treasury (the two elements not adding exactly because of rounding). Contributions are set to reflect pensions being earned by current employees, so are not designed to equal pensions in payment in any one year. The Treasury figure provides the balance required to meet pension payments. Contributions are generally less than payments over the long term in mature pension schemes, whether funded or pay-as-you-go.

## On projected payments over the next fifty years

**9** Projected annual payments across all UK public service pay-as-you-go pension schemes can be analysed in three ways, reflecting the need for a rounded interpretation of long-term figures in the context of a financial environment that will also change substantially.

- Expressed in terms of 2008-09 prices, the Government Actuary's Department projects payments rising to £79.1 billion by 2059-60 from an estimated £25.4 billion in 2009-10.
- Expressed in terms of 2008-09 earnings, projected payments reach a peak of £29.4 billion between 2031-32 and 2033-34 before falling to £28.8 billion by 2059-60. This is based on the Treasury's assumption of 2.0 per cent real-terms annual earnings growth across the economy as a whole.
- Expressed in terms of Gross Domestic Product (GDP), the presentation the Treasury uses in its *Long-term public finance reports*, projected payments reach a peak of 1.9 per cent of GDP between 2018-19 and 2033-34 then fall to 1.7 per cent by 2059-60. This compares to a rise from around 1.5 per cent to 1.7 per cent over the last ten years. The projection is based on Treasury assumptions of 2.0 per cent annual productivity growth in the economy as a whole and 20 per cent growth over 50 years in the working population.

**10** Projections of future payments depend critically on assumptions used as the basis of calculations. Changes to these assumptions can have a large impact on results. The Treasury's four main assumptions for projecting the cost of UK public service pay-as-you-go pensions are:

- average life expectancy of pensioners in UK public service pay-as-you-go schemes rising steadily, for example to 94.7 for women and 92.3 for men who reach 65 in 2055, in line with assumptions by the Office for National Statistics, but reflecting the longer-than-average lives of occupational pension scheme members;
- real-terms earnings growing by 2.0 per cent a year for employees in UK public service pay-as-you-go pension schemes, linked to the assumptions described earlier of 2.0 per cent annual growth in productivity and real-terms earnings in the wider economy;
- a constant number of employees covered by UK public service pay-as-you-go pension schemes; and
- two-thirds of employees' share of increased future pension costs being taken as reduced future pension payments, and one-third as increased employee contributions, under changes to the schemes that we will examine in detail in our second report.

### **On sensitivity analyses**

**11** The Treasury has undertaken some analysis on the sensitivity of its projections to changes in key assumptions. In each case, changes in the opposite direction to those illustrated below would have the opposite effect, smaller or larger changes would have proportionally smaller or larger effects, and the combination of changes would reinforce each other or partially cancel out depending on their respective directions.

- Higher life expectancy, equal for example to around two extra years for a man reaching 65 in 2015 and three extra years for a man reaching 65 in 2025, would add around 0.05 percentage points to the cost of public service pensions as a proportion of GDP by 2059-60.
- A 0.25 per cent lower annual productivity growth rate, affecting earnings and GDP, would add 0.1 percentage points to the cost of public service pensions as a proportion of GDP by 2059-60.

**12** The Treasury has not undertaken any systematic analysis of the impact of changing the assumption about zero public service workforce growth, although it did consider doing so. In our view, such an analysis is needed to understand the potential impact on public service pension costs of plausible alternative outcomes.

- A constant number of employees, if reflected more widely across the public sector, would mean a very large reduction in public service employment as a proportion of employment as a whole. In the context of assumed growth of 20 per cent over 50 years in the overall UK workforce, public sector employment would fall to 16.3 per cent by 2059-60, from 19.5 per cent in 2008 and 21.1 per cent in 2009.
- Recent trends have been of strong public service workforce growth. The number of people in areas of employment covered by the four largest UK public service pay-as-you-go pension schemes rose by 21 per cent in the period 1999-2000 to 2008-09.
- Although short term expectations are of a reducing public service workforce, factors such as larger numbers of older people are likely to increase demand on public services.
- The most significant factor in increasing pension costs over the last ten years has been the rising numbers of retirements, which are directly linked to the numbers of staff in post.

## Conclusion

**13** Real-terms increases of 38 per cent in the costs of paying pensions in the four largest UK public service pay-as-you-go schemes, over the last ten years, have been driven by increases in the number of employees retiring. On the basis of the Treasury's assumptions, the total cost of paying public service pay-as-you-go pensions is projected to increase as a proportion of GDP over the next fifty years, rising from 1.7 per cent to 1.9 per cent before falling back to 1.7 per cent. Higher life expectancy and lower productivity growth would increase the cost of public sector pensions as a proportion of GDP. Conversely, lower life expectancy and higher productivity growth would reduce costs as a proportion of GDP. There is a reasonable framework in place for assessing future pension costs, including sensitivity analysis covering some significant assumptions. The Treasury has not assessed the impact of different assumptions about the size of the public service workforce, despite it being a critical driver of pension costs. Our second report will examine sensitivity analyses further.