National Audit Office

Public service pensions

HM Treasury

REPORT

by the Comptroller and Auditor General

SESSION 2019–2021
19 MARCH 2021
HC 1242

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Public service pensions

HM Treasury

Report by the Comptroller and Auditor General

Ordered by the House of Commons
to be printed on 17 March 2021

This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act

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Comptroller and Auditor General
National Audit Office

15 March 2021

HC 1242 | £10.00

009105 03/21 NAO

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Key facts

£33.5bn

total benefits paid (ongoing payments and lump sums) to pensioners by the four largest pay-as-you-go schemes in 2019-20

2.0%

projected gross pension benefit expenditure across all public service pension schemes, as a percentage of GDP in 2019-20

£10,000

average annual pension paid by the four largest pay-as-you-go schemes in 2019-20

£25.4 billion total taxpayer funding in 2019-20 of the four largest pay-as-you-go schemes, including employer contributions and a balancing payment from HM Treasury

£8.2 billion total employee contributions in 2019-20 into the four largest pay-as-you-go schemes

105% real-terms increase in total benefits paid annually over the past 20 years across the four largest pay-as-you-go schemes (the armed forces, civil service, NHS and teachers' pension schemes)

69% increase in the number of pensioners across the four largest pay-as-you-go schemes over the past 20 years to 2.8 million

16% real-terms increase over the past 20 years in the average annual pension paid (excluding lump sum payments) by the four largest pay-as-you-go schemes

1.5% projected gross pension benefit expenditure across all public service pension schemes, as a percentage of GDP from 2064-65 (HM Treasury's measure of affordability)

Summary

Background

1 As an employer, the government provides public service employees with access to occupational pension schemes. As at 31 March 2020, there were more than 8 million members of four of the largest public service pension schemes (the armed forces, civil service, NHS and teachers' pension schemes), of which 2.8 million were retired and receiving pension benefits and 5.2 million were either current or former employees. Around 25% of pensioners and 16% of the working-age population are members of a public service pension scheme.

2 Most public service pension schemes operate on a pay-as-you-go (or 'unfunded') basis with payroll contributions from current employees and their employers, and additional funding from HM Treasury, used to pay pension benefits to those members already in retirement. Funded schemes (such as the Local Government Pension Scheme), by contrast, use employer and employee contributions to create investment assets in a pension fund, with those assets and associated returns used to pay for future pensions.

3 In general, public service pensions have become more expensive over time as the number of people receiving them has increased, owing to more members entering retirement and living longer. This trend applies across public and private pensions and is consistent with international experience. HM Treasury, the government department responsible for policy in relation to public service pensions, is concerned about increasing costs and affordability, in the context of other demands on public finances.

4 In 2010 the government established the Independent Public Service Pensions Commission, chaired by Lord Hutton (the Hutton Review) to undertake a fundamental structural review of public service pensions. We have previously reported on the rising costs of public service pensions. In 2010 we published two reports, covering (i) the current and future costs of public service pension schemes, and (ii) the impact of changes to the government's schemes in 2007-08.[1] In 2016, we published a report looking at public service pensions in the context of the government's balance sheet.[2]

1 Comptroller and Auditor General, *The cost of public service pensions*, Session 2009-10, HC 432, National Audit Office, March 2010. Comptroller and Auditor General, *The impact of the 2007-08 changes to public service pensions*, Session 2010-11, HC 662, National Audit Office, December 2009.

2 Comptroller and Auditor General, *Evaluating the government balance sheet: pensions*, Session 2016-17, HC 238, National Audit Office, June 2016.

5 Following the Hutton Review final report in March 2011, and a period of negotiations with trade unions representing public service employees, the government introduced reforms intended to manage the future costs of providing pensions. The government's objectives for pensions reform were to:

- ensure a good level of retirement income for public service workers, with a reasonable degree of certainty;
- be affordable and sustainable, with cost risk managed and shared effectively;
- provide a fair balance of costs and benefits between public service workers and other taxpayers;
- protect those closest to retirement;
- have a clear legal framework and governance structure, and be widely understood by workers; and
- that reforms stand the test of time, with no more reform for at least 25 years.

Prior to 2012, the government had a further stated objective for public service pensions: "to aid the recruitment and retention of the right people in the right jobs". HM Treasury also intends that public service employers bear the costs of their recruitment decisions.

6 To deliver the objectives, since 2011 HM Treasury took several steps, including moving members from pensions based on their final salary to their career average salary; aligning the normal pension age with the State Pension age; changing the inflation measure used to increase pensions annually; and establishing a mechanism (the 'cost control mechanism') aimed at protecting taxpayers by sharing the risk of cost increases fairly between scheme members and other taxpayers. A Court of Appeal judgment in 2018 (the 'McCloud judgment') found that protections offered to those closest to retirement were discriminatory on the basis of age; the government is working to remedy the discrimination and complete the implementation of the reforms.

Scope of our work

7 This report outlines how the public service pensions landscape has changed since the Hutton Review and highlights key challenges for the future. We examine data from the four largest pay-as-you-go pension schemes (NHS, teachers, civil service and armed forces) across the past 20 years to draw out long-term trends in pension costs and benefits. Throughout this report, when we refer to 'departments' we are also referring to other public service employers. State pensions and private sector pensions are outside the scope of this study, as are the schemes of privatised industries, such as the Royal Mail, or bodies that receive substantial public money but operate independently, such as the BBC. We do not make a judgement on whether public service pensions are affordable, as we consider this a policy decision.

8 The report is structured as follows:

- Part One provides background on public service pensions, covering the roles and responsibilities of key stakeholders, recent reforms and how performance is measured.
- Part Two outlines recent long-term trends in pension costs and benefits as well as future projections.
- Part Three highlights future challenges, including the age discrimination case resulting from the 2011–2015 pension reforms, the government's mechanism for assessing affordability and the role of pensions in recruitment and retention.
- The Appendices set out our audit approach and evidence base.

Key findings

Payments from the schemes

9 Total payments from public service pension schemes have grown significantly over the past 20 years. Total annual payments from the four schemes have risen by 105% (£17.1 billion) in real terms over the past 20 years, with £33.5 billion paid to pensioners. This included £28.5 billion of annual ongoing pension payments and £5 billion of one-off lump sum payments, with the NHS Pension Scheme the largest by payment value. The £17.1 billion increase in total payments also comprised ongoing pension payments (£13.9 billion) and lump sum payments (£3.2 billion). While future pension benefits have been affected by government's 2011–2015 reforms, such as the move to career average pensions, these changes will take many years to have an effect on total payments (paragraphs 2.3 to 2.4 and Figure 4).

10 The main factor driving the growth in total payments is the increasing number of pensioners. Total membership of the four schemes has increased from 5.1 million in 1999-2000 to 8.1 million in 2019-20. Most of the increase in pension payments is because of a 69% increase in the number of pensioners (to 2.8 million) between 1999-2000 and 2019-20. Of the £17.1 billion increase in payments over that period, £10.1 billion (in real terms) relates to the increase in pensioner numbers (paragraph 2.4 and Figure 5).

11 **Average annual pensions have grown by 16% in real terms since 1999-2000, but there is wide variation across schemes and groups of members.** The real-terms rise in average annual pensions since 1999-2000 has increased total payments by around £3.8 billion (in real terms). On average, pensioners across the four pay-as-you-go schemes received an annual pension of around £10,000 in 2019-20, up from £8,650 in 1999-2000. However, differences in pension payments between individuals and between groups of members arise because of a range of factors including the characteristics of different schemes, length of service and salary. For example, our analysis of the latest available data from 2016 shows that on average male scheme members receive £14,100 annually, whereas female scheme members receive £7,750 – a 45% difference. This gap is greatest in the NHS pension scheme at 63%. On average, male scheme members earn more over their careers and therefore build up a higher pension than female members. Scheme members who receive higher pay make higher contributions. There is also considerable variation across the schemes in average pensions with, for example, teachers' scheme members receiving £12,300 on average annually compared with £8,100 received by civil service scheme members (paragraphs 2.5 to 2.9 and Figures 6 and 7).

How the schemes are funded

12 **Pay-as-you-go public service pensions are funded through employee and employer contributions and a balancing payment from HM Treasury.** Employees and employers make monthly payroll contributions to public service pension schemes based on a set contribution rate and the employee's pay. As total contributions and the amounts paid to current pensioners may differ, HM Treasury makes an annual balancing payment to schemes to cover any shortfall (and retains any surplus). The total taxpayer funding for public service pensions therefore includes both employer contributions and the HM Treasury balancing payment (paragraphs 1.4 and 1.5, and Figure 1).[3]

13 **Employees are contributing substantially more to their pensions both individually and in total, because of the 2011–2015 reforms.** The 2011–2015 reforms increased contribution rates for pension scheme members. In 2019-20 total employee contributions from the four largest pay-as-you-go schemes amounted to £8.2 billion, 44% higher than 2009-10 (in real terms). On average, employees contributed around £2,700 in 2019-20 to their pensions, 33% higher in real terms than in 2009-10, and around 8.5% of average salaries in 2019-20. These increases in employee contributions are in the context of average pay decreasing 12% in real terms over the same period (to £31,600 in 2019-20), as prices increased faster than total pay (paragraphs 2.10 to 2.13 and Figures 8 and 9).

3 In this report we use this definition of costs to the taxpayer as distinct from employee contributions, although employees are also taxpayers in their own right.

14 **While the taxpayer's proportion of total pension funding remains similar to 10 years ago, employer contributions have risen significantly in 2019-20**. The taxpayer funds about 75% of the costs of the four largest pay-as-you-go schemes, a similar figure to 10 years ago. In cash terms this was £25.4 billion in 2019-20. Of this, £23.3 billion came from employer contributions – up £6.4 billion on the previous year – and the rest came from HM Treasury. The increase in employer contribution rates in April 2019 (based on the results of the 2016 valuations) is largely the result of a change to the discount rate government used to estimate the current cost of future benefits to be paid out by the schemes. This increase is consistent with HM Treasury's intention for departments and other public service employers, who control staffing decisions, to bear the full cost of those decisions. Employers also bear some costs outside of their control, such as those related to deferred members and current pensioners. In 2019-20, departments partly funded the increases in employer contributions through existing budgets. For example, the Department for Education told us it had to fund around £270 million of cost increases from existing budgets (paragraphs 2.14 to 2.20 and Figures 8 and 10).

HM Treasury's measure of affordability

15 **Despite rising costs, the government expects that public service pensions will become more financially sustainable over time, but this forecast is subject to some uncertainty.** HM Treasury's measure of affordability compares projected pension expenditure to the UK's economic output (spend as a proportion of GDP) over the next 50 years. The government's most recent projections – published in 2018, before the COVID-19 pandemic and before the UK exited the EU – indicate that expenditure is expected to increase from 2.0% of GDP in 2019-20 to a peak of 2.1% in 2022-23 before reducing over time, to around 1.5% of GDP from 2064-65. This forecast change can be partly explained by past reforms, as an increasing proportion of retiring scheme members draws on the (cheaper to the taxpayer) reformed schemes, rather than the more expensive legacy schemes. This measure is sensitive to changes in projections of GDP, which are now less certain because of the economic impacts of the COVID-19 pandemic, EU Exit and climate change (paragraphs 1.13, 2.21 to 2.26 and Figure 11).

Current and unresolved issues

16 **A legal challenge overturned a key part of the government's 2011–2015 reforms, and the government's proposed remedies will present substantial challenges for schemes and their members.** In 2011, the Hutton Review said that special protections for members aged 50 and over should not be necessary if, as happened, the reforms retained the link between pensions and final salary for past service. It pointed to age discrimination legislation as a potential barrier to such protections. Despite this warning, and following negotiations with employee representatives, government decided to offer 'transitional protection' measures to those within 10 years of their normal pension age. In 2018, the Court of Appeal ruled that these measures were unlawful on the grounds of discrimination based on age. In February 2021, following consultation on options to remedy the discrimination, the government announced that it would offer eligible members a choice to receive benefits from the legacy or reformed pension schemes for their service between April 2015 and March 2022. The government currently estimates the cost of these proposals to be £17 billion. It has decided that scheme members will meet these costs. More than three million scheme members will need to make a complex decision about their plans for retirement, and they will need useful, reliable and timely information from scheme administrators to support them in making that decision. This presents a significant administration challenge for schemes. Work between the schemes and HM Treasury to deliver the remedy is under way, but HM Treasury has not yet set out in detail how it plans to support schemes (paragraphs 3.2 to 3.8).

17 **Government is concerned that the cost control mechanism introduced in the 2011–2015 reforms is not working as intended.** As a part of its 2011–2015 reforms, government established a 'cost control mechanism' intended to protect the taxpayer and ensure that the risks associated with pension provision are shared with scheme members; the mechanism was only intended to be triggered should 'extraordinary, unpredictable events' occur. Provisional results from the 2016 actuarial valuations indicated that costs had fallen and that the mechanism could be triggered, leading to an increase in pension benefits. HM Treasury took these results as an indication that the mechanism was not working as intended and asked the Government Actuary to review the mechanism. In 2019, following the McCloud judgment, the government paused the cost control mechanism and the review of the mechanism, as it considered the value and costs of schemes were too uncertain until HM Treasury had fully developed its response to the judgment. Employee representatives told us that the review of the mechanism has undermined trust between employees and the government, and trade unions have brought legal challenges against the government's decision to pause the mechanism. In July 2020 HM Treasury announced that the pause of the mechanism would be lifted, and employee and employer representatives have since had an opportunity to feed their views into the Government Actuary's review, which is due to report around April 2021 (paragraphs 3.9 to 3.14).

18 **HM Treasury's strategy for public service pensions has focused on affordability and does not explicitly consider the needs of employers or the role of pensions in the recruitment and retention of staff.** HM Treasury officials told us that the government recognises the importance of pensions in the overall remuneration package, which includes pay and other benefits, and that it considers the role of pensions in recruitment and retention from this perspective. But HM Treasury's objectives (since 2012) do not consider the role of pensions in supporting the recruitment and retention of staff across public services, and its single formal measure for public service pensions considers affordability. The Cabinet Office is responsible for cross-government workforce planning and senior civil servant remuneration, and individual employers are responsible for ensuring the remuneration package they offer attracts the staff they need in other grades, within the wider pay policy HM Treasury sets. There is little progress since our 2010 report when we noted that HM Treasury and employers had not agreed a long-term strategy for how pensions support recruitment and retention. There had been no assessment at that time of the long-term impact on staff motivation and retention (paragraphs 3.15 to 3.17).

19 **Some public bodies find the pension arrangements inflexible for supporting their workforce plans, which may present a risk to value for money.** Employers told us that pensions can play an important role in retaining people with the right skills, but it is less clear whether current arrangements help them recruit new employees. For comparable private sector workers, pensions often form part of a flexible range of benefits alongside pay. As such, private sector employers have more flexibility to set the balance between different elements of remuneration, such as pay, pension and annual leave. Most public service employers can only offer potential employees the choice between staying in the scheme or opting out. There is some evidence to suggest that those in lower age and income groups are more likely to opt out of pension arrangements as they view contributions as unaffordable. Employers told us that they have looked at options for more flexible pension arrangements, such as allowing for higher pay in exchange for reduced pension benefits. HM Treasury has rejected proposals for more general flexibility, although it has allowed some employers to implement more flexible arrangements in specific cases. HM Treasury told us that, because pensions are relatively inflexible, it has used other approaches to recruit and retain staff – for example, introducing pension tax measures to help avoid senior clinicians reducing their overtime hours and retiring early. HM Treasury also told us that the government's commitment to making no major changes to public service pensions for 25 years limits the flexibility that it can provide, and it must consider the short-term impact on the public finances of any proposals (paragraphs 3.18 and 3.19).

Concluding remarks

20 Public service pensions are a notable benefit to public servants. HM Treasury focuses on the affordability of these pensions and who pays for them. The total costs of providing pensions have been increasing over time, reflecting increasing numbers of pensioners. The government's pension reforms over recent years have contained the rise in future taxpayer costs by making pensions less generous and by increasing contributions from employees. However, taxpayer funding has increased and it will take decades for the full effects of the 2011–2015 reforms to be seen in the government's affordability measure. The balance of taxpayer funding has shifted from central payments by HM Treasury to employer contributions by departments and organisations to ensure that employers bear the consequences of their employment decisions.

21 However, HM Treasury needs to monitor more than just affordability. Government's approach to protecting those nearest retirement has been ruled unlawful and will cost time and money to resolve. The government's reforms also take no account of pensions as a recruitment and retention tool, with pensions continuing to be relatively inflexible; the only real choice for most employees is to stay in the scheme or opt out altogether.

Recommendations

22 Through our work, we have noted several key issues that the government needs to address soon. HM Treasury should:

a develop plans to address the impact of the administrative challenge that its proposals in response to the McCloud judgment will have for employers and scheme administrators, so any changes can be implemented whilst maintaining a good level of service for members;

b resolve its concerns about the cost control mechanism and be open and transparent about the impact of any changes it makes for employers and scheme members;

c in conjunction with the Cabinet Office, work closely with employers to understand how public service pensions can best support their workforce planning, to ensure pensions are an effective tool in recruiting and retaining the staff they need;

d consider government's overall approach to ensuring that employees understand their pensions, particularly for the three million scheme members affected by the McCloud judgment who will need reliable and timely information, including from scheme administrators, to make decisions about their retirement plans; and

e consider whether broader performance measures, covering affordability and its other objectives, would give it greater assurance that it is delivering its objectives for public service pensions. For example, it could collect and analyse information regularly on the rate at which some groups are opting out of schemes.

Part One

Background

1.1 This part provides background to the public service pension schemes, including how pension costs are met, and the main roles and responsibilities relating to schemes.

Public service pensions landscape

1.2 Pensions provide people an income in retirement. There are two main types of government-provided pensions: the State Pension and public service pensions. The State Pension is a benefit received by all pensioners reaching State Pension age who have paid or been credited with sufficient National Insurance Contributions. Public service pension schemes are occupational pension schemes that form a part of the overall remuneration package of staff in central government, local authorities and other public bodies, including hospitals, schools and some public corporations.[4]

1.3 Members of public service schemes can be active (those who are currently employed), deferred (members who are no longer accruing benefits, usually because they have left their employer) or retired (those receiving pension payments). Typically, public service pensions are defined benefit pension schemes, where government has a contractual obligation to provide employees with a pension linked to their salary and years of service. This contrasts with defined contribution pension schemes, which are more common in the private sector and provide a pension based on how much money has been paid into a pension pot plus any investment returns.

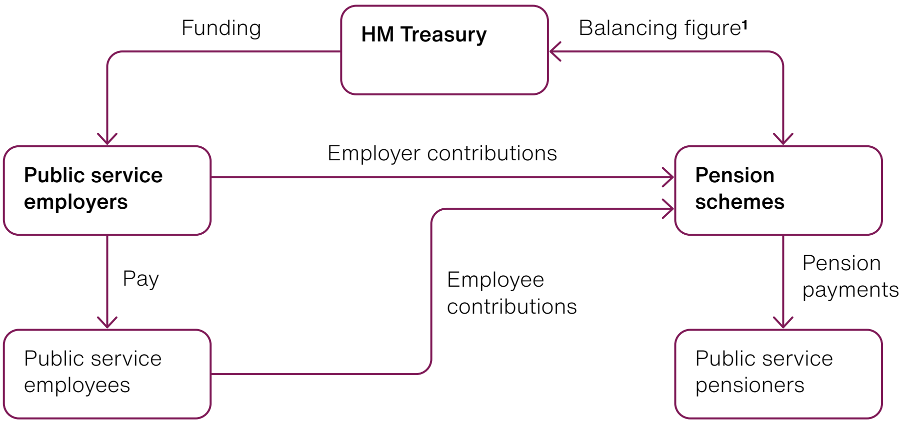
1.4 Most of the schemes in central government operate on a 'pay-as-you-go' (or 'unfunded') basis, whereby contributions made by employers and current employees are used to pay pensions to retired scheme members. The unfunded public service schemes undertake actuarial valuations every four years to determine how much employers and employees need to contribute. These valuations include an estimate of the future cost of pensions accrued by current employees, and of costs relating to deferred members and pensioners. HM Treasury, the central government department responsible for public service pensions policy and for monitoring costs to the taxpayer, makes a balancing payment if contributions are insufficient to cover pensions paid in any given year (**Figure 1** overleaf).

4 Some employers who offer membership to public service pension schemes are classified to the private sector (for example, independent schools). HM Treasury does not hold data on what proportion of members relate to these employers.

Figure 1

Payments and contributions in the UK's pay-as-you-go pension schemes

Pay-as-you-go public service pensions are paid for by staff, through employee contributions, and taxpayers, through employer contributions and a balancing payment from HM Treasury



Notes

1 Should pension payment exceed contributions in any year, HM Treasury covers the deficit through a balancing payment. Any surplus of contributions over pension payments is returned to HM Treasury.

2 Arrows represent the direction of funding flows.

Source: National Audit Office

1.5 The four largest pay-as-you-go public service pensions schemes make up more than 70% of government's occupational pension liabilities (the armed forces, civil service, NHS and teachers' pension schemes).[5] They had 8.1 million members as at 31 March 2020, comprising more than three million current staff, 2.2 million previous employees who had earned pensions but were not yet eligible to draw them, and more than 2.8 million pensioners (**Figure 2**). This means around 16% of the working-age population and 25% of existing pensioners are members of one of the four largest pay-as-you-go public service pension schemes. There were 5.1 million members of the four schemes in 1999-2000. Appendix Two summarises the main features of these schemes.

1.6 Many public sector schemes outside of central government are 'funded' schemes, whereby contributions from employees and employers are invested in a pool of assets. The returns on these assets are then used to pay pensions as they fall due. The Local Government Pension Scheme is the largest funded public sector pension scheme with almost six million members in 2019.

5 Excluding non-occupational pensions, such as the State Pension.

Figure 2

Number of members and pension benefits paid for the UK's four largest pay-as-you-go pension schemes, as at March 2020

The NHS Pension Scheme is the largest pay-as-you-go scheme by number of active members and total pensions paid

Scheme	Active members[1]	Deferred members[2]	Pensioners[3]	Total members	Benefits paid in 2019-20[4]
					(£bn)
Armed Forces	198,530	519,763	442,954	1,161,247	4.8
Civil Service	510,220	357,830	700,157	1,568,207	6.5
NHS	1,619,853	701,348	962,928	3,284,129	11.9
Teachers[5]	702,773	638,458	739,974	2,081,205	10.3
All four schemes	**3,031,376**	**2,217,399**	**2,846,013**	**8,094,788**	**33.5**

Notes

1 **Active members** are those currently employed and contributing to their pension.

2 **Deferred members** are those no longer accruing benefits, usually because they have left their employer. They will draw their pension upon their retirement.

3 **Pensioners** are those retired and receiving pension payments.

4 **Benefits paid** includes both lump sum and annual pension payments.

5 Member numbers for the Teachers' Pension Scheme are as at 31 March 2019 (the latest data available to us at the time of writing this report).

Source: National Audit Office analysis of pension scheme financial statements

1.7 Over the long term, the total amount paid out by pension schemes depends on several factors, some of which are specific to each scheme (such as how quickly benefits accrue) and some that are specific to each member and are uncertain (such as how long members of the scheme might live). In defined benefit schemes the risks, such as the unanticipated costs of people living longer than expected, are typically borne by the employer. In defined contribution schemes, the employee typically bears the risks, for example that lifetime contributions are insufficient to fund the level of retirement income that the scheme member wants.

Roles and responsibilities

1.8 Responsibilities for public service pensions are split across government:

- In addition to its policy role, **HM Treasury** sets the methodology and assumptions used in actuarial valuations, which are important factors in employer and employee contribution rates for pay-as-you-go schemes.
- The **responsible authority** for each scheme (a secretary of state, minister or government department) is responsible for setting policy for that scheme. For example, the Secretary of State for Health and Social Care is the responsible authority for the NHS Pension Scheme. For some schemes, the responsible authority may be a devolved administration. HM Treasury has final approval over any changes to scheme regulations that a responsible authority puts forward.
- The **Government Actuary's Department** (GAD) is the scheme actuary for all of the main public service pension schemes, with responsibility to carry out regular actuarial valuations. GAD also provides advice to government in developing and implementing pension policy, and provides actuarial support to many public sector organisations.
- The **Office for Budget Responsibility** (OBR), the government's independent economic forecaster, publishes forecasts of public service pension payments for the medium term (five years) and long term (50 years).

Appendix Three sets out the main features of governance arrangements for public service schemes.

Public service pension reform

1.9 In general, public service pensions have become more expensive over time as the number of people receiving them has increased because people are living longer, and more employees leading to more retirees. This trend is consistent with the cost of providing other types of pensions and with international experience. HM Treasury has had long-held concerns about increasing costs and affordability, in the context of other demands on the public finances. Before 2010, the government introduced reforms to manage the costs to the taxpayer of pensions, including increases in normal pension age for new scheme entrants and 'cap and share' rules to share the risks arising from demographic changes.

1.10 In 2010, the government established the Independent Public Service Pensions Commission (known as the Hutton Commission) to undertake a fundamental structural review of public service pension provision. In 2011, the Hutton Commission published a final report, which found that existing pension schemes had not responded 'flexibly to changes in working lives' and people living longer, while creating an unfair balance of risks between scheme members and taxpayers.

1.11 The government accepted the Commission's recommendations as a basis for negotiations with trade unions representing public service employees. The government set out the following six objectives for the reform of public service pensions:

- Ensure a good level of retirement income for public service workers, with a reasonable degree of certainty.
- Be affordable and sustainable, with cost risk managed and shared effectively.
- Provide a fair balance of cost and benefits between public service workers and other taxpayers.
- Protect those closest to retirement.
- Have a clear legal framework and governance structure and be widely understood by workers.
- Reforms stand the test of time, with no more reform for at least 25 years.

In 2013, the government introduced legislation leading to new arrangements for members, summarised in **Figure 3** overleaf.

1.12 HM Treasury estimated at the time of the reforms that they would reduce future pension costs by around £430 billion. The reforms included moving pension entitlement to career average earnings for all remaining final salary schemes and increasing the normal pension ages, aligning this with the State Pension age of 65 (increasing to 68 by 2046 under current legislation).[6] Around the same time, the government changed the measure of inflation used to calculate pension increases, from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI). Using CPI, which has typically been lower than RPI, results in a reduced value of pension benefits.

1.13 HM Treasury assesses the affordability and sustainability of public service pensions using projected pension scheme expenditure over the next 50 years as a percentage of GDP. This projection includes annual pension payments and lump sum payments. The Hutton Commission identified this measure as a suitable proxy for the government's ability to pay for future public service pensions with benefit payments ultimately financed through taxation, with tax revenues closely linked with GDP. The remaining objectives outlined in paragraph 1.11 are not supported by specific metrics to measure performance.

6 Normal pension ages across all schemes were raised and all (except for uniformed services: armed forces, police and firefighters) linked with the State Pension age. Following a recent review, the government has announced plans to bring forward the timetable for changes to the State Pension age. The State Pension age would therefore increase to 68 between 2037 and 2039.

Figure 3

Key factors affecting payments from the UK's four largest pay-as-you-go public service pension schemes and how the 2011–2015 reforms changed these

Several factors determine pension payments, some of which recent reforms have affected

Factor	Effect on pensions	2011–2015 reforms changes
Pay	Defined benefit pension payments are linked to an individual's pay, which itself can be affected by, for example, seniority and working hours.	All remaining schemes based on an individual's final salary moved to a 'career average', which is based on average annual earnings during their qualifying working life. For many people this reduces the pension accrued following the move.
Accrual rates	An accrual rate is set for each scheme and is used to determine the amount of benefits built up each year. For example, each year of service in the Civil Service classic scheme accrued 1/80th of final salary as pension.	Accrual rates increased across all schemes following the reforms, increasing the proportion of pension earned for each additional year of service (see also 'lump-sum' arrangements below).
Length of service	An individual's pension is linked to how long they work in public service. For example, an individual retiring with 40 years' service in the Civil Service classic scheme would have accrued 50% of their final salary as pension (40 years at a 1/80th accrual rate).	No change resulting from the reforms.
Life expectancy	The total pension payments made to an individual in their retirement will depend on how long they live.	No change resulting from the reforms.
Normal pension age	An age set for each scheme at which a member normally becomes entitled to retire and receive their pension. Some schemes allow members to retire early (or late) in exchange for reducing their annual pension payments (or for additional benefits).	Normal pension ages across all schemes were raised and all (except for uniformed services: armed forces, police and firefighters) linked with the State Pension age, which is expected to increase in the future.
Lump-sum arrangements	Some schemes provide individuals with an automatic lump sum payment on retirement, either as a set entitlement or in exchange for reducing their annual pension payments.	None of the four largest pay-as-you-go schemes now offer an automatic lump sum entitlement on retirement – which funded an increase in the accrual rate – but all provide an option to receive one in exchange for a reduced pension.

Source: National Audit Office

Scope of our report

1.14 We have looked at public service pension schemes in past reports. In 2010 we published two reports, covering (i) the current and future costs of public service pension schemes, and (ii) the impact of changes to the government's schemes in 2007-08. In 2016, as part of our examination of the government balance sheet, we published a report looking at public service pension schemes in the context of the government's wider pension liabilities, and how the government managed risks to the taxpayer arising from the schemes.

1.15 This report (Part Two) updates our past analysis. It focuses on the four largest pay-as-you-go schemes which make up more than 70% of government's occupational pension liabilities. Our report (Part Three) also considers developments, since we last reported, regarding the public service pension schemes and the government's reforms which apply to all public service pension schemes. Throughout this report, when we refer to 'departments' we are also referring to other public service employers. State pensions and private sector pensions are outside the scope of this study, as are the schemes of privatised industries, such as the Royal Mail, or bodies that receive substantial public money but operate independently, such as the BBC. We do not make a judgement on whether pensions are affordable, as we consider this a policy decision.

Part Two

Trends in payments and funding

2.1 This part examines how costs and benefits have changed over the past 20 years for the four largest UK public service pay-as-you-go pension schemes, both in total and for individuals, and the reasons for those changes. We also consider future projections of pension expenditure.

2.2 We analysed data on scheme member numbers, pension payments and contributions over the 20 years from 1999-2000 to 2019-20, to assess the impact of the government's 2011–2015 reforms. We used data from financial statements for each of the four largest pay-as-you-go pension schemes (see paragraph 1.5). We then expressed the financial information in real terms by using the Consumer Prices Index (CPI) to adjust the information to reflect 2019-20 prices. More information on this approach and its limitations is provided in Appendix One of this report and Appendix Four summarises our analysis.

Payments from the schemes

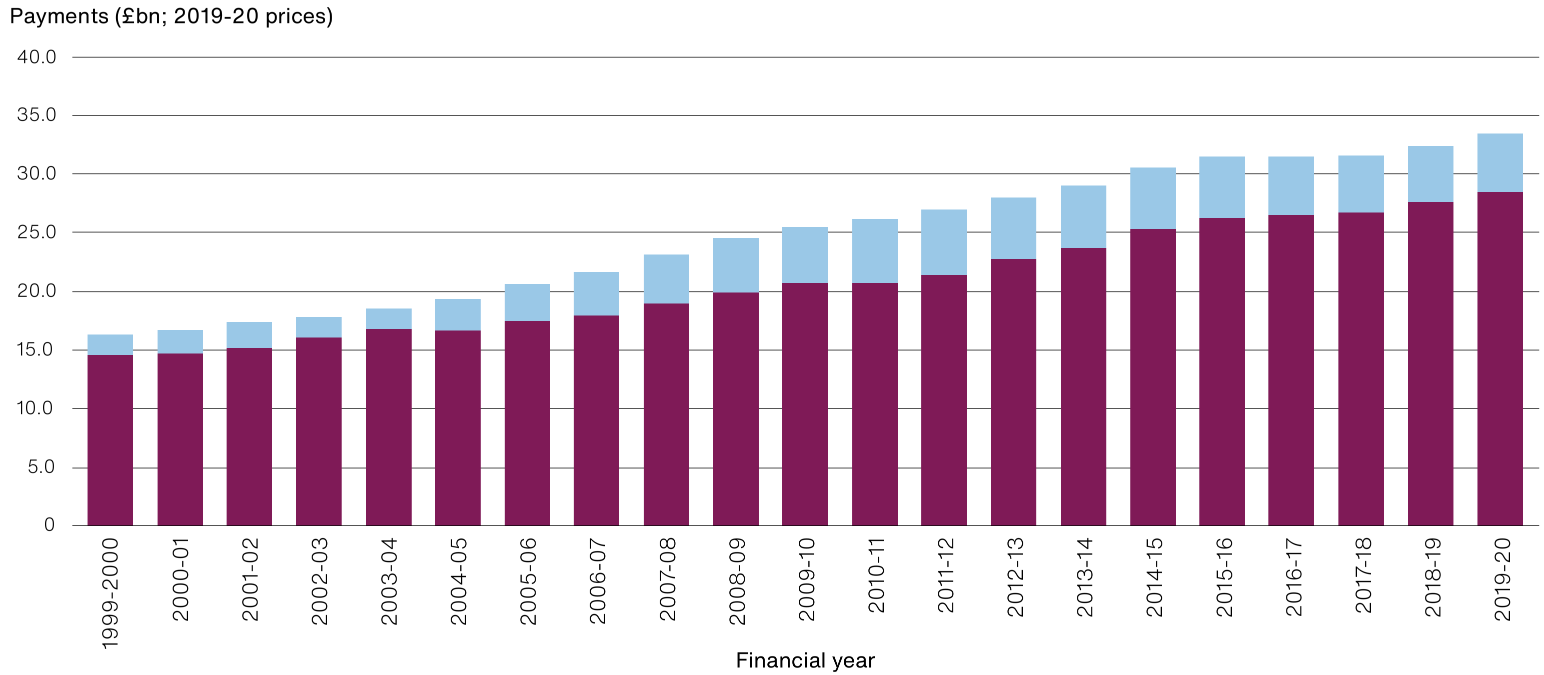
2.3 The total payments from the four largest pay-as-you-go schemes have increased by 105% in real terms (an increase of £17.1 billion) over the past 20 years. In 2019-20, pensioners in these schemes received £33.5 billion, consisting of £28.5 billion in ongoing pension payments and £5 billion in one-off lump sum payments (**Figure 4**). The £17.1 billion increase in total payments comprises ongoing pension payments (£13.9 billion) and lump sum payments (£3.2 billion). However, growth has reduced in recent years, with total payments increasing by 3% in real terms between 2018-19 and 2019-20.

2.4 The main factor driving the growth in total payments is the increasing number of pensioners, which accounts for £10.1 billion of the £17.1 billion real-terms increase since 1999-2000. There were 2.8 million pensioners across the four schemes in 2019-20, up 29% from 2.2 million in 2009-10, and an increase of 69% compared with 1999-2000 (**Figure 5** on page 22). Increases in the number of pensioners are largely driven by past trends in public service employment – many of those members who began their working careers 40 to 45 years ago are now approaching retirement age – and the extension of pension rights for early leavers and women. While future pension benefits have been affected by government's 2011–2015 reforms, such as the move to career average pensions, these changes will take many years to have an effect.

Figure 4

Total pension and lump sums paid by the UK's four largest pay-as-you-go public service pension schemes from 1999-2000 to 2019-20

Total pension and lump sums paid have doubled in real terms since 1999-2000 to £33.5 billion in 2019-20



	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Pension payments	14.6	14.7	15.2	16.1	16.8	16.7	17.5	18.0	18.9	20.0	20.7	20.7	21.4	22.8	23.7	25.4	26.2	26.5	26.8	27.6	28.5
Lump sum payments	1.8	2.0	2.2	1.7	1.7	2.6	3.0	3.6	4.2	4.5	4.7	5.4	5.6	5.2	5.3	5.2	5.3	4.9	4.8	4.8	5.0
Total benefits paid	**16.4**	**16.7**	**17.4**	**17.8**	**18.5**	**19.3**	**20.6**	**21.6**	**23.1**	**24.5**	**25.5**	**26.1**	**27.0**	**28.0**	**29.0**	**30.6**	**31.5**	**31.5**	**31.6**	**32.4**	**33.5**

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 Payments are adjusted to 2019-20 prices using the Consumer Prices Index.

3 Pension payments include those to divorced spouses or civil partners and other beneficiaries such as widows and widowers, survivors and other dependants. This also includes any relevant compensation payments.

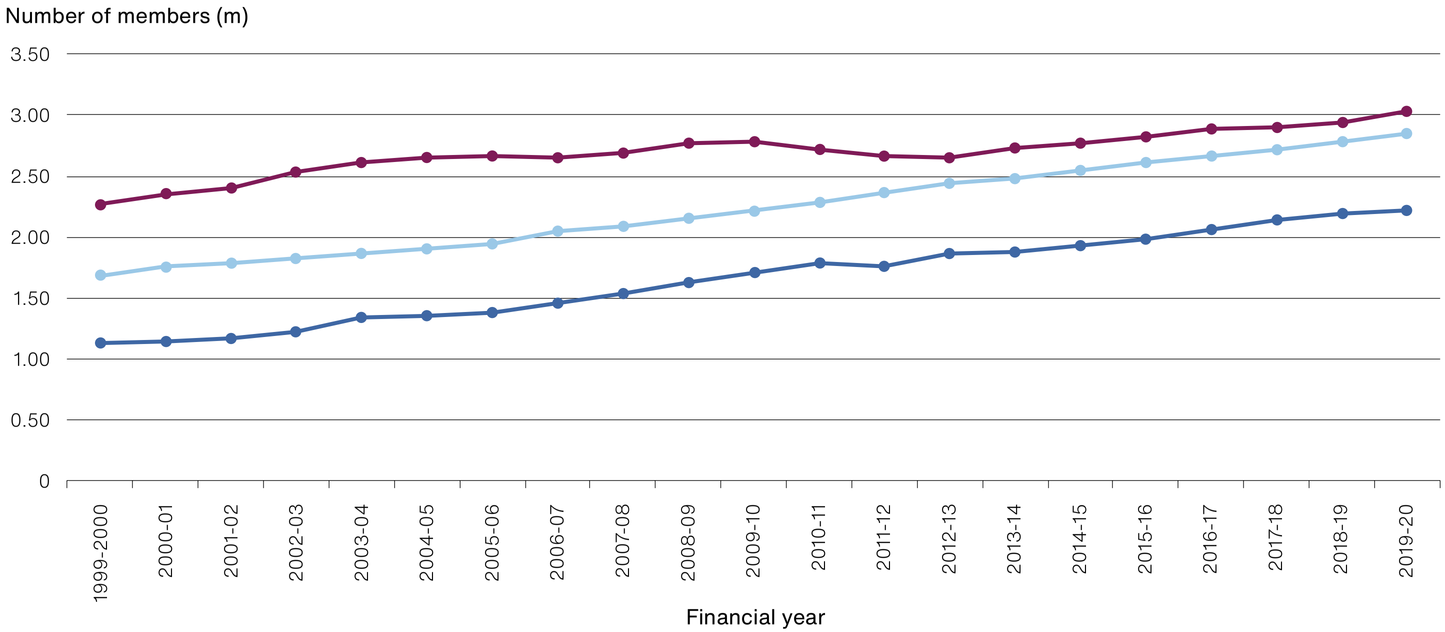
4 Figures may not sum owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

Figure 5

Membership of the UK's four largest pay-as-you-go public service pension schemes, from 1999-2000 to 2019-20

The number of pensioners receiving payments has grown by 69% since 1999-2000 while the number of active members paying in has increased 34%



	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Active members	2.27	2.35	2.41	2.54	2.61	2.65	2.66	2.65	2.70	2.77	2.79	2.71	2.67	2.65	2.73	2.77	2.82	2.89	2.90	2.94	3.03
Pensioners	1.68	1.76	1.79	1.83	1.87	1.91	1.95	2.05	2.09	2.15	2.21	2.28	2.37	2.44	2.48	2.55	2.61	2.67	2.71	2.78	2.85
Deferred members	1.13	1.15	1.17	1.23	1.34	1.36	1.38	1.46	1.54	1.63	1.71	1.79	1.76	1.86	1.88	1.93	1.99	2.06	2.15	2.20	2.22

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 **Active members** are those currently employed and contributing to their pension. **Deferred members** are those no longer accruing benefits, usually because they have left their employer; they will draw their pension upon their retirement. **Pensioners** are those retired and receiving pension payments.

3 **Deferred members** and **pensioners** may include divorced spouses or civil partners and other beneficiaries such as widows and widowers, survivors and other dependants.

4 The Armed Forces Pension Scheme reports 'benefits in payment' rather than number of pensioners; an individual pensioner may have more than one benefit in payment from this scheme. The Teachers' Pension Scheme has not yet reported the number of active and deferred members as at 31 March 2020; we have assumed 2019-20 figures are in line with 2018-19 figures for this scheme.

Source: National Audit Office analysis of pension scheme financial statements

2.5 Around £3.8 billion of the £17.1 billion increase in total payments is because of higher average annual payments made to each pensioner. The average annual pension payment across the four largest pay-as-you-go schemes, at around £10,000 in 2019-20, is approximately 7% higher in real terms than it was 10 years ago (around £9,400 in 2009-10) and around 16% higher in real terms than 20 years ago (almost £8,650 in 1999-2000) (**Figure 6**).

2.6 There is variation in the average pension across the four largest pay-as-you-go schemes. For example, members of the Teachers' Pension Scheme receive an average pension of £12,300 compared with £8,100 received by members of the Civil Service Pension Scheme. This is in part because of their higher average pay; also, average pensions are affected by factors such as different average length of service and how quickly pension benefits accrue in each scheme (see Figure 3).

Figure 6

Pensions paid from the four largest UK pay-as-you-go public service pension schemes in 2019-20 compared with 2009-10 and 1999-2000

The average pension across the four schemes has increased 7% in real terms in the past decade

	Number of pensions in payment			Average pension			Pension payments		
Scheme	March 2000	March 2010	March 2020	1999-2000	2009-10	2019-20	1999-2000	2009-10	2019-20
				(£)	(£)	(£)	(£bn)	(£bn)	(£bn)
Armed Forces	335,306	398,446	442,954	8,311	9,487	9,779	2.79	3.78	4.33
Civil Service	552,500	609,700	700,157	6,235	7,366	8,104	3.44	4.49	5.67
NHS	450,900	638,610	962,928	8,050	8,865	9,709	3.63	5.66	9.35
Teachers	344,778	567,671	739,974	13,679	11,986	12,337	4.72	6.80	9.13
All four schemes	**1,683,484**	**2,214,427**	**2,846,013**	**8,659**	**9,365**	**10,008**	**14.58**	**20.74**	**28.48**
Real-terms change (10 years)		32%	29%		8%	7%		42%	37%
Real-terms change (20 years)			69%			16%			95%

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 Pension payments and average pensions are adjusted to 2019-20 prices using the Consumer Prices Index.

3 Pension payments exclude lump sum payments and include any additional benefits accrued by employees who elected to pay additional voluntary contributions.

4 Figures may not sum owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

2.7 On average, men receive higher pensions than women because men, on average, earn more over their careers. Across the largest pay-as-you-go schemes, the average difference in pension payments between male and female pensioners was 45% in March 2016, with male scheme members receiving £14,100 on average, whereas female scheme members received £7,750 on average (**Figure 7**). The largest difference in pension payments was observed in the NHS Pension Scheme at 63%. The main factors likely to explain men receiving higher pensions than women are differences in pay between male and female employees – on average men receive higher pay than women and are less likely to work part-time; and differences in length of service – as female members are more likely to have spells out of the workforce, for example to care for children. Scheme members who receive higher pay make higher contributions. The average difference in pension payments has reduced one percentage point since March 2012 (from 46%).

Figure 7

Average annual pension payments from the UK's four largest pay-as-you-go public service pension schemes as at 31 March 2016, by gender

The average difference between male and female pension payments was 45%

Scheme	Percentage of female pensioners	Male average pension	Female average pension	Difference between male and female average pension
	(%)	(£)	(£)	(%)
Civil Service	47	11,047	5,875	47
NHS	75	17,541	6,440	63
Teachers	64	15,248	10,882	29
All three schemes	**64**	**14,138**	**7,766**	**45**

Notes

1 Pension payments include those made based on early and ill-health retirements, as well as age. This analysis excludes payments to dependents.

2 Information on the Armed Forces Pension Scheme was not available.

3 These data, sourced from the most recent round of actuarial valuations, are the latest available and published in 2019.

Source: National Audit Office analysis of scheme actuarial valuation report supporting materials (as at 31 March 2016) produced by the Government Actuary's Department

2.8 There are similarly differences in accrued pensions between male and female active scheme members, for similar reasons. For example, current members of the NHS and teachers' pension schemes experience a pay gap of around 29%, resulting in a difference in accrued pension of around 36%. The male average accrued pension is around £7,600, compared with £4,850 for female members. It is expected that the differences in accrued pension will remain for a long time even if government were to make progress in addressing gaps in pay, as accrued pensions are based on past employment. Elements of the government's 2011–2015 reforms, such as the move to career average schemes, may help to reduce these differences over the long term, but the gap will likely persist because of differences in pay and working patterns.

2.9 We found no information that allowed us to quantify the differences in pension for other groups with known pay gaps, such as members identifying as black, Asian or minority ethnic.

Trends in scheme funding

Employee contributions

2.10 The government wants public service pensions to provide a fair balance of cost and benefits between public service workers and other taxpayers. Employee contributions reduce pension costs to the taxpayer. One result of the pension reforms was increased employee contributions: in 2019-20, total employee contributions across the four largest pay-as-you-go schemes amounted to £8.2 billion, 44% higher in real terms than the £5.7 billion total in 2009-10 (**Figure 8** overleaf).

2.11 Employee contributions are affected by:

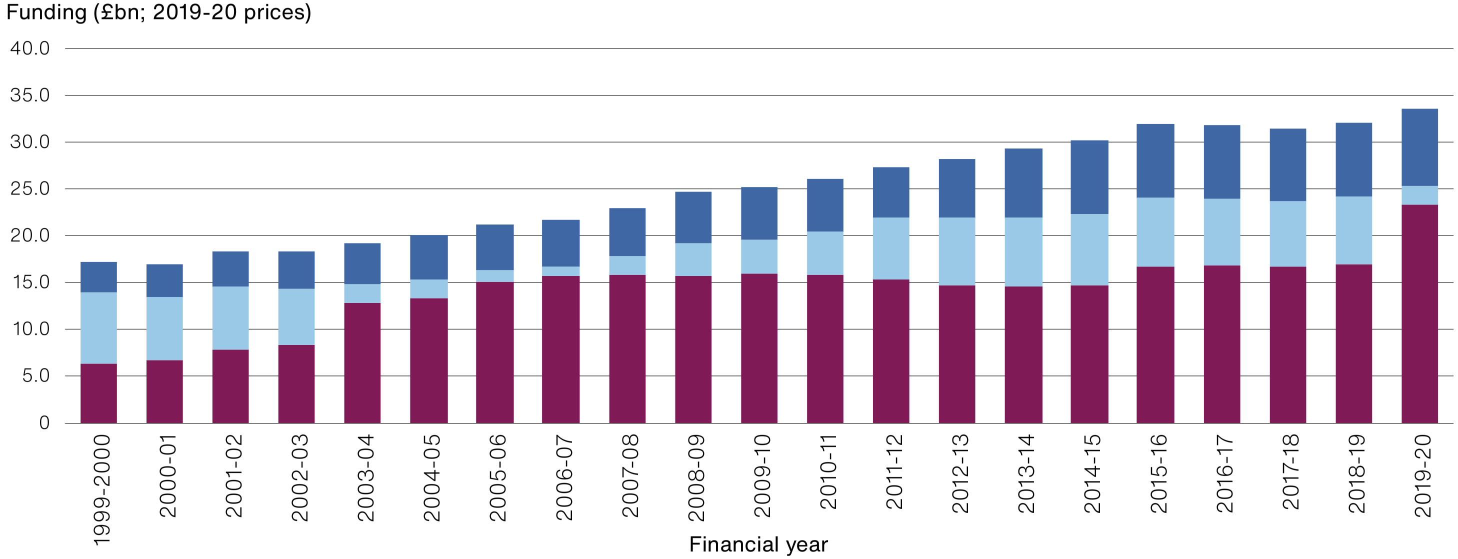
- **the employee contribution rate,** which is the proportion of pay that members contribute to their pension. The government's 2011–2015 reforms increased the contribution rates for most members of public service schemes. We estimate that the effective employee contribution rate across the four schemes has increased to 8.5% in 2019-20 from 5.7% in 2009-10; and
- **total payroll** of active members across the schemes. While the number of active members paying into the schemes has increased by 9% between 2009-10 and 2019-20, total pay fell by more than 4% in real terms over the same period.

This means that the real-terms increase in total employee contributions is a result of the decision to increase the employee contribution rate.

Figure 8

Sources of funding of the UK's four largest pay-as-you-go public service pension schemes from 1999-2000 to 2019-20

Annual employer contributions have more than trebled and employee contributions more than doubled in real terms since 1999-2000 to more than £23.3 billion and £8.2 billion respectively



	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Taxpayer funding	**14.0**	**13.4**	**14.5**	**14.3**	**14.9**	**15.3**	**16.4**	**16.7**	**17.8**	**19.2**	**19.6**	**20.5**	**22.0**	**21.9**	**22.0**	**22.4**	**24.2**	**24.0**	**23.7**	**24.2**	**25.4**
Employer contributions	6.3	6.7	7.9	8.4	12.8	13.3	15.2	15.7	15.9	15.8	16.0	15.9	15.4	14.7	14.7	14.7	16.7	16.8	16.7	17.0	23.3
HM Treasury balancing payment	7.6	6.8	6.7	5.9	2.0	2.0	1.2	1.0	1.9	3.4	3.6	4.6	6.6	7.2	7.3	7.7	7.5	7.2	7.0	7.3	2.1
Employee contributions	3.3	3.5	3.7	4.0	4.4	4.8	4.9	5.0	5.1	5.5	5.7	5.6	5.3	6.3	7.3	7.9	7.8	7.8	7.8	7.9	8.2

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 **Employee and employer contributions** are the amounts paid towards the cost of the future pension benefits accrued by current staff. These contributions are not linked to the pension benefits paid to current pensioners, and therefore HM Treasury makes a balancing payment to cover any shortfall in contributions over benefit payments (and retains any surplus). Employer contributions and the HM Treasury balancing payment reflect the total taxpayer funding of public service pensions.

3 All costs adjusted to 2019-20 prices using the Consumer Prices Index.

4 **Employee contributions** include any voluntary contributions members chose to make in exchange for additional future benefits.

5 Some employers who offer membership to public service pension schemes are classified to the private sector (for example, independent schools). HM Treasury does not hold data on what proportion of the total employer contributions these employers make.

6 Figures may not sum owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

2.12 The average employee contributed almost £2,700 to fund current pension payments in 2019-20, which is 33% higher in real terms than in 2009-10 at around £2,000 (**Figure 9**). These increases in employee contributions are in the context of average pay decreasing in real terms by 12% from £36,000 in 2009-10 to £31,600 in 2019-20. This fall largely reflects prices increasing faster than total pay; in cash terms average pay has increased by 8% over this period.

Figure 9

Employee contributions to the UK's four largest pay-as-you-go public service pension schemes in 2019-20 compared with 2009-10 and 1999-2000

Average annual employee contributions have increased by 88% in real terms since 1999-2000

	Number of active members			Average employee contributions			Total employee contributions		
Schemes	March 2000	March 2010	March 2020	1999-2000	2009-10	2019-20	1999-2000	2009-10	2019-20
				(£)	(£)	(£)	(£bn)	(£bn)	(£bn)
Armed Forces[3]	205,420	204,246	198,530	Members of the Armed Forces Pension Scheme do not make contributions unless they choose to do so in exchange for additional benefits.					
Civil Service	494,000	574,000	510,220	462	821	1,778	0.23	0.47	0.91
NHS	996,671	1,368,215	1,619,853	1,731	2,448	2,998	1.73	3.35	4.86
Teachers	570,624	639,125	702,773	2,275	2,888	3,438	1.30	1.85	2.42
All four schemes	**2,266,715**	**2,785,586**	**3,031,376**	**1,435**	**2,035**	**2,699**	**3.25**	**5.67**	**8.18**
Real-terms change (10 years)		23%	9%		42%	33%		74%	44%
Real-terms change (20 years)			34%			88%			151%

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 **Total and average employee contributions** adjusted to 2019-20 prices using the Consumer Prices Index.

3 **Employee contributions** include any voluntary contributions members chose to make in exchange for additional future benefits.

4 Figures may not sum owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

2.13 On average, NHS Pension Scheme members contributed nearly 10% of their pay towards their pensions in 2019-20, more than two-thirds more than civil service scheme members (5.9%). Members of the teachers' scheme contributed 9.5% and members of the armed forces scheme are not required to contribute to their pension costs. Schemes have adopted a banded approach to contributions, with higher-paid members contributing progressively more of their pay in percentage terms. Each scheme has different rates and bandings. Additionally, contributions reflect differences across schemes – for example, average pay is higher in the teachers' scheme than in the civil service scheme.

The cost of the schemes to the taxpayer

2.14 The total taxpayer funding of the four largest pay-as-you-go schemes in 2019-20 was £25.4 billion, almost 30% higher in real terms than in 2009-10 (Figure 8). This total excludes scheme administration costs, which were £112.8 million across the four schemes in 2018-19, equivalent to 0.35% of total pension expenditure.

2.15 The total taxpayer funding of these schemes is made up of two parts:

- **Employer contributions** (from, for example, government departments) made as part of the normal cost of employing staff.[7] In 2019-20, total employer contributions increased sharply, by £6.4 billion (in real terms) to £23.3 billion. We estimate that the effective employer contribution rate across the four schemes has increased to 24.3% in 2019-20 from 15.9% in 2009-10.
- **A HM Treasury balancing payment** to cover the difference between pension payments and total contributions (from employer and employee).[8] In 2019-20, this balancing payment decreased by £5.2 billion to £2.1 billion.

2.16 Total contributions are intended to cover the cost (in today's terms) of future payments to pensioners following their retirement. HM Treasury sets and applies a discount rate (the SCAPE rate) to estimate the present value of future pension payments and calculate employer contributions. In setting the discount rate, it aims to ensure that current contributions fairly reflect future pension costs, while taking into account risks to government's future income and the need to avoid unnecessary changes in the rate. HM Treasury sets the discount rate based on the Office for Budget Responsibility's (OBR's) long-term expectations of GDP growth. When it first applied the discount rate in the 2011 Budget, at 3% above the Consumer Prices Index (CPI), the government committed to review the rate every five years and to review the methodology used to set the rate every 10 years.[9]

7 Some employers who offer membership to public service pension schemes are classified to the private sector (for example, independent schools). HM Treasury does not hold data on what proportion of employer contributions are paid by these employers.
8 These two costs provide an estimate of the total cost of the schemes to the taxpayer. However, some smaller public organisations are funded from other sources and this estimate also excludes the tax effects of public service pensions, such as tax relief on employee contributions and tax paid by pensioners.
9 This discount rate is called the Superannuation Contributions Adjusted for Past Experience (SCAPE) discount rate.

2.17 Following a five-yearly rate review in 2016, HM Treasury reduced the discount rate to CPI+2.8%. In Budget 2018, HM Treasury revised the rate down again, outside of the review cycle, to CPI+2.4%. Reducing a discount rate increases the present value of future payments, which means they 'cost' more today. This discount rate reduction largely explains the increase in employer contributions for each of the four largest pay-as-you-go schemes for the four-year period beginning 2019-20. The increase in contributions would have been higher but for changes in other assumptions, such as the lower than expected improvements in life expectancy and earnings growth, the latter because of ongoing pay restraint in public services. The falling discount rate follows a similar trend to the market benchmarks that inform the rates used by private pension schemes, although those rates remain lower than the SCAPE rate government uses. If HM Treasury applied a discount rate similar to that of private sector providers (around 1.3%), employer contributions would increase further. Public service schemes use a higher discount rate because of a number of factors; for example, there is greater certainty about the ability of public service employers to support schemes in the long term, as pension benefits are paid through tax revenue rather than less certain investment returns.[10]

Rebalancing costs between employees, employers and taxpayers

2.18 One of the government's objectives for its 2011–2015 reforms was "to provide a fair balance of costs and benefits between scheme members and other taxpayers" (see paragraph 1.11). The total proportion of costs met by employers and HM Treasury payments in 2019-20 was broadly the same in real terms as it was in 2009-10, at just over 75% (**Figure 10** overleaf).

2.19 The increase in employer contributions in 2019-20 represents a shift of costs to employers and away from HM Treasury's balancing payments. Pension payments and contributions are not intended to balance in any one year, owing to the different populations that affect these flows.[11] HM Treasury funds any differences between payments and contributions and retains any surpluses of contribution overpayments. For example, in recent years the surplus of contribution overpayments in the NHS Pension Scheme, which reached £3 billion in 2019-20, was returned to HM Treasury.[12]

10 Based on 15-year AA corporate bond yields at 31 December 2020, used here as an indicator of average private sector pension scheme funding discount rates.

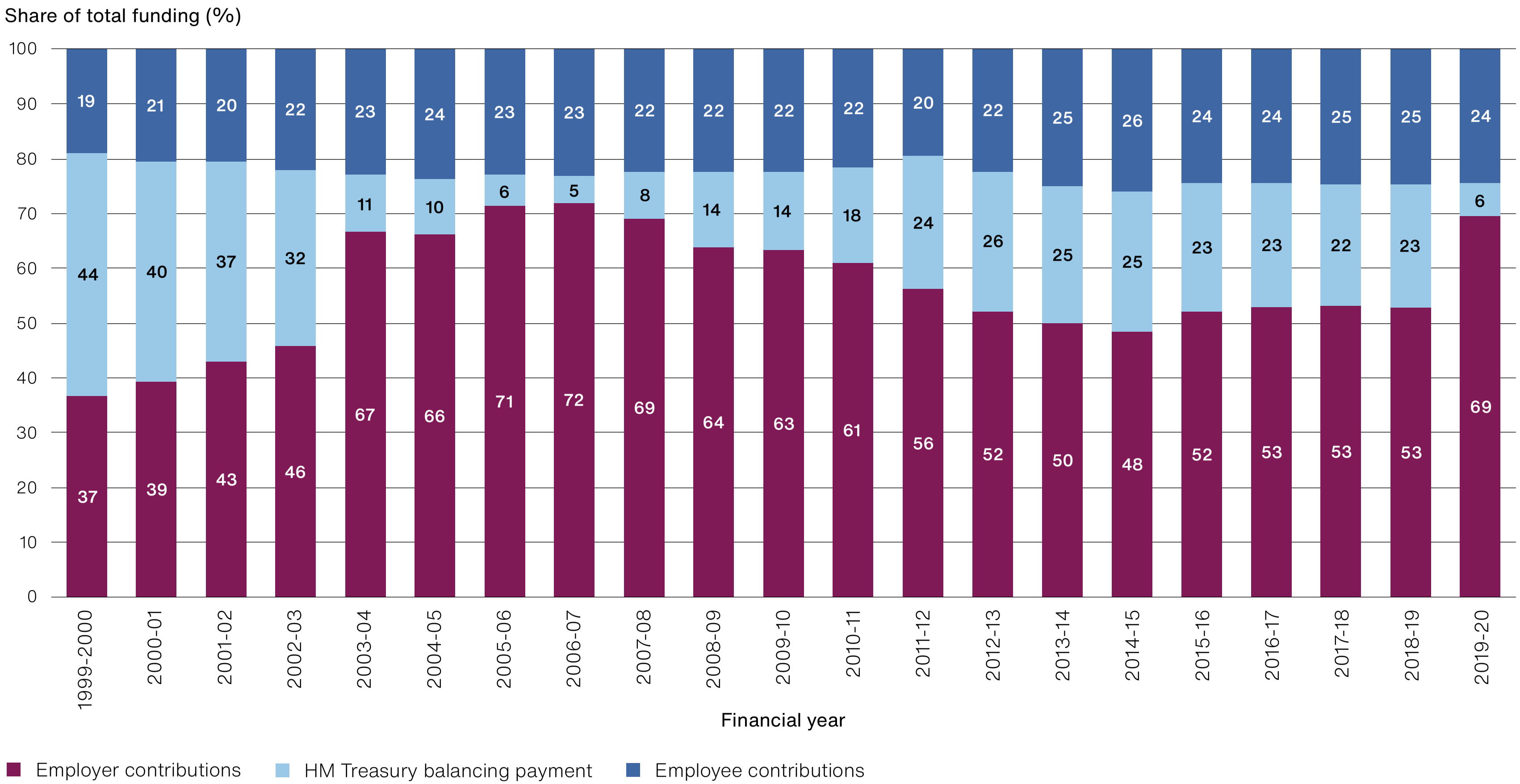
11 For example, the number of active members paying contributions compared with the number of pensioners receiving payments.

12 The growth in the surplus of contributions over pension benefit payments in the NHS Pension Scheme is largely a result of how contribution rates are set. Employer and employee contribution rates are primarily based on the future cost of benefits accrued by active members, rather than based on the cost of payments to current pensioners. The rapid growth in the number of active members in the NHS Pension Scheme relative to the growth in the number of pensioners is the main factor in the growth of the surplus.

Figure 10

Funding mix of the UK's four largest pay-as-you-go pension schemes from 1999-2000 to 2019-20

While the share of pension costs funded by the HM Treasury balancing payment has fallen since 1999-2000, the total share of costs met by the taxpayer (employers and HM Treasury) in 2019-20 is broadly the same at more than 75% of total costs



Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 **Employee contributions** include any voluntary contributions members chose to make in exchange for additional future benefits.

3 Some employers who offer membership to public service pension schemes are classified to the private sector (for example, independent schools). HM Treasury does not hold data on what proportion of the total employer contributions these employers make.

4 Figures may not sum to 100% owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

2.20 Between 2009-10 and 2018-19 total employer contributions declined as a proportion of total costs from 63% to 53%, while total costs increased (Figure 10). The regular valuations that are used to set these contribution rates (paragraph 1.4) are in line with HM Treasury's intention that employers should bear the full cost of their staffing decisions.[13] Increasing employer contributions may also put pressure on departmental budgets if these costs are not allowed for in funding settlements. For example, in 2019-20 HM Treasury provided £4.7 billion in additional funding to partially offset the £6.4 billion increase in employer contributions in the same year, with the remainder coming from existing employer budgets. The Department for Education told us it had to fund from existing budgets around £270 million of cost increases resulting from the 2019-20 increase in employer contributions. The increases have also had a wider impact on schemes; for example, around 200 independent schools are now set to withdraw from the Teachers' Pension Scheme following concerns that the cost increases create financial difficulties, and some would be unable to afford to remain in the scheme.

Measuring long-term sustainability and affordability

2.21 The government aims for public service pensions to be affordable and sustainable, with 'cost increase risks managed and shared effectively' (see paragraph 1.11). HM Treasury measures the long-term sustainability and affordability of public service pensions by comparing future pension expenditure to forecasts of the size of the economy, as measured using GDP. HM Treasury uses OBR projections to make this comparison. The projections of future pension expenditure reflect both the pension benefits already accrued by members and those expected to be earned in the future. In forming its assessment, the OBR draws on the Government Actuary's Department (GAD) cash flow projections.

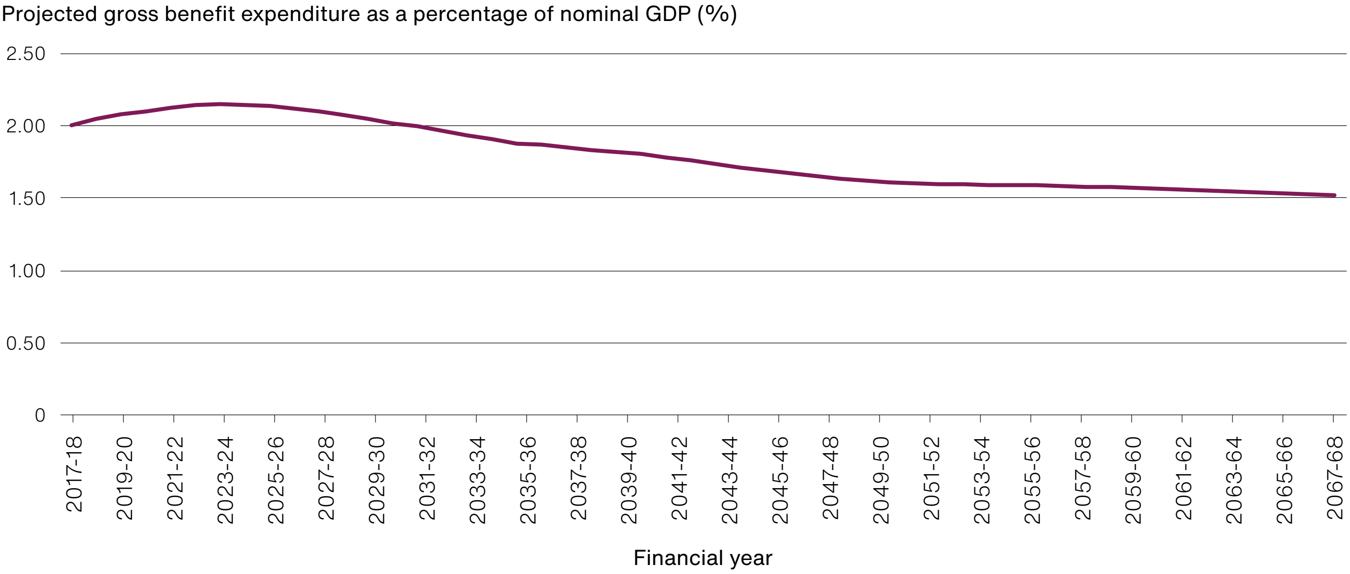
2.22 The OBR's latest projections published as a part of its 2018 *Fiscal sustainability report* indicate that while gross benefit expenditure will continue to rise in cash terms over the long term, it will fall as a percentage of GDP over the medium and long term (**Figure 11** overleaf). Gross benefit expenditure is expected to increase from 2.0% of GDP in 2019-20 to a peak of 2.1% in 2022-23, before reducing over time to around 1.5% of GDP from 2064-65 onwards. These projections are based on assumptions and will differ from the actual outcomes of the schemes. For example, the supporting analysis behind these projections shows that a 0.5% annual increase in the earnings growth assumption would increase pension costs by £14.9 billion in 2067-68 (0.1% of GDP). The projections were made before the COVID-19 pandemic and any impact of EU Exit, both of which have increased the uncertainty around GDP forecasts. The economic impact of climate change also increases the uncertainty of these forecasts.

13 Employers still bear some costs that are outside of their control, such as an element of costs relating to deferred members and current pensioners.

Figure 11

Projected public service pension costs relative to the size of the UK economy from 2017-18 to 2067-68

Government's 2011–2015 reforms mean that gross benefit expenditure is expected to fall as a percentage of GDP in the long term



Source: Office for Budget Responsibility projections, produced as a part of its 2018 *Fiscal sustainability report*

2.23 The OBR attributes the fall in pension costs over the long term as partly reflecting the 2011–2015 reforms to public service pensions introduced since 2010. Over time, an increasing proportion of retiring scheme members will draw on the (cheaper to the taxpayer) reformed pension schemes introduced in 2015, rather than the higher-cost legacy schemes. The OBR also attributes these changes to the reductions in the public sector workforce associated with cuts to departmental spending since 2010. However, this workforce trend has reversed since 2016 owing to the impact of preparing for EU Exit and, more recently, responding to the COVID-19 pandemic.

2.24 Despite the Committee of Public Accounts' previous recommendations, HM Treasury does not set out what it considers an affordable level of spending on public service pensions against which to assess these projections.[14] HM Treasury judges that the OBR's projections demonstrate that the 2011–2015 reforms have made public service pensions more affordable over the long term.

14 HC Committee of Public Accounts, *The impact of the 2007-08 changes to public service pensions*, Thirty-eighth Report of Session 2010–2012, HC 833, May 2011: "The Treasury should set out what it believes is an affordable level of spending so it can assess the cost of public service pensions against a clear benchmark."

Managing risks of future cost increases

2.25 HM Treasury's affordability measure is sensitive to changes in projections of GDP, which is now less certain because of the economic impact of the COVID-19 pandemic. The government has a limited number of actions it can take to manage risks that schemes become less sustainable and affordable over time. Some factors, particularly life expectancy, are outside government's control. The government can influence other factors, for example the size of the public services workforce (which affects the number of people employed and their length of service) and the generosity of the benefits that the schemes provide to members. Lowering future benefits accrued by scheme members would take many years to affect pension payments.

2.26 Increasing employee contributions may reduce the amount of taxpayer funding, but would not improve HM Treasury's measure of affordability (as this is defined in terms of gross expenditure, and not who pays) and may have a detrimental effect on government's ability to recruit and retain the staff it needs to deliver public services. Similarly, the split between employer contributions and HM Treasury balancing payments does not impact overall affordability. Reducing the size of the workforce increases the amount of taxpayer funding required in the short term, as it reduces employee contributions, but reduces the amount of pension accrued and thus improves the long-term affordability measure. However, any changes outside of the existing mechanisms risks HM Treasury not meeting its objective of *no more reform for at least 25 years*. In Part Three, we examine the cost control mechanism that the government introduced to limit the extent to which the taxpayer bears cost increases over time.

Part Three

Current and unresolved issues

3.1 This part highlights future challenges, including the age discrimination case resulting from the 2011–2015 public service pension reforms; the government's cost control mechanism, which aims to share fairly the costs of pensions as underlying assumptions change; and the role of pensions in recruitment and retention.

Court of Appeal judgment on transitional protection

3.2 As part of its objective to protect those closest to retirement in the 2011–2015 reforms, the government introduced transitional protection measures, ensuring that members with 10 years or less until their normal pension age on 1 April 2012 would face no change to their pension age or their expected pension. In March 2011, the Hutton Review reported its view that special protections should not be necessary, because members over the age of 50 should only experience fairly limited change if (as happened) the reforms retained the link between pensions and final salary for past service. The Review also pointed to age discrimination legislation as a potential barrier to such protections, and HM Treasury officials advised ministers that transitional protection could potentially be in breach of that legislation. Despite this warning, following negotiations with employee representatives, the government decided to offer the transitional protection measures.

3.3 In a December 2018 judgment commonly referred to as the 'McCloud judgment', the Court of Appeal ruled that the transitional protection offered to members of the judges' and firefighters' schemes represented unlawful discrimination. The government accepted that there had been discrimination on age grounds but had considered this "a proportionate means of achieving a legitimate aim". The government sought permission to appeal to the Supreme Court. This application was refused on 27 June 2019.

3.4 While the legal judgment applied only to cases brought regarding two schemes, the government accepted that the judgment had implications for the other public service schemes that had similar transitional arrangements. It has therefore developed proposals to remove equivalent differences in treatment across all public service pension schemes. Since not all members would benefit from transferring back to the old schemes, government proposed giving members a choice of whether to receive benefits from the legacy or reformed pension schemes for the period 1 April 2015 to 31 March 2022. In July 2020, the government published a consultation for the largest pay-as-you-go-schemes, with two options:

- **Immediate Choice** – This would require scheme members to make an irrevocable choice soon after 2022, as to whether they wanted their accrued service between April 2015 and March 2022 to count towards the legacy or reformed schemes. The Immediate Choice option would require schemes to act quickly, with members expected to make their decisions shortly after April 2022. This option would have taken less time to administer, but members would need to make some assumptions regarding their future circumstances and preferences.
- **Deferred Choice Underpin** – This would allow scheme members to make a similar choice, but at the time their pension becomes payable.

3.5 In February 2021, the government announced its decision to implement the Deferred Choice Underpin option and confirmed that the legacy schemes would close in relation to service from April 2022, meaning employees will no longer accrue benefits under these schemes. In addition, to address the age discrimination that the Court of Appeal judgment identified, it announced that from April 2022, all members remaining in service will be entitled to be a member of their respective reformed scheme, regardless of their age or any other factor.

3.6 The Deferred Choice Underpin option allows members to make decisions based on actual circumstances, which helps reduce the risk that decisions are based on incorrect assumptions. Employee representatives told us that this option was the fairer option for members because it gives them more time to consider the factors involved and greater certainty about the implications of their decisions. The government announced that it will support members in making their choice, by requiring schemes to provide annual information statements of the accrued benefits under both the legacy and the reformed scheme. Nonetheless, to implement the proposed remedy, around three million scheme members will need to make a complex financial decision regarding their pension.

3.7 The government accepts that proceeding with the Deferred Choice Underpin option represents an administrative challenge for schemes. Employers told us this will be difficult and expensive to administer. The Deferred Choice Underpin will give schemes more time to respond to members who have yet to retire, because members will decide at the point when their pension becomes payable, rather than immediately. However, this option will effectively require schemes to run two sets of benefits calculations over the next 30 years and will require new systems so members are well informed to make their decisions and can record their choices. Schemes would need to manage this process at the same time as managing other scheme administration developments, such as pension dashboards.[15] HM Treasury told us that it acknowledges the significant pressure on schemes in coming years and it has decided to delay the implementation of any employer contribution rate changes resulting from the next round of actuarial valuations, from April 2023 to April 2024. Work between the schemes and HM Treasury to deliver the remedy is under way, but HM Treasury has not yet set out in detail how it plans to support schemes.

3.8 The government currently estimates the cost of providing the additional pension benefits under the remedy proposals to be around £17 billion (excluding the cost of the additional administration) or around 4% of the £430 billion savings originally expected to be secured through the 2011–2015 reforms. This estimate is based on 2016 valuation data and assumptions and is therefore subject to a high degree of uncertainty. HM Treasury expects that, since the McCloud remedy involves increasing the value of pension schemes to members, the cost control mechanism (see paragraph 3.9) should take account of the associated costs, which current scheme members will bear. Employee representatives told us that they consider it unfair to penalise members when HM Treasury was responsible for the elements that the courts found were discriminatory.

Cost control mechanism

3.9 As a part of its 2011–2015 reforms, government put in place a 'cost control mechanism' aimed at protecting the taxpayer and ensuring that the risks associated with the cost of pension provision are shared with scheme members. The government recognised the risk that, even after the reforms, costs could continue to rise for employers and the taxpayer.

15 The Money and Pensions Service leads a pension dashboards initiative allowing people to access information on their pensions in one place online, including information on how much they have in their pension pots and what they can expect to have to live on in retirement.

3.10 The mechanism is built into the four-yearly actuarial valuations, whereby employee contributions increase – or future benefits are reduced – if certain costs increase by more than 2% of pay. The mechanism protects the taxpayer from changes affecting members that would increase costs, such as increased life expectancy and earnings. It does not apply to changes in the discount rate, inflation or economic growth that could affect affordability. The mechanism is symmetrical, meaning that scheme members benefit if certain costs fall by more than 2% of pay. The Hutton Review recommended a cost 'ceiling' arrangement to manage costs to the taxpayer, but it did not refer to a symmetrical arrangement (such as a cost 'floor').

Pause of the mechanism

3.11 In January 2019, HM Treasury paused the mechanism following the McCloud judgment. HM Treasury did this because it considered the value and costs of schemes were too uncertain until it had fully developed the government's response to the judgment. Provisional results from the Government Actuary's Department's (GAD's) 2016 actuarial valuations indicated that costs had fallen and that the mechanism could be triggered. This would lead to an increase in pension benefits for scheme members from April 2019 to March 2023 through either an increase to future benefits, a reduction in employee contributions, or a combination of the two. In September 2018, prior to the pause, government committed to implement the results of the valuations later, while increasing employer contributions as if the benefits to scheme members had been implemented. Trade unions have brought legal challenges against the government's decision to pause the mechanism.

3.12 In July 2020, HM Treasury announced it had decided to un-pause the cost control element of the 2016 valuations. GAD is now performing work to complete the 2016 valuations, to take account of the expected additional costs of the McCloud remedy proposals. HM Treasury expects this to be completed and any adjustments required to employee benefits or contributions to be made in 2021. In February 2021, HM Treasury also announced that, in finalising the 2016 valuations, the government would increase benefits for schemes where costs are below the mechanism 'floor' but would not impose costs on members for schemes where costs are above the mechanism 'ceiling'. It intends both the floor and ceiling to apply to future valuations.

Concerns about effectiveness

3.13 HM Treasury took the provisional results of the 2016 actuarial valuations as an indication that the cost control mechanism is not working as intended and exposes the taxpayer to affordability risks. HM Treasury's original intention was for the cost control mechanism to be activated only 'if extraordinary, unpredictable events' occur. HM Treasury told us it is concerned that the current design exposes taxpayers and members to short-term changes in assumptions rather than responding to long-term trends. GAD's analysis, performed in 2012, suggested the mechanism could easily be triggered if multiple factors were to move at the same time.

3.14 HM Treasury has asked the Government Actuary to review whether the mechanism is working as it should. The review will consider the operation and effectiveness of the mechanism as it is currently set out in legislation governing the valuation of public service pension schemes. In 2019, HM Treasury paused the review at the same time as it paused the mechanism. Employee representatives told us that reviewing the mechanism because of what happened at the first valuation undermines trust between employees and the government. The government now expects the Government Actuary will conclude his review in April 2021, following an opportunity for employee and employer representatives to give their views.

Recruitment and retention

3.15 In our December 2010 report, we found that the value for money of earlier reforms could not be demonstrated because HM Treasury and employers had not agreed a long-term strategy for the role of pensions in staff recruitment and retention. We noted that HM Treasury's focus in the 2007-08 changes was on meeting its 'cost envelope' without a longer-term strategy and analysis, agreed with employers, of what features are desirable in a modern public service pension scheme to support employers' and taxpayers' objectives and the needs of specific schemes. There had been no assessment of the long-term impact of pensions on staff motivation and retention. We recommended that:

- in the light of the Hutton Commission's recommendations, HM Treasury, government departments and public service employers should agree and communicate a clear view of the purpose of public service pensions, including their role in recruitment, retention and mobility, and what aspects of scheme design are delegated and what characteristics are not; and
- government departments and HM Treasury should improve their understanding of how employees view a pension within an overall pay package and how it influences their employment decisions.

3.16 Recruitment and retention is not a formal part of the government's objectives for public service pensions; however, officials told us that pensions play an important role. HM Treasury told us that it considers recruitment and retention from the perspective of total remuneration, which includes pay and other benefits including pensions. Prior to 2012, the government had a stated objective for public service pensions "to aid the recruitment and retention of the right people in the right jobs".[16] The Cabinet Office is responsible for cross-government workforce planning and senior civil servant remuneration, and individual departments are responsible for ensuring the wider remuneration they offer attracts the staff they need in other grades, within the wider pay policy HM Treasury sets. The government has not made clear what role it wants public service pensions to play in recruiting and retaining people with the right skills. Government has not articulated a strategy that would link the skills that public services need, the benefits that pensions provide to current and potential employees and the costs of providing those pensions.

16 HM Treasury, *Public service pensions: good pensions that last*, Cm 8214, November 2011.

3.17 Despite substantial pension reforms in the past decade, the government has not assessed the impact these could have had on staff recruitment and retention. The Office for National Statistics analysis shows that public sector pay lags behind private sector equivalent pay by around 3% if pension contributions are excluded from their estimates (average public sector pay exceeds private sector pay by 7% when the value of employer pension contributions is included).[17] Public service staff are also less likely than their private sector equivalents to receive wider benefits such as bonuses. Beyond this, evidence of how important different characteristics of pensions are to current or potential employees' career choices is generally anecdotal.

3.18 We found some evidence that inflexibility in public service pensions harms recruitment and retention in certain cases. Public service pension schemes were designed when there was an expectation that employees would spend the majority of their career in public service. Defined benefit schemes almost always provide better retirement outcomes for employees and greater certainty about those outcomes. They tend, however, by their nature to be less flexible than alternatives such as defined contribution schemes. We interviewed representatives of employers and employees who provided evidence, some anecdotal, describing some of the risks arising from inflexibility in current scheme design arrangements:

- **Recruitment**: Departments told us that pay was the more important factor in attracting staff, particularly in younger age groups. We are aware that some public bodies find the current offer inflexible, and not suitable for attracting staff into certain professions, for example people with specialist skills. Most public service employers can only offer potential employees the choice between staying in the scheme or opting out, while some employers offer a defined contribution scheme as an alternative.

- **Retention**: Employer and employee representatives told us that pensions tend to be more important for current employees making decisions about their career, rather than to potential employees at the recruitment stage. As well as influencing decisions on whether to leave, pensions can affect decisions on hours worked, with a consequent adverse impact on operational activities. The Department of Health & Social Care (DHSC) and the NHS have experienced particular operational difficulties resulting from some senior clinicians not wishing to continue working paid overtime because pension payments would trigger a significant tax liability.

17 Office for National Statistics, *Public and private sector earnings: 2019*, September 2020.

- **Participation**: Participation rates can be lower among lower-paid and younger employees. There is some evidence to suggest that those in lower age and income groups are more likely to opt out of pension arrangements as they view contributions as unaffordable, or because they see pensions as a lower priority relative to other shorter-term spending pressures such as housing costs. Employee representatives told us this is problematic because these groups include individuals most likely to benefit from pensions and other scheme features such as life assurance.
- **Links with pay:** There is evidence that because of factors such as high housing costs and student loan repayments, some (particularly younger) employees would like more flexibility to receive higher pay in exchange for lower pension entitlements.

3.19 Employers told us that they have looked at options for more flexible pension arrangements. In September 2019, DHSC consulted on proposed changes to the NHS Pension Scheme that would provide greater flexibility. HM Treasury has rejected proposals for more general flexibility, although it has allowed some employers to implement more flexible arrangements in specific cases. HM Treasury told us that because pensions are relatively inflexible, it has used other approaches to recruit and retain staff – for example, introducing pension tax measures to help avoid senior clinicians reducing their overtime hours and retiring early. HM Treasury told us there are some limits to the flexibility that it can provide because of the government's commitment to making no major changes to public service pensions for 25 years and the need for an enhanced consultation process on some elements of the schemes (such as accrual rates and normal pension age). HM Treasury also told us that, as with all other areas of policy, it must consider the short-term impact on the public finances of any proposals.

Appendix One

Our audit approach

Scope

1 This report outlines how the public service pensions landscape has changed since the Hutton Review and highlights key challenges for the future. We carried out our fieldwork between September 2020 and January 2021.

2 The report covers:

- an update of analysis that we undertook in our 2010 and 2016 reports on the subject. Our analysis covers the four largest pay-as-you-go public service pension schemes, which make up around 70% of all public service schemes as measured by liabilities; and
- current issues in public service pensions, following the government's reforms to pensions between 2011 and 2015, and the outcome of the McCloud judgment on part of the reforms. These issues are relevant to all public service pension schemes.

State pensions and private sector pensions are outside the scope of this study, as are the schemes of privatised industries, such as the Royal Mail, or bodies that receive substantial public money but operate independently, such as the BBC. We do not make a judgement on whether public service pensions are affordable, as we consider this a policy decision.

Methods

3 In producing this report, we drew on a variety of evidence sources.

4 Interviewing officials: We held 12 semi-structured and unstructured interviews with officials with responsibilities relevant to public service pensions, including:

- **HM Treasury** – the central government department responsible for public service pensions policy and for monitoring costs to the taxpayer;
- **Government Actuary's Department (GAD)** – the scheme actuary for all of the main public service pension schemes. GAD also provides advice to government in developing and implementing pension policy;
- **Office for Budget Responsibility (OBR)** – the government's independent economic forecaster, publishes forecasts of public service pension payments for the medium term (five years) and long term (50 years);
- **Cabinet Office** – the central government department responsible for cross-government workforce planning and senior civil servant remuneration; and
- **other departments** – see paragraph 7, below.

We undertook these interviews to understand the roles of each body; the government's objectives for public service pensions; the departments' views on current issues; and the risks to achieving the government's objectives.

5 Document review: We reviewed documents that the government departments named above provided, to understand the evolution of government policy relating to public service pensions, from the 2011–2015 reforms through to the government's proposals in February 2021 for remedy following the McCloud judgment. We have also reviewed GAD documents relevant to its role in valuation – including published actuarial valuation reports – and OBR documents relating to projections of future pension costs – including the OBR's *Fiscal sustainability reports* available on its website.

6 Data analysis: We analysed data on scheme member numbers, pension payments and contributions over the 20 years from 1999-2000 to 2019-20, to assess the impact of the government's 2011–2015 reforms. We used data from financial statements for each of the four largest pay-as-you-go pension schemes. The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales). We then expressed the financial information in real terms by using the Consumer Prices Index (CPI) to adjust the information to reflect 2019-20 prices. We used CPI as the basis of this analysis because the benefits of the four schemes have been linked to this index since 2011. Where we use averages in our analysis, these are mean averages.

7 **Workshops and meetings with employee and employer representatives:** We held a workshop meeting with officials from four of the largest trade unions representing many of the people who are employees of public service organisations and members of public service pensions. The union officials we interviewed were from the GMB Union, the National Education Union (NEU), the Public and Commercial Services Union (PCS) and Unison. We also met with officials with responsibilities for pensions from three government departments that either employ public service pension scheme members or oversee public service pension schemes. The departments were the Cabinet Office, the Department for Education (DfE), the Department of Health & Social Care (DHSC) and the Ministry of Defence (MOD). We asked both sets of stakeholders their views on:

- the McCloud judgment, including views on the government's proposed options to remedy the discrimination that the judgment identified;
- the cost cap mechanism, in terms of the principle of its use to manage the risks of rising costs, and its operation in practice; and
- the extent to which public service pensions allow employers to provide current and potential employees with an attractive offer and recruit people with the skills they need to provide public services.

We also asked employers about the financial impact of increased employer contributions.

8 We asked PwC to undertake a technical actuarial review of the report, and to provide an independent perspective on our findings to help mitigate any potential conflict of interests since the National Audit Office offers staff membership of the Civil Service Pension Scheme. We used the review to inform our judgements and conclusions regarding:

- the analysis we performed of the four largest pay-as-you-go schemes, including our explanations of the causes of changes since analysis we included in our previous reports;
- the completeness of the evidence we have used in preparing our report; and
- availability of comparisons that we could make between our analysis of the public service schemes and other types of scheme, for example in the private sector.

Limitations

9 We have identified the following specific limitations and observations relating to our data analysis methods:

- At the time of our report, the Teachers' Pension Scheme had not yet reported the number of active and deferred members as at 31 March 2020; we have assumed 2019-20 figures are in line with 2018-19 figures for this scheme.
- The Armed Forces Pension Scheme reports 'benefits in payment' rather than number of pensioners; an individual pensioner may have more than one benefit in payment from this scheme.
- There are a number of ways of adjusting for the effect of inflation on prices. We used the Consumer Prices Index (CPI) to express our financial analysis in real terms (2019-20 prices). Had we used a different index this would affect the numbers quoted in our report.
- Where we refer to averages in our analysis, these are mean averages. We were unable to identify information that would allow us to calculate median averages.
- Some employers who offer membership to public service pension schemes are classified to the private sector (for example, independent schools). HM Treasury does not hold data on what proportion of the total employer contributions these employers make.
- The projections shown in Figure 11 are sourced from the OBR's 2018 *Fiscal sustainability* report and are the most recent projections of public service pension costs available. The projections were made before the COVID-19 pandemic and any impact of EU Exit, both of which have increased the uncertainty around GDP forecasts. The economic impact of climate change also increases the uncertainty of these forecasts.

Appendix Two

The main features of the UK's four largest pay-as-you-go public service pension schemes

1 See **Figure 12** overleaf.

Figure 12
The main features of the UK's four largest pay-as-you-go public service pension schemes

The four largest pay-as-you-go schemes have different scheme designs that have changed over time

Scheme	Scheme design in effect	Normal pension age	Pension basis	Pension accrual rate[1,2]	Lump sum on retirement	Employee contribution rate as at 31 March 2020[4]
Armed Forces	Before April 2005	55	Final salary	1/69th changing to 1/91st for years' service in excess of 22[3]	3 x annual pension	Nil
	From April 2005	55	Final salary	1/70th	3 x annual pension	
	From April 2015	60	Career average salary	1/47th	Optional in exchange for reduced pension	
Civil Service	Before October 2002	60	Final salary	1/80th	3 x annual pension	4.6% to 8.05%, dependent on pay range
	From October 2002	60	Final salary	1/60th	Optional in exchange for reduced pension	
	From July 2007	65	Career average salary	2.30% (equal to 1/43rd)	Optional in exchange for reduced pension	
	From April 2015	Later of State Pension age and 65	Career average salary	2.32% (equal to 1/43rd)	Optional in exchange for reduced pension	
NHS	Before April 2008	60	Final salary	1/80th	3 x annual pension	5% to 14.5%, dependent on pay range
	From April 2008	65	Final salary	1/60th	Optional in exchange for reduced pension	
	From April 2015	Later of State Pension age and 65	Career average salary	1/54th	Optional in exchange for reduced pension	
Teachers	Before January 2007	60	Final salary	1/80th	3 x annual pension	7.4% to 11.7%, dependent on pay range
	From January 2007	65	Final salary	1/60th	Optional in exchange for reduced pension	
	From April 2015	Later of State Pension age and 65	Career average salary	1/57th	Optional in exchange for reduced pension	

Notes

1 The pension accrual rate is the proportion of final or average salary, multiplied by the number of years' service, which determines an employee's annual pension entitlement.

2 For active members, future benefits under career average salary schemes are revalued annually using a rate set in the rules of each scheme. This rate varies from scheme to scheme: Civil Service scheme benefits are revalued using the Consumer Prices Index (CPI); the NHS scheme is revalued using CPI+1.5%; the Teachers' scheme by CPI+1.6%; and the Armed Forces scheme using an index based on average weekly earnings. Deferred pensions and pensions in payment are revalued using CPI.

3 The accrual rate for officers joining before April 2005 is 1/56th of final salary for the first 16 years of service, then 1/90th for subsequent years.

4 Regularly updated alongside the four-yearly actuarial valuations process.

Source: National Audit Office

Appendix Three

Governance arrangements in public service pension schemes

1 The main features of governance arrangements for public service schemes are as follows:

- The **scheme manager** has overall responsibility for managing or administering the pension scheme. Scheme managers can delegate activities to other parties, such as the scheme administrator, but remain accountable for ensuring compliance with scheme regulations and other legislation.
- The **pension board** is responsible for assisting the scheme manager in matters such as ensuring compliance with regulations and legislation. Pension boards consist of equal numbers of employer and member representatives.
- The **scheme advisory board** provides advice to the responsible authority on the desirability of changes to the pension scheme. Typically, boards consist of equal numbers of employer and member representatives and may include independent experts.
- **Scheme administrators** perform the day-to-day functions of running the scheme for the scheme manager. Responsibilities include keeping records, collecting contributions and paying benefits to members.
- **The Pensions Regulator** (TPR) is a public body set up to protect workplace pensions in the UK. From April 2015, TPR's role was expanded to include regulation of public service pension schemes to improve standards of governance and administration and to drive compliance with the associated legal requirements.

Appendix Four

Summary membership and financial information

Figure 13

Percentage change in the UK's four largest pay-as-you-go pension schemes' payments, employee contributions and pensioners and total taxpayer funding since 1999-2000

Our analysis shows how membership, payments and funding have changed since 1999-2000

	1999-2000	2009-10	2019-20	Change from 1999 to 2020	Change from 2009 to 2020
Membership (in millions)				(%)	(%)
Total membership	**5.1**	**6.7**	**8.1**	**59**	**21**
Active members	2.3	2.8	3.0	34	9
Deferred members	1.1	1.7	2.2	97	29
Pensioners	1.7	2.2	2.9	69	29
Payments (£ billion; real terms)					
Total payments	**16.4**	**25.5**	**33.5**	**105**	**31**
Pension payments	14.6	20.7	28.5	95	37
Lump sum payments	1.8	4.7	5.0	180	5
Funding (£ billion; real terms)					
Total taxpayer funding	**14.0**	**19.6**	**25.4**	**82**	**30**
Employer contributions	6.3	16.0	23.3	270	46
Balancing payment	7.6	3.6	2.1	-73	-43
Employee contributions	**3.3**	**5.7**	**8.2**	**151**	**44**

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 **Payments** include both lump sum and annual pension payments.

3 **Payments and funding** adjusted to 2019-20 prices using the Consumer Prices Index.

4 **Employee contributions** include any voluntary contributions members chose to make in exchange for additional future benefits.

5 Totals do not sum owing to rounding. Total funding may not equal total payments in any given year because of timing factors (for example, the use of existing cash balances).

Source: National Audit Office analysis

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National Audit Office

£10.00

ISBN 978-1-78604-365-8

9 781786 043658

Design and Production by NAO External Relations
DP Ref: 009105-001