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Public service pensions - facts and figures

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Summary

The six largest public service pension schemes in the UK – the schemes for the Armed Forces, the Civil Service, NHS, Teachers, Police and Firefighters (which operate on a pay-as-you-go basis) and the Local Government Pension Scheme (which is funded) are statutory defined benefit (DB) pension schemes (i.e. they provide pension benefits based on salary and length of service).

These schemes were reformed under the *Public Service Pensions Act 2013*. Key features of the new schemes included:

- pension benefits based on Career Average Revalued Earnings (CARE);
- a pension age linked to the State Pension age for teachers, local government, NHS and the civil service;
- a pension age of 60 for members of the schemes for the police, firefighters and armed forces.

Active members of the schemes prior to April 2015 (2014 for local government) were transferred onto the new schemes, except for those covered by transitional protection for those 'closest to retirement.'

Spending on unfunded public service pensions is expected to fall gradually from around 2% of GDP to below 1.5% of GDP over the next 50 years. The Government says there are "various [reasons] for this fall – including the impact of both historic and recent reform."(Whole of Government Accounts 2017-18, June 2018, para 1.63).

1. Background

Public sector pension schemes are occupational pension schemes for employees of central or local government, a nationalised industry or other statutory bodies and are established by statute.[1]

The main public service schemes are Defined Benefit (DB) schemes – which provide pension benefits based on salary and length of service.[2]

As discussed in section 2 below, they have recently been subject to two rounds of reform. While reforms by the Labour Government in the mid-2000s increased standardisation,[3] those by the Coalition Government went further, with the *Public Service Pensions Act 2013* setting a common framework,[4] within which regulations set out the detail.

There are differences in the geographical extent of schemes:

- The Armed Forces scheme is UK-wide.
- The civil service has separate schemes for Great Britain and Northern Ireland.
- The rules for the schemes for local government, police and firefighters are set nationally but the schemes are managed and administered locally by LGPS administering authorities, police authorities and fire and rescue authorities respectively.
- There is an NHS and Teachers for England and Wales, with separate schemes in Scotland.

The Scottish Government has power to make regulations governing the detail of how the schemes for NHS, teachers, local government, police and firefighters in Scotland, certain financial and legal restraints (in particular the framework set by the 2013 Act).[5]

The Welsh Assembly has powers in relation to the scheme for firefighters, also within the framework set by the 2013 Act.[6]

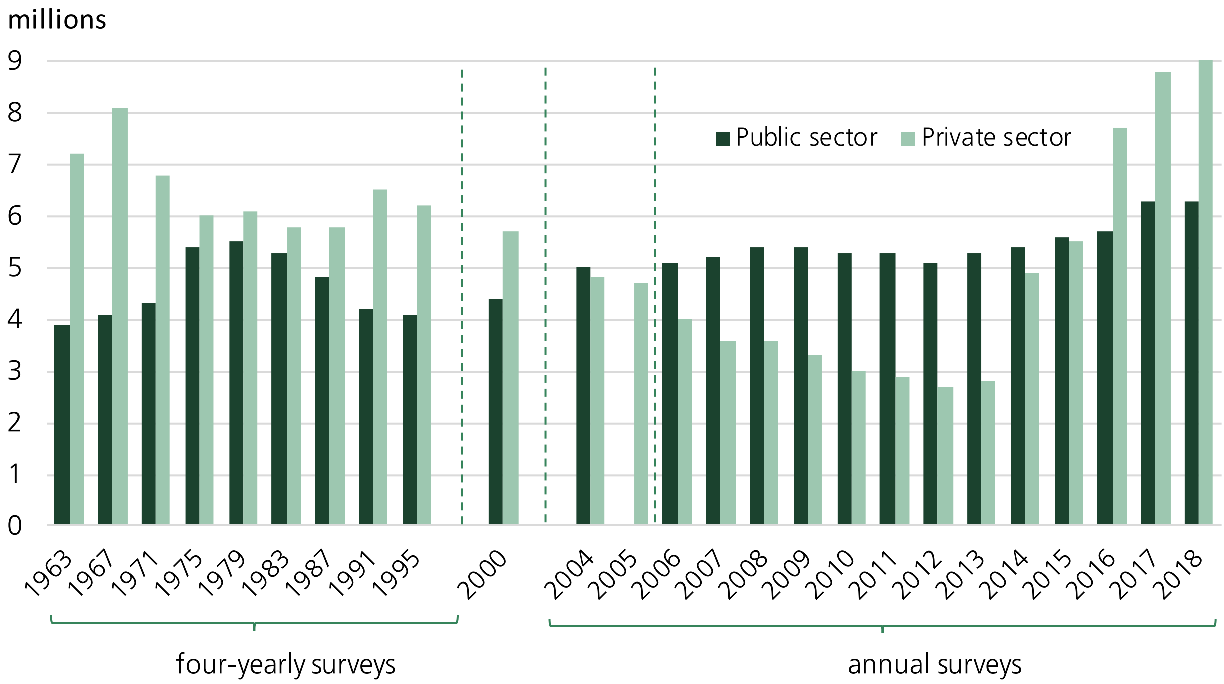
The Northern Ireland Executive agreed the introduction of reforms in line with those for Great Britain and legislated for them in the *Public Service Pensions Act (Northern Ireland) 2014*.

1 *Public Service Pensions Act 2013*
2 The other main type of scheme is defined contribution (DC) in which contributions ae made to a fund that is invested and used to provide an income in retirement
3 Independent Public Service Pensions Commission: interim report, October 2010, chapter 2
4 Independent Public Service Pensions Commission: final report, March 2011, p14
5 *Scotland Act 1998*, schedule 5 (F3); *The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999* (S.I. 1999/1750)
6 *Public Service Pensions Act 2013*, s2, Sch 2; *Government of Wales Act 2006*, section 94 and schedules 5 and 7

2. Trends in public and private sector pension schemes

The number of members of public sector pensions has gradually increased over recent decades. The opposite was true for private pensions until 2012, when auto-enrolment was introduced. This caused the number of members actively contributing to private sector schemes to increase to 11 million by 2018. Active participation in public service pensions has also increased, but at a much more modest rate, reaching 6.3 million in 2018.[7]

Figure 1a: Active members of occupational pension schemes by sector, 1963 to 2018



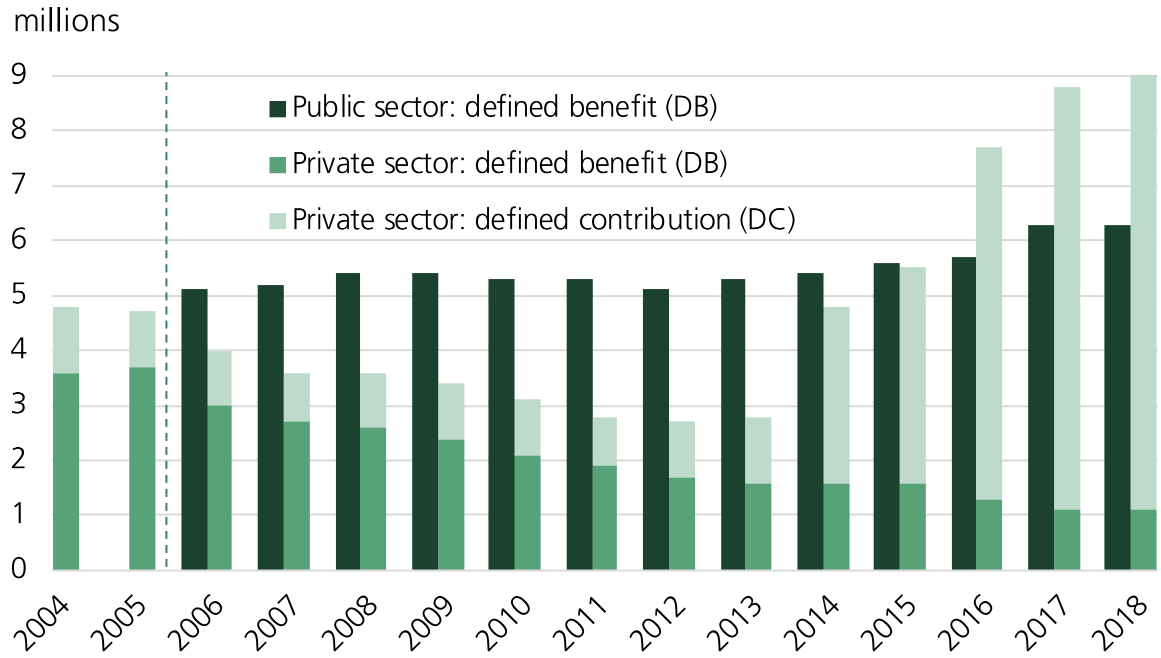
Note: Due to changes in the definition of the public and private sectors, estimates for 2000 and onwards differ from earlier years. From 2000, organisations such as the Post Office and the BBC were reclassified from the public to the private sector.
Changes to methodology from 2006 onwards mean comparisons with prior periods should be treated with caution. Source: ONS Occupational Pension Schemes Survey.

As shown in figure 1b, the increase in active workplace pension participation in the private sector has been in the form of defined contribution (DC) arrangements, whereas active membership of defined benefit DB schemes in the private sector has continued to decline. DC schemes are where contributions are made to a fund that is invested and used to provide an income in retirement.

As of 2018, public sector employees accounted for 85% of all those actively contributing to a DB scheme (6.3 million out of 7.5 million).

7 Occupational Pension Schemes Survey, UK: 2017, Section 4

Figure 1b: Active members of occupational pension schemes by sector and benefit type, 1963 to 2018



Note: Changes to methodology from 2006 onwards mean comparisons with prior periods should be treated with caution. (a) The 2005 survey did not cover the public sector.
Source: ONS Occupational Pension Schemes Survey.

There has been a decline in DB schemes in the private sector as companies have become increasingly concerned about building up liabilities to uncertain costs in the future. Liabilities for DC schemes are more certain and typically employer and employee contributions are lower for DC than DB schemes.

Demographic pressures on pension schemes

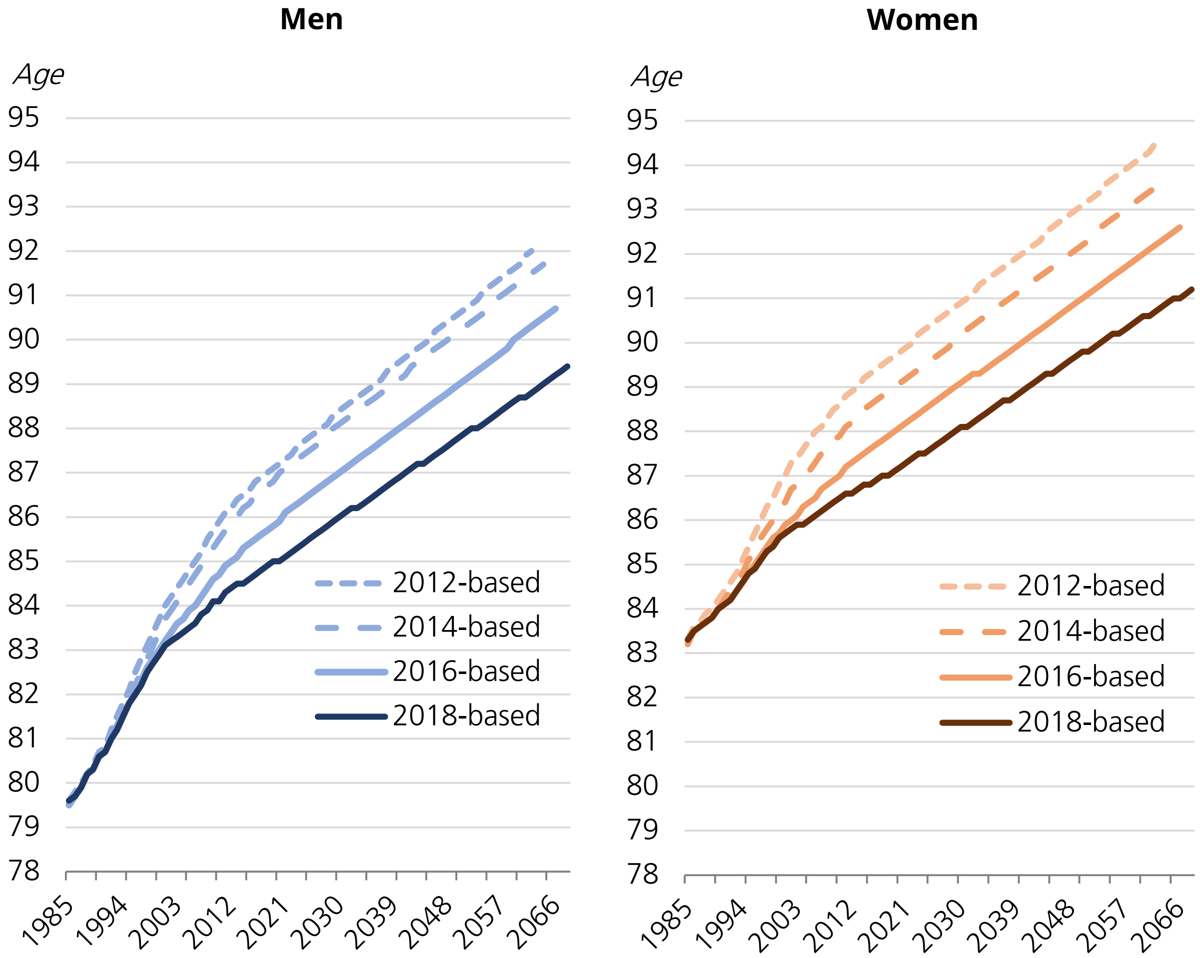
Rising life expectancy exerts a cost pressure on schemes. The latest ONS projections (using data for 2018) show longevity for those reaching age 65 to increase by around 3½ years over the next 40 years. Typically, a 65-year-old man today would expect to reach 85 years old and a woman 87 years. By the 2050s these are projected to be around 88 years for men and 90 years for women.

In each of its last three sets of projections (based on 2014, 2016 and 2018 data respectively) the ONS has revised downwards its projections of improvements in life expectancy, due to higher-than-expected mortality rates (see **figure 2** below).

The Government Actuary's Department (GAD) has cited reductions in projected future life expectancy improvements as the "main driver" behind a reduction in assumed future costs to public service pension schemes in the GAD's 2016-based valuations compared with the previous (2012-based) valuations.[8]

[8] GAD 2016-based actuarial valuations of the Teachers' Pension Scheme, Police Pension Schemes and Armed Forces Pension Schemes, pages 7-8.

Figure 2: Total life expectancy at age 65, 1985-2068, UK



Source: [ONS Expectation of life, principal projection, United Kingdom]() - cohort life expectancies.

3. Pension benefit reforms

The main public service schemes are Defined Benefit (DB) schemes.[9] The benefits provided by the scheme have been reformed over the years.

Labour Government reforms

The last Labour Government introduced reforms to public service pension schemes in 2007/08, with the aim of improving financial sustainability and reflecting changes in life expectancy, working practices and the private sector.[10] They included:

- Increases in pension age, mostly for new entrants. For example, in the civil service, NHS and teachers' schemes, existing members kept a pension age of 60, but new entrants had a pension age of 65. Pension ages lower than 65 in the Local Government Pension Scheme would be phased out by 2020. There were also increases in the pension age for members of the schemes for the police, firefighters and armed forces.[11]
- Changed accrual rates for many of the reformed schemes, particularly those for new entrants. However, all schemes continued to provide pension benefits based on final salary, with the exception of the civil service scheme, which introduced a new scheme (nuvos), providing benefits based on career average revalued earnings (CARE) for new entrants from 30 July 2007.[12]

Figures for the average pension in payment from these schemes are in the interim report of Independent Public Service Pensions Commission (although, as it pointed out, care needs to be taken in interpreting the numbers, as they include part-time workers, people with short service and dependants). Pension payments vary considerably both within and between schemes.[13]

For more detail, see Library Briefing Paper 5298 Public service pension reform – 1997-2010 (November 2010) and RP 12/57 *Public Service Pensions Bill* (Oct 2012), section 2

Coalition Government reforms

In its first Budget after the 2010 election, the Coalition Government set up the Independent Public Service Pensions Commission, chaired by former Work and Pensions Secretary, Lord Hutton of Furness to:

> ... undertake a fundamental, structural review of public service pension provision by Budget 2011 and consider the case for short-term savings in the Spending Review period, by September 2010.[14]

9 In some cases, such as the civil service scheme, there is the option of a Defined Contribution scheme - 'partnership'
10 Department of Trade Industry, Pensions Update – October 2005',
11 Independent Public Service Pensions Commission: Interim Report, 7 Oct 2010, p9
12 Independent Public Service Pensions Commission: Interim Report, 7 Oct 2010, p9
13 Ibid, p 26-30; See also NAO, The cost of public service pensions, HC 432, March 2010, Figure 3
14 HM Treasury, Budget 2010, HC 61, June 2010, para 1.42

At the same time, it announced a switch in the measure of prices used for pension increases – from Retail Prices Index (RPI) to Consumer Prices Index (CPI), implemented from April 2011.[15]

In an interim report published in October 2010, the Commission said longer term structural reform was needed, to adopt "a more prudent approach to meeting the cost of public service pensions" and to "strike a fairer balance not just between current taxpayers and public service employees but also between current and future generations."[16]

Its final report, published in March 2011, recommended the introduction of new schemes which would:

- Provide pension benefits based on Career Average Revalued Earnings (rather than final salary); and
- Have a pension age linked to the State Pension age (except for the schemes for the uniformed services (police, firefighters and armed forces), which would have a pension age of 60.[17]

The Government accepted the Commission's recommendations as the basis for negotiation with the trade unions. It announced final proposed agreements for reform of most public service schemes over the period March to October 2012.

It legislated in the *Public Service Pensions Act 2013* for a framework for the new schemes to be introduced for future service from 2015 (2014 for local government). These schemes would be CARE schemes with a pension age linked to the State Pension age (except for the uniformed services).

Existing scheme members would transfer to the new schemes except for those covered by transitional protection for those 'closest to retirement'. There was protection for rights accrued in the old scheme up to the date of change.[18]

As discussed below, the reforms have contributed to a gradual decline in spending on public service pensions as a proportion of GDP. The Pensions Policy Institute, which looked at the impact of the reforms to the four main schemes (NHS, civil service, teachers and local government) found that they had reduced the average value of the benefit offered across all members of these schemes by more than a third: from 23% of a member's salary to 14%. It said:

> The PPI's analysis suggests that the Coalition Government's proposed reforms to the NHS, Teachers, Local Government and Civil Service pension schemes will reduce the average value of the benefit offered across all scheme members by more than a third, compared to the value of the schemes before the Coalition Government's proposed reforms. Across the four largest public service pension schemes the value of the schemes reduces, on

15 Ibid, para 1.43
16 Independent Public Service Pensions Commission: interim report, October 2011, foreword
17 Independent Public Service Pensions Commission: Final Report, 10 March 2011
18 Ibid, recommendation 4, para 154; For more detail, see Library Briefing Paper CBP 5768 and Library Research Paper RP 12-57 Public Service Pensions Bill (October 2012), section 5.4.

> average, from 23% of a scheme member's salary before the reforms to 15% of a scheme member's salary after the Coalition Government's proposed reforms (Chart 1).[…]
>
> Nevertheless, even after the Coalition's proposed reforms the benefit offered by all four of the largest public service pension schemes remains more valuable, on average, than the pension benefit offered by Defined Contribution (DC) schemes that are now most commonly offered to employees in the private sector, into which employers typically contribute around 7% of a DC scheme member's salary.
>
> There are still some Defined Benefit schemes in the private sector, although less than 10% of private sector employees are active members of a Defined Benefit Scheme. A typical Defined Benefit scheme in the private sector has an average pension benefit value of 23% of a member's salary, assuming that the scheme benefits are linked to the Consumer Prices Index (CPI). Some private sector schemes still have benefits linked to the Retail Prices Index (RPI), and for a typical private sector Defined Benefit scheme linked to RPI the average value of the pension benefit is 27% of a member's salary.[19]

Briefing on the impact of these reforms can be found in CBP 5678 Public service pensions – the 2015 reforms (December 2019) and CBP 6183 Public service pensions - background (August 2012).

[19] PPI, The implications of the Coalition Government's reforms for members of the public service pension schemes, October 2012

4. How are pensions funded?

The main difference between defined benefit (DB) pension schemes in the public and private sectors lies in the funding arrangements.

Most private sector DB schemes are funded, meaning that contributions from employees and employers are paid into a fund, which is invested, and from which the cost of pension benefits is met. To help ensure they have sufficient assets to pay out pensions when they are due, they are required to conduct regular valuations and are subject to funding requirements overseen by the Pensions Regulator.[20]

Most of the main public service pension schemes - the exception is the Local Government Pension Scheme (LGPS) - are unfunded. They operate on a Pay as You Go (PAYG) basis (see below).

These different funding arrangements within the public sector are to some extent the result of historical development. David Blake, for example, notes that:

> ... with the exception of the civil servants' scheme, all public sector schemes have developed since 1920; in 1919 a committee, in discussing local authority schemes, happened to recommended that these should be funded and they have been ever since.[21]

The Independent Public Service Pensions Commission reviewed the funding arrangements but recommended no change to the existing arrangements. It concluded it was reasonable for the existing PAYG public service schemes to continue to operate without actual funds:

> Ex.24 The Commission has also come to the conclusion that it remains reasonable to continue to operate arrangements without actual funds as the basic financing model, given the risks, lack of obvious economic benefit and transition costs of moving to a fully funded model. Equally, there is no reason to de-fund existing funded schemes.[22]

It also considered whether the LGPS should move to an unfunded model as a way of removing investment return volatility and releasing cash in the short term but decided against this on the grounds that:

> [...] this might reduce employers' and funds' ability to adjust recovery periods and other assumptions, in order to limit immediate LGPS valuation pressures on employer contribution rates and Council Tax. Also, if such relaxation of funding requirements were applied to private sector admitted bodies such as contractors and charities and other non-profit making organisations, of which there may be several thousand in the LGPS, it would be equivalent to providing a new Government subsidy for the DB pensions of these private sector employers with the Government having limited control over the risk. It would also

[20] For more detail, see Library Briefing Paper CBP 4877 Defined benefit pension scheme funding (October 2018)

[21] David Blake, Pension schemes and pension funds in the United Kingdom, 2003, page 384

[22] Independent Public Service Pensions Commission: Interim Report, 7 October 2010

contrast with the regulatory requirements placed on other private sector employers who were offering DB schemes to employees.[23]

4.1 Pay-as-you-go (PAYG) schemes

Most of the main public service schemes operate on a PAYG basis, meaning that there is no fund of assets which is invested and from which pension benefits are paid. Contributions are paid to the sponsoring government department. These contributions are not invested. Instead, the sponsoring government department pays benefits to pensioner members, netting off the contributions received.

Contributions

The schemes are subject to actuarial valuations every four years, the purpose of which is to ensure that contributions are set at a level to reflect the future value of benefits being earned. This is so that the full costs of the scheme are taken into account when financial decisions are made by employers.[24]

In most cases, both employers and employees contribute to their pensions. The main exception is the Armed Forces Pension Scheme, which is non-contributory for members, although pension benefits are taken into account when pay is assessed.[25]

Until April 2012, members of two further schemes (the *classic* section of the civil service scheme and the judicial pension schemes) only paid contributions towards survivor benefits. However, they now also contribute to personal benefits.[26]

In response to the interim report of the Independent Public Service Pensions Commission (which recommended that the most effective way of making savings in the short-term was to increase member contribution rates and that there was a case for doing so), the Coalition Government increased member contribution rates by an average of 3.2 per cent across public service schemes, except for the armed forces. The increases were phased-in over the period 2012/13 to 2014/15.[27]

The *Public Service Pensions Act 2013* provided for common arrangements to apply across public service schemes, with valuations conducted in accordance with Treasury directions, to ensure the approach was transparent and consistent.[28] The results of the first set of valuations were of the position of the scheme as at end March 2016.[29]

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23 Ibid, p84

24 HM Treasury, Public service pensions: actuarial valuations and the employer cost cap mechanism, March 2014

25 AFPS 05, *Your Pension Scheme Explained*, (MMP/124, re-issued January 2007)

26 Cabinet Office, Principal Civil Service Pension Scheme – Consultation on proposed increases to employee contribution rates effective from April 2012 – Government response, 15 December 2011; HC Deb, 8 March 2012, c72-3

27 HM Treasury, Spending Review 2010, October 2010, para 1.94; For more detail, see Library Note SN 6137 Public service pension contributions (April 2012)

28 Section 11; HM Treasury, Actuarial valuations of public service pension schemes, November 2012; For more detail, see Library Briefing Paper CBP-7539 Public service pensions – employer contributions (December 2018)

29 HLWS916, 6 September 2018

4.2 Funded schemes

Of the six main public service schemes, only the Local Government Pension Scheme (LGPS) is funded. The LGPS is made up of 90 funds in England and Wales administered and managed at local level, although the rules are set nationally by the Secretary of State. The Department for Communities and Local Government explains that:

> The assets of the pension funds are for meeting the future pension liabilities of the funds, and are part of the financial corporations sector in the National Accounts, not part of the local government sector. Pensions paid out under the scheme are therefore part of the expenditure of the pension funds, not of the local authorities that administer them. Employers' and employees' contributions, part of the income of the funds, are recorded as expenditure by local authorities in their revenue accounts, either directly or indirectly under employees' expenses.[30]

There is no single set of accounts. Each LGPS fund is subject to a valuation at local level. This is needed to ensure that each fund has sufficient assets to meet its liabilities and to set employer contribution rates. The Scheme Advisory Board explains how the process works:

> - Scheme regulations set out when valuations are to be carried out.
> - Each LGPS pension fund is required to appoint their own fund actuary, who carries out the fund's valuation. The fund actuary uses a number of assumptions to value the liabilities of the fund. Liabilities are split between those that relate to the past (the past service cost), and those that relate to the future (the future service cost). The results of the valuation may lead to changes in employer contribution rates for both future and past service costs.
> - The portion of the total employer contribution which relates to the past service cost is known as the deficit contribution, and is often payable in cash terms. The portion of the total employer contribution which relates to the future service cost is known as the future service rate and is normally payable in percentage of pay terms.[31]

Other funded public service schemes include the scheme for Members of Parliament – the Parliamentary Contributory Pension Fund (PCPF).[32]

30 CLG Statistical Release, 'Local Government Pension Scheme Funds England 2007-08', 15 October 2008, p8
31 LGPS Advisory Board – 2016 valuations - summary
32 For more detail, see Library Briefing Paper SN 6283 MPs' Pension Scheme

5. Estimates of costs and liabilities

There are different measures of the costs of public service pensions, which are appropriate for different purposes. Official figures routinely produced include estimated liabilities and net annual expenditure on public service schemes.

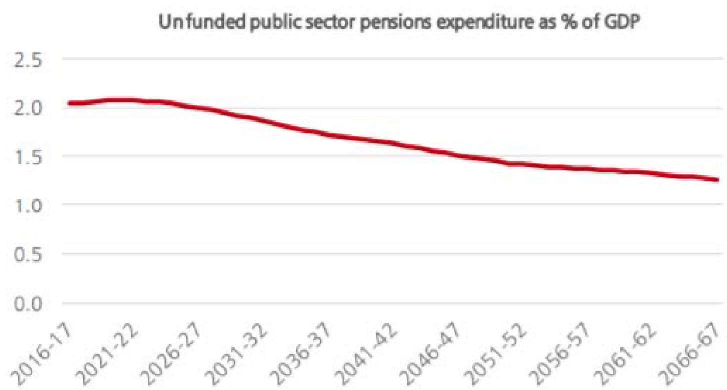
The debate on how the costs of public service pension schemes should be measured and presented, which preceded the 2013 Act, is in Library Briefing Paper CBP 6183 [Public service pensions – background](#) (August

5.1 Long-term expenditure as % of GDP

The Independent Public Service Pensions Commission said its preferred measure of the cost of public service pensions was the level of benefit payments as a percentage of GDP. This was because it "can give a good sense of the share of national income that has to be devoted to public service pensions expenditure," enabling a focus on affordabilitiy and the associated fiscal risks.[33]

Spending on unfunded public service pensions is projected to fall gradually from around 2% of GDP to below 1.5% of GDP over the next 50 years:

Chart 1.N: Unfunded public sector pensions expenditure as a percentage of GDP



The Government says there are "various [reasons] for this fall – including the impact of both historic and recent reform." [34]

5.2 Net annual expenditure

In the main public service pension schemes, which operate on a pay as you go (PAYG) basis, employer and employee contributions are paid to the sponsoring government department, which then then pays out benefits to pensioners, netting off the contributions received.

The contribution rates are set to meet the cost of accruing benefits, not those of existing pensioners. As the National Audit Office (NAO) explains:

> Payments and contributions are driven by different populations and are not designed to balance in any one year. Overall, contributions to mature pension schemes in the private and public sectors are generally less than pension payments over the long term. Investment income and capital gains make up the different

[33] Independent Public Service Pensions Commission: Final Report, 10 March 2011
[34] Whole of Government Accounts 2017-18, May 2019, para 1.63-7

> in funded schemes. In pay-as-you-go schemes, again over the long term, Treasury payments reflect the benefit of past alternative use of pension contributions to fund government activities without additional taxation or borrowing. [35]

For this reason, the Independent Public Service Pensions Commission concluded that the net annual expenditure figure was not an appropriate measure of the cost of public service pensions:

> As well as being inherently volatile, it is a mismatch between contributions made in respect of future benefits and payments of previously accrued benefits and so provides no insight into long term affordability.[36]

However, it could "in a limited way highlight cash flow issues for government that could affect other expenditure in the short-term."[37]

The table below breaks down public service pension scheme expenditure and receipts for the period 2017/18 to 2023/24.[38]

[35] NAO, The cost of public service pensions, HC 432, Session 2009-10, para 2.10

[36] Independent Public Service Pensions Commission: Final Report, 10 March 2011, para 1.18

[37] Independent Public Service Pensions Commission: Interim Report, Oct 2010, para 4.7

[38] The figures for the 10 years to 2008-09 are discussed part two of the NAO's report on The cost of public service pensions (March 2010)

Public service pension schemes expenditure and receipts *£ billion, nominal (cash) (a)*

	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Principal Civil Service pension scheme							
Exchequer top-up grant (b)	2.3	2.4	1.6	1.7	1.9	2.0	2.2
Pension scheme expenditure	6.0	6.3	6.5	6.7	7.0	7.2	7.5
Pension scheme receipts	-3.7	-3.9	-4.9	-5.0	-5.1	-5.2	-5.2
of which: Employer contributions	-2.9	-3.0	-4.0	-4.1	-4.2	-4.3	-4.3
NHS pension scheme							
Exchequer top-up grant (b)	-0.4	-0.2	-3.4	-3.4	-3.4	-3.5	-4.1
Pension scheme expenditure	10.4	11.1	11.6	12.4	13.1	13.9	14.6
Pension scheme receipts	-10.8	-11.3	-15.0	-15.8	-16.6	-17.4	-18.7
of which: Employer contributions	-6.4	-6.7	-10.1	-10.6	-11.1	-11.7	-12.5
Teachers' pension scheme							
Exchequer top-up grant (b)	3.4	3.5	3.0	2.2	2.5	2.7	3.1
Pension scheme expenditure	9.7	10.0	10.5	10.9	11.3	11.7	12.1
Pension scheme receipts	-6.3	-6.5	-7.5	-8.6	-8.8	-8.9	-9.0
of which: Employer contributions	-4.0	-4.1	-5.1	-6.1	-6.2	-6.3	-6.4
Armed Forces pension scheme							
Exchequer top-up grant (b)	1.6	1.7	1.3	1.5	1.6	1.8	2.0
Pension scheme expenditure	4.6	4.7	5.0	5.2	5.4	5.6	5.8
Pension scheme receipts	-2.9	-3.0	-3.7	-3.7	-3.8	-3.9	-3.9
of which: Employer contributions	-2.9	-3.0	-3.6	-3.7	-3.8	-3.8	-3.9
NHS and teachers pension schemes in Scotland							
Exchequer top-up grant (b)	0.4	0.5	0.1	0.1	0.1	0.1	0.1
Pension scheme expenditure	2.3	2.5	2.6	2.7	2.8	2.9	3.1
Pension scheme receipts	-1.9	-2.0	-2.5	-2.6	-2.7	-2.8	-3.0
of which: Employer contributions	-1.2	-1.2	-1.7	-1.8	-1.9	-1.9	-2.0
Northern Ireland Executive pension schemes							
Exchequer top-up grant (b)	0.4	0.4	0.2	0.2	0.2	0.2	0.3
Pension scheme expenditure	1.4	1.5	1.6	1.7	1.7	1.8	1.8
Pension scheme receipts	-1.1	-1.1	-1.4	-1.5	-1.5	-1.5	-1.6
of which: Employer contributions	-0.7	-0.8	-1.1	-1.1	-1.1	-1.1	-1.2
LG Police Force pension schemes							
Exchequer top-up grant (b)	1.8	2.0	1.7	1.8	2.1	2.1	2.1
Pension scheme expenditure	3.6	3.8	3.9	4.0	4.3	4.3	4.4
Pension scheme receipts	-1.8	-1.8	-2.2	-2.2	-2.2	-2.2	-2.3
of which: Employer contributions	-1.2	-1.2	-1.5	-1.6	-1.6	-1.6	-1.6
LG Firefighters' pension schemes in England							
Exchequer top-up grant (b)	0.5	0.6	0.5	0.5	0.5	0.5	0.5
Pension scheme expenditure	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Pension scheme receipts	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
of which: Employer contributions	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3
Other							
Other net pension expenditure	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total public service pensions expenditure (c)	**10.5**	**11.2**	**5.3**	**4.9**	**5.7**	**6.3**	**6.5**

Source Office for Budget Responsibility (OBR) Economic and Fiscal Outlook March 2019, supplementary fiscal table 4.8
Note (a) Positive figures are expenditure (by scheme or Treasury); negative figures are receipts into schemes from contributions or other income.
(b) Exchequer top-up grant is annually managed expenditure (AME) to cover the difference between pension scheme expenditure and pension scheme receipts in each year.

(c) Excludes net public expenditure in respect of Royal Mail pension scheme liabilities.

5.3 Liabilities

The accounts for the individual schemes include estimates of their total liabilities. These are an estimate of the net present value of pension benefits accrued to the relevant date and due to be paid out over a period of 60 to 70 years to surviving public service employees, former employees and surviving dependants.

Although they both reflect the same future benefit payments, the liability figures in scheme accounts differ from those in the regular scheme valuations, due to different timing cycles and financial assumptions, in particular, the discount rate. The Government explains:

> 1.69 The valuations of the pension schemes use a different discount rate and different assumptions for CPI and salary growth (known collectively as the "financial assumptions") to the accounts and, as explained above, this causes differences in the liability figures. The financial assumptions used in the accounts are based on market conditions close to the effective date of the accounts, while the valuations use more stable financial assumptions including a discount rate (known as the SCAPE rate) linked to the OBR's expected rate of long-term GDP growth, which is reviewed at least every five years.[39]

The total liability figure in scheme accounts is highly sensitive to changes in the discount rate (a figure used to convert a flow of future payments to a single figure today):

> 1.55 This discount rate generally has a significant impact on the liability because many of the benefit payments the schemes expect to make fall decades into the future, and so a small change in the (per annum) discount rate has a large impact on the liability.
>
> 1.56 [Whole of Government Accounts] is prepared in accordance with international accounting standards, which prescribe that the discount rate for pension liabilities should be based on the real yield on corporate bonds. Therefore, the discount rate changes each year to reflect changes in these real yields. An increase in the discount rate lowers the liability because future benefit payments are discounted by a higher amount.[40]

However, the discount rate does not affect the future benefits payable as there are other underlying drivers in liability:

> 1.59 Annual changes in the discount rate drive changes in the public sector pension liability, but setting aside future CPI growth, the discount rate does not affect the future benefits payable.
>
> 1.60 As the liability represents commitments to make future benefit payments to both current and historic workforces the underlying drivers of the liability (besides the discount rate) are the assumptions for CPI growth and salary growth (which affect how much an individual is expected to receive), life expectancy (how long payments are expected to be made for) and workforce size (the number of people expected to receive payments).[41]

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39 Whole of Government Accounts 2016-17, June 2018, para 1.69
40 Ibid
41 Ibid

The Government therefore focuses on other measures to assess the affordability of public service pensions:

> As the discount rate has no bearing on the future benefits payable, the government focuses on other measures to assess the affordability of the public sector pension schemes and to manage the associated fiscal risks. For example, when monitoring the fiscal implications of the schemes the government considers the OBR's long-term projections of public sector pension scheme expenditure published in their Fiscal Sustainability Reports, which looks at the future benefits payable as a percentage of GDP.[42]

The Government explained that over three quarters of the public service pension scheme liability relates to the four largest (unfunded) schemes – those for the armed forces, civil service teaches and the NHS. The figures are set out in the table below:

UK defined benefit public service pension scheme balance sheet

	2017-18 Scheme liabilities (a)	2017-18 Scheme assets	**2017-18 Net liabilities**	2016-17 Net liabilities	*Change in scheme liabilities*
	£bn	£bn	**£bn**	£bn	*%*
Unfunded schemes					
NHS (UK)	612.6	-	**612.6**	591.8	*+3.5*
Teachers (UK)	412.9	-	**412.9**	398.3	*+3.7*
Civil Service (UK)	260.9	-	**260.9**	257.0	*+1.5*
Armed Forces	195.5	-	**195.5**	191.8	*+1.9*
Police (UK)	161.7	-	**161.7**	157.5	*+2.7*
Royal Mail	46.4	-	**46.4**	46.8	*-0.9*
Fire (UK)	29.2	-	**29.2**	31.0	*-5.8*
Other unfunded	22.6	-	**22.6**	22.8	*-0.9*
Unfunded schemes: total	1,741.8	-	**1,741.8**	1,697.0	*+2.6*
Funded schemes					
Local government (UK)	359.6	-253.6	**106.0**	117.7	*-9.9*
Other funded	94.6	-77.1	**17.5**	20.0	*-12.5*
Funded schemes: total	454.2	-330.7	**123.5**	137.7	*-10.3*
Total: all public service DB	2,196.0	-330.7	**1,865.3**	1,834.7	*+1.7*

Source HM Treasury Whole of Government Accounts 2017-18

Note (a) These figures collate the annual scheme accounts produced in accordance with international accounting standards (IAS). This basis differs from the four-yearly valuations of scheme liabilities conducted by the Government Actuary's Department (GAD) for the purpose of setting contribution rates. The latest set of GAD valuations for unfunded schemes relate to 2016 and set contribution rates for 2019-23. The two valuation methods can produce different liability figures due to differences in financial assumptions used (discount rate, CPI and salary growth). The GAD valuations also calculate 'notional assets' of unfunded schemes, whereas the Whole of Government Accounts only includes actual assets held by schemes (funded schemes only).

[42] Ibid, para 1.63

6. Membership figures

The table below shows the latest available membership figures for the main public service pension schemes:

Public service pension scheme membership

		Membership type		
Schemes grouped by geographical coverage:	As of date:	Active	Deferred	Pensions in payment (to pensioners and dependants)
UK / Great Britain				
Armed Forces Pension Scheme (UK)	Mar 2019	305,473	520,097	436,588
Civil Service Pension Scheme (GB)	Mar 2018	480,763	361,222	669,412
England and Wales				
Teachers Pension Scheme (E&W)	Mar 2018	674,067	629,125	717,037
NHS Pension Scheme (E&W)	Mar 2019	1,561,530	688,201	920,839
Local Government Pension Scheme (E&W)	Mar 2019	1,980,025	2,219,488	1,746,392 ‡
Firefighters Pension Scheme (England)	Mar 2019	32,957	7,696	43,743 *
Police Pension Scheme (England and Wales)	Mar 2016	120,673	27,786	152,020
Scotland				
NHS Superannuation Scheme (Scotland)	Mar 2019	175,757	63,739	106,142
Teachers Superannuation Scheme (Scotland)	Mar 2019	74,497	20,583	81,521
LGPS Scotland	Mar 2014	217,644	125,317	162,808
Police Pension Scheme (Scotland)	Mar 2016	16,599	3,530	16,492
Firefighters Pension Scheme (Scotland)	Mar 2016	5,580	1,518	5,304
Northern Ireland				
Civil Service (NI)	Mar 2018	29,246	8,924	30,040
Local Government (NI)	Mar 2019	61,513	31,646	36,788
Teachers (NI)	Mar 2019	24,557	16,352	24,174
Firefighters (NI)	Mar 2019	1,626	253	1,298

Sources

UK/GB: Civil Superannuation Resource Accounts 2017-18; AFPS Annual Accounts 2017 to 2018

England and Wales: Teachers' Pension Scheme (E&W) Annual accounts 2017 to 2018;NHS Pension Scheme Resource Accounts 2017-18; LGPS E&W statistics (*Note* ‡ pensioner total includes a small number of 'flexible retirees' - 13,492 in 2019); Fire statistics data table FIRE1304 firefighters' pension membership (*Note * pensioners* includes age retirement and ill-health retirement pensioners)

Scotland: NHS Pension Scheme (Scotland) Accounts 2017-18; Scottish Teachers' Superannuation Scheme Accounts 2017-18; LGPS Scotland Valuation as at March 2014; Scottish Public Pensions Agency (schemes for police and firefighters)

Northern Ireland: Department of Finance Superannuation and Other Allowances Pension Scheme Statement 2018; NILGOSC Annual Report 2018/19; Teachers' Suerpannuation Annual Scheme Statement 2018; NI Fire and Rescue Service Annual Report and Accounts 2017-18.

7. Where to find information

7.1 Armed forces

Armed Forces Pension Scheme

Information for scheme members	Gov.UK – Armed forces pensions Armed forces and reserve forces pension scheme guidance booklets Veterans UK website
Main scheme rules	AFPS 15 regulations AFPS 05 order; AFPS 75 regulations
Scheme data	Annual Accounts 2018 to 2019
Valuations	As at March 2016 As at March 2012

7.2 Civil Service

Civil Service Pension Scheme (GB)

Member guides	Civil Service Pensions website - Members publications
Main scheme rules	Civil service pensions website – scheme rules
Scheme data	Civil Superannuation Accounts, 2018-2019
Valuations	As at March 2016

7.3 Teachers

Teachers' Pension Scheme (England and Wales)

Member guides	Teachers' Pensions website
Main scheme rules	*2015 scheme - Teachers' Pension Scheme Regulations 2014 (SI 2014/512)*;1995/2008 scheme - *Teachers' Pensions Regulations 2010 (SI 2010/990)*

Scheme data	Teachers' Pension Scheme: Accounts 2018-19
Valuation	As at March 2016 As at March 2012

Scottish Teachers' Superannuation Scheme	
Information for scheme members	SPPA website; Scottish Teachers' Superannuation Scheme – scheme guide
Scheme rules	Regulations on the SPPA website
Scheme data	SPPA website
Valuation	As at March 2016

7.4 NHS

NHS Pension Scheme (England and Wales)	
Information for scheme members	NHS Pensions – Member Hub
Scheme rules	The National Health Service Pension Scheme Regulations 2015 (SI 2015/94)
Membership data	NHS Pension Scheme Resource Accounts 2018-19
Valuation	As at March 2016 As at March 2012

NHS Pension Scheme (Scotland)	
Information for scheme members	SPPA website
Scheme rules	SPPA website
Scheme data	SPPA website
Valuation	As at March 2016 As at March 2012

7.5 Firefighters

Firefighters Pension Scheme (England)

Member guides	Member guides
Scheme rules	Firefighters Pension Schemes – regulations and guidance
Scheme data	Fire and rescue workforce and pension statistics: England April 2018 to March 2019 Scheme advisory board website
Valuations	As at March 2016 As at March 2012

Firefighters Pension Schemes (Scotland)

Information for scheme members	SPPA website – forms and guides
Scheme rules	SPPA website - regulations
Valuation	The valuation as at March 2016 is referred to here As at March 2012

Firefighters Pension Schemes (Wales)

Information for scheme members	Welsh Government website Welsh Government website - guides
Valuation	As at March 2016 As at March 2012

7.6 Police

Police Pension Scheme (E&W)

Information for scheme members	Gov.UK – Police pension schemes
Scheme rules	www.legislation.gov.uk. The main rules for the three schemes are in the following regulations,

	as amended: (SI 2015/445); (SI 2006/3415); (SI 1987/257)
Membership data	CIPFA (£) for pensions in payment and employer contributions
Valuation	As at March 2016 As at March 2012

Police Pension Scheme (Scotland)

Information for scheme members	SPPA – police pension schemes; forms and guides;
Scheme rules	SPPA - regulations
Valuation	As at March 2016 As at March 2012

7.7 Local Government

Local Government Pension Scheme – England and Wales

Information for scheme members	LGPS website
Scheme rules	LGPS regulations and guidance Scheme advisory board website
Scheme data	LGPS E&W statistics Scheme advisory board website (see for example – results of individual fund valuations 2016)
Valuation	As at March 2016

LGPS Scotland

Information for scheme members	SPPA website
Scheme rules	SPPA website
Membership data	SPPA website – as at March 2011
Valuation	As at March 2014

7.8 Northern Ireland

Civil Service Pension Scheme (NI)

Member guides	Civil Service Pensions NI
Scheme rules	PCSPS NI rules See also, NI Civil Service Pensions Board
Membership data	Department of Finance Superannuation and Other Allowances Accounts
Valuations	As at March 2016

Local Government Pension Scheme (NI)

Member guides	NILGOSC website
Scheme rules	NILGOSC - regulations
Membership data	NILGOSC Annual Report
Valuations	As at March 2016

Teachers' Pension Scheme (NI)

Member guides	NITPS factsheets
Scheme rules	Department of Education (NI) – pension regulations
Membership data	Teachers' Superannuation Annual Scheme Statements
Valuation	As at March 2016 As at March 2012

NHS Pension Scheme (NI)

Member guides	HSC Pension Service website – scheme guides
Scheme rules	HSC Pension Scheme Regulations
Valuation	As at March 2012

Police Pension Scheme (NI)

Member guides	NI Policing Board website

Firefighters Pension Scheme (NI)

Scheme rules	NI Fire and Rescue Service website
Membership data	NIFRS Annual Report and Accounts

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