Public Service Pension Reform in the United Kingdom

Tamara Finkelstein and Joe Perkins

The UK pensions landscape

The main United Kingdom public service pension schemes cover health workers, teachers, civil servants, local government workers, the judiciary, the armed forces, police and firefighters. There are around 5 million active members of these schemes, and 12 million total scheme memberships, covering perhaps 1 in 5 UK citizens (Figure 1). Most scheme members are public sector employees, but there are also more than a million non-public sector workers, principally employees of contractors who have taken on local authority services and teachers in independent (privately-financed) schools.

[FIGURE 1 ABOUT HERE]

Public service pensions are largely independent from, and additional to, state pension provision. For instance, pensioner members of public service pension schemes are eligible for the flat-rate basic State Pension and for means-tested Pension Credit payments. This is consistent with the UK’s historical pensions structure, with the state providing a foundation level of pension provision that is supplemented by private or occupational pensions. One exception is that members of public service pension schemes, like members of other occupational defined benefit schemes in the private sector, are ‘contracted out’ from the State Second Pension. This means that their national insurance contributions are reduced to take account of their lack of eligibility for this earnings-related additional pension.

The terms of public service pension schemes vary significantly, depending on their historical evolution and the requirements of the professions they cover (Figure 2). The first civil service pensions were paid in the late 17th century, and military pensions date back to 1874. Accrual rates, final salary structures and pension ages of 60 all date back to the 19th and early 20th centuries, or even earlier.

[FIGURE 2 ABOUT HERE – OR COULD BE ANNEX]

The funding of public service pension schemes has long been a topic of discussion; for instance, Lord (Nicholas) Kaldor examined the question for the Treasury in the 1960s. Most public service schemes are unfunded. Current pension contributions are treated as revenue, with contribution rates calculated so that the contributions received from members and

---

1 Tamara Finkelstein was the head of the secretariat for the Independent Public Service Pensions Commission, chaired by Lord Hutton of Furness. Joe Perkins was a member of the secretariat. This article is based on work carried out by the Commission, published in IPSPC (2010) and IPSPC (2011).
3 See Gilling-Smith (1968), Chapter 5.
employers should reflect the future cost of the pensions for current active members. Current pension payments are met by the Exchequer. Figure 3 shows the flow of money in the four largest unfunded schemes in 2009-10.

[FIGURE 3 ABOUT HERE]

The main funded public service pension scheme is the Local Government Pension Scheme, which includes 101 different funds across the UK. The 79 English LGPS funds were estimated to have around £130 billion in assets in 2010, compared to around £180 billion in liabilities, resulting in a funding ratio of 72 per cent. Because these funds are locally managed, their investment strategies and assumptions vary. Total annual investment management costs in England and Wales were £296 million in 2009-10.

Pensions in payment

The number of pensioners in the five largest schemes has increased by 27 per cent in the last decade, almost 700,000 additional pensioners as a result of increasing longevity and workforce trends. Excluding lump sum payments, pension payments to pensioners and dependants from these schemes were over £21 billion in 2009-10 (Figure 4), an increase from £16 billion a decade earlier.

[FIGURE 4 ABOUT HERE]

The distribution of payments from these schemes is inevitably uneven. About 65 per cent of female pensioners, and 40 per cent of male pensioners, receive pensions below £6,000 per annum, collectively making up about a sixth of total pension payments. About 1 in 10 male pensioners, and 1 in 50 female pensioners, receive pensions of more than £20,000 per annum. Pensions of this size or larger constitute about a quarter of the total amount of pension payments, but are received by only about five per cent of pensioners (Figure 5).

[FIGURE 5 ABOUT HERE]

Pension liabilities

The accrued liabilities of public service pension schemes were estimated by the Government Actuary’s Department (GAD) at £770 billion in March 2008. However, estimates of liabilities can fluctuate widely depending upon the assumed discount rate (the GAD

---

4 By making payments in respect of the accruing pension rights of current employees, public service employers should face the true costs of employment, ensuring that their incentives are not distorted.
5 Audit Commission (2010).
6 Local Government Pension Scheme Funds for England 2009-10 and Local Government Pension Scheme Funds Wales 2009-10.
7 The NHS and Teachers’ Pension Schemes in England and Wales, the Principal Civil Service Pension Scheme (UK), the Armed Forces Pension Scheme and the Local Government Pension Scheme in England.
calculations assume a discount rate based on real AA corporate bond yields, 2.5% in 2008), which can lead to very different estimates of liabilities.  

It is better to look at projected benefit payments from public service schemes over the next five decades, as a proportion of GDP. This measure can give a good sense of long-term affordability. Figure 6 shows that, on this basis, benefit payments have increased significantly in the last decade, both as a result of increased retirements and reduced GDP (following the financial crisis). Payments are expected to remain at about 1.8 per cent of GDP for the next decade before falling to around 1.4 per cent of GDP by 2059-60. In the medium term, most of these payments reflect accrued rights, but future accruals could be affected by reforms to the pensions systems.

[FIGURE 6 ABOUT HERE]

Private sector pension provision

During much of the 20th century there was substantial convergence in pensions provision between the private and public sectors. This was particularly evident in the first half of the century among employers with large skilled or semi-skilled workforces. By the middle of the century the prevailing consensus was to satisfy demand for skilled labour by offering a steady job with good prospects featuring recruitment at an early age, training and career progression over a 40 to 50 year working life to be rewarded in substantial part by a retirement package offering a pension equivalent to about two thirds of final salary.

As a result, there are many non-public service employer-sponsored defined benefit schemes in the UK. The high point of private sector DB pensions was in the late 1960s, but there was an extended plateau of active DB membership that lasted into the 1990s. However, more recently active DB membership has declined significantly. Part of the gap has been covered by increasing membership of defined contribution schemes, but there has also been an overall reduction in employer-sponsored pension provision in the private sector, such that around two thirds now lack any such provision (Figure 7).

[FIGURE 7 ABOUT HERE]

Concerns about the level of saving for retirement were addressed by a Pensions Commission chaired by Lord Turner, which published its final report in 2005. In response, the Government proposed the introduction of automatic enrolment to employer-sponsored schemes, with minimum levels of employer and employee contributions. These new schemes are likely to be predominantly DC, with NEST expected to provide low-cost DC pensions targeted at smaller employers and the low paid. Implementation of automatic enrolment is planned to start from 2012.

Differences in pension provision between the public and private sector do not have any direct impact on public service pensions, but they could make mobility more difficult from the

---

8 For instance, Towers Watson supposed a real discount rate of 1.8% in March 2010, and thus estimated liabilities to be £993 billion – see IPSPC (2010), p.60.
public to the private sector, as well as create an impression that public servants are in some way privileged.

Recent reforms to public service pensions

The previous Government recognised the need for major reforms and began a modernisation programme for public service pensions when it took office in 1997. The first wave of reforms was generally focused on modernising outdated benefit designs. The pension ages for new entrants were increased to 65 in the civil service, NHS and teachers’ schemes, while pension ages were changed to 65 for all members of the local government scheme (with some transitional protection for existing members). Normal Pension Ages for new entrants to the police and armed forces were standardised at 55 (and 60 for new entrant firefighters), while the pension age for deferred members of these schemes was increased to 65.

With the exception of the civil service scheme, all of the schemes retained their final salary structure. The civil service scheme instead move to a career average structure for new entrants. This was deemed to be more appropriate than final salary for an increasingly diverse civil service – one that wished to encourage movement to and from the private sector and to deliver equitable pension outcomes. Figure 2 above documents some of the key changes across the schemes.

The second wave of reforms introduced cap and share measures to share and limit pension costs. Under cap and share, increases or reductions in cost pressures identified at a pension scheme actuarial valuation are shared between employees and employers, up to the level of a cap. Above that cap, cost increases or reductions are borne entirely by employees, either by changing employee contributions or the cost of employee benefits (by measures such as changing pension ages), or by doing both. The current cost caps are set at around 14 per cent of pensionable pay in the teaching and NHS schemes, and 20 per cent in the civil service scheme.

Cap and share is an untried system for sharing risks, and the arrangements are still in the developmental stage. Apparent limitations in the system include:

- the inability to pick up the considerable increases in the costs of providing pensions that have resulted from increases in longevity in recent decades; and
- the scheme-by-scheme basis of the system, which seems unlikely to produce coherent outcomes across government.

The current Government has put forward significant reforms on top of these changes. In particular, it has changed the measure of indexation in public service pension schemes from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI). As a result of the CPI’s different coverage (excluding most housing costs) and different methodology (using

---

9 The NHS scheme already provided career average arrangements for general and dental practitioners, and continues to do so.
geometric weighting rather than arithmetic weighting), inflation on the CPI measure may on average be about three quarters of a percentage point lower than that on the RPI measure.

This could have a significant effect on costs, reducing public service pension expenditure by over 10 per cent by 2030 and by 20 per cent by 2060. Figure 8 shows how the recent reforms and the change to CPI indexation might have reduced the effective employee benefit rates of pension schemes to public service employees, as a percentage of pay. The combined impact might be a 25 per cent reduction in the value of public service pensions to new scheme members compared to the value to old scheme members before the shift to CPI indexation.

Furthermore, in the light of the Independent Public Service Pensions Commission’s interim report, the Government announced that it would introduce staggered and progressive increases in the contribution rates of active members of public service schemes, of three percentage points on average.

**The Independent Public Service Pensions Commission**

It is in this landscape that the UK’s coalition government, elected in May 2010, invited Lord Hutton of Furness, the former Secretary of State for Work and Pensions, to chair a commission to conduct a fundamental structural review of public service pension provision. The government asked the IPSPC to make recommendations on pension arrangements “that are sustainable and affordable in the long term, fair to both the public service workforce and the taxpayer and consistent with the fiscal challenges ahead, while protecting accrued rights.”

The IPSPC published its interim report on 7 October 2010, and its final report on 10 March 2011.

**The principles of reform**

The IPSPC structured its analysis around four key principles, which were chosen to provide a balanced and comprehensive framework with which to consider the case for reform and against which to assess the options for long-term structural change. Public service pensions should be:

- **Affordable and sustainable.** Public service pension expenditure must be affordable. To be sustainable, it must remain affordable over time. Affordability must be analysed in the context of overall government expenditure. A reform that reduces the take-up of means-tested benefits such as Pension Credit, for instance by reducing the number of people opting out from pension provision, could have a substantial positive impact on long-term finances. This could not be calculated by looking at public service pension spending on its own. In order to be sustainable, a scheme must be able to manage and share risks effectively, without dramatic increases in costs.

- **Adequate and fair.** Public service pensions should provide an adequate level of retirement income for public service workers with a reasonable degree of certainty,
• **Supporting productivity.** Public service pension scheme design should support an efficient labour market for employees, and should look to aid the recruitment and retention of the right people in the right jobs in a cost-effective and flexible way.

• **Transparent and simple.** Public service pensions should be widely understood. Scheme members need to know their entitlements and potential future benefits. The population as a whole needs to be confident that public service pensions offer value for money. Key design features and costs to employers and employees should thus be set out clearly and transparently. Only with good general understanding is it possible to achieve the wide agreement that is central to reform.

These principles formed the basis for the IPSPC’s assessment. But there are important trade-offs between them. For example, some of the possible options to ensure long-term sustainability are relatively complex and therefore difficult to understand, contrary to the principle of transparency and simplicity.

In light of these trade-offs, it is important to consider the purpose of public service pensions. This is not something that the British government has done before previous reforms; in its report on the 2007-08 reforms, the National Audit Office commented that the Treasury “did not make a clear statement about the purpose of public service pensions and the types of employee behaviour it wished to encourage and support through them...”

There are many possible reasons for public service employers to provide pension benefits to their employees. Those that stand out are centred on adequacy and fairness and on supporting productivity.

**Adequacy and fairness**

At the core of occupational pension schemes is the aim of ensuring that income is adequate across an employee’s lifetime. Since we typically assume that individuals display declining marginal utility of consumption, an individual’s lifetime welfare will usually be higher if consumption is smoothed over the life cycle. Given that people’s earning capacities are typically lower in later life, this can be a strong motivation for providing pensions.

It could be argued that individuals should just be left to make their own arrangements to smooth income in retirement. But there is strong evidence that people might then make decisions which are harmful either to themselves, with undersaving resulting in inadequate

---

10 National Audit Office (2010), p. 34.
11 Barr and Diamond (2008), Chapter 2, discuss the purposes of pensions in general, while McCarthy (2006) looks at the case for occupational pension provision.
12 Modigliani and Brumberg (1954).
resources in later life, or to wider society, for instance because of a reliance on means-tested benefits. There are thus good reasons for governments to promote consumption smoothing through pension schemes.

Insurance is a further central motivation for pensions. By providing constant pension payments throughout an employee’s lifetime, government can help to insure against the risk of low incomes for those who live for longer than they had expected. Public service pension schemes also provide an element of family insurance through survivors’ pensions and death in service benefits (partially insuring family members against the risk of the death of the pension holder).

Governments could also have an interest in promoting poverty relief and redistribution towards the worse off through public service pensions, though the state pension system is of most importance in this respect. Under current public service pension scheme and UK state pension system designs, about 1 in 8 of public sector pensioners with at least 20 years’ service could expect to be eligible for means-tested Pension Credit payments at some stage in their lives. In these circumstances, the true fiscal cost of providing pensions to the low paid might be relatively low, because the occupational pension in part replaces other income from the state. However, there are other ways of achieving poverty relief and redistribution within the overall pension system, so these are not central motivations for occupational pensions.

Supporting productivity

Pension schemes could help public service employers to recruit and retain effective employees. In principle, providing remuneration through pensions could be more cost-effective than doing so through pay, for the following reasons:

- **Selection.** Because pension schemes do not provide remuneration until late in life, they might attract particular kinds of employee – those who value the future more highly, work more effectively, and are less likely to leave their jobs. This could make it relatively cheaper to provide remuneration through pensions instead of pay. This reason could be most important for society as a whole where the employer provides substantial training, as in the National Health Service and armed forces – by hiring people who are likely to stay for several years, the employer will it easier to recoup its investment.

---

14 See Feldstein and Liebman (2002), who describe the US social security system as a way “to prevent free-riding in the presence of altruism.”
15 Based on analysis of the Pensim2 database provided by the Department for Work and Pensions. This is described in Annex C of IPSPC (2011). Most of those who are eligible for Pension Credit payments have relatively short careers in the public sector; about 1 in 3 of all employees with some service in the public sector could expect to receive Pension Credit payments. These figures would of course change were the state pension system to be overhauled.
16 For private firms, the tax advantages of pension provision can be a strong incentive too, but this motive does not apply to the government.
17 Ippolito (2002).
• **Motivation.** Pensions could play a role in encouraging employees to work hard. For instance, the presence of an adequate and secure pensions guarantee could support employee engagement and commitment to their employers.18

• **Risk transfer.** If employees value the risk transfer implicit in many pension schemes, they might be prepared to receive lower total remuneration in return. For instance, employees might prefer not to bear the risk of variation in the price of annuities at retirement (and so variation in retirement income). Most defined benefit schemes transfer this risk to the employer.

These are potentially important impacts. However, a downside of providing remuneration through pensions is that pensions lack the flexibility and responsiveness to circumstances that pay can provide. For instance, an employer who finds that a particular set of skills is in high demand can increase pay for people with those skills, or offer retention bonuses to current employees. It is much harder to target pensions in a similar fashion.

Moreover, there is evidence that the valuation of pension entitlements by employees is lower than their cost to public service employers, suggesting that pensions will often not be as cost-effective in recruiting and retaining employees as other aspects of remuneration.19 Pension design should also guard against perverse effects, such as a reduction in labour market mobility that could harm productivity in the wider economy.

Overall, the IPSPC concluded that public service employers have historically used pensions excessively for workforce management, for instance to encourage the departure of older employees. This is a task for which pensions are not very well suited, and in which they are unlikely to provide value for money. Public service pensions should continue to be a valuable part of the reward package, helping to attract and motivate high-quality employees. But the IPSPC argued that their primary purpose should be to ensure adequate levels of retirement income for public service pensioners.

**The Commission’s recommendations**

The IPSPC’s recommendations are summarised in Figure 9.20 The IPSPC argued that, if accepted, its recommendations would deliver a fair and sustainable pensions deal for both public service workers and taxpayers.

[FIGURE 9 ABOUT HERE]

Accrued pension rights should be protected. This is a prerequisite for reform both to build trust and confidence and to protect current workers from a sudden change in their pension benefits or pension age. In addition, the final salary link for past service should be

---

18 Dorsey et al (1998) find a positive relationship between wages and pension coverage, which could imply that employees covered by pensions are on average more productive than those who are not.

19 See IPSPC (2010), Chapter 6.

20 The full list of recommendations can be found in IPSPC (2011), Annex A.
maintained for current members, so that pension benefits continue to be based on the member’s final salary in public service.

**Scheme design**

But the IPSPC decided that final salary pension schemes were no longer appropriate for future accruals by public service employees. The Government should continue to provide a form of defined benefit pension as the core design, but a career average revalued earnings (CARE) scheme would be fairer and would produce a better distribution of risks.

In order to analyse the potential impact of different pension scheme designs, the IPSPC asked the Pensions Policy Institute to define the parameters for a set of alternative scheme structures in order that they would, on average, provide the same value of benefits to the scheme membership as a proxy final salary scheme (broadly intended to replicate a typical current UK public sector pension scheme). This would enable assessment of the distributional effects of alternative structures. The scheme parameters that resulted are shown in Figure 10.

The Commission then applied these parameters to data from the Department for Work and Pensions’s Pensim2 model. Pensim2 is a dynamic microsimulation model which aims to estimate the future distribution of pensioner incomes. It is based on data sources including the Lifetime Labour Market Database (a one per cent survey of national insurance and taxation administrative data), the Family Resources Survey and the British Household Panel Study.

The IPSPC’s analysis showed that all of these main scheme designs would be largely successful in achieving adequacy targets for those individuals with at least 20 years of public service employment. Almost 95 per cent are expected to meet the level of pension income that Lord Turner’s Pensions Commission assessed to be a minimum level. This result can provide some confidence that adequacy need not be harmed by a change in scheme design, but it does not allow us to differentiate between the designs.

Greater differentiation can be provided by looking at the effects on those with different career profiles, in particular so-called ‘high flyers,’ employees with rapid promotions, and ‘low flyers,’ employees who have little or no real salary growth until retirement. The IPSPC’s interim report showed that, in final salary schemes, high flyers could receive almost twice as much in pension payments per pound of employee contribution than do low flyers, implying that final salary schemes are much more valuable to these employees.

---

21 See IPSPC (2011), Annex C, for more details of the technical modelling work carried out.
22 Because of differing assumptions, for instance about the age structure of public sector workers, the CARE scheme with earnings indexation provides somewhat higher benefits when applied to the Pensim2 data. To correct for this, payments under this scheme were multiplied by 90.35 per cent. See IPSPC (2011), p.183.
This analysis is reinforced by the Pensions Policy Institute’s work, which shows that effective employee benefit rates are much higher for high flyers than for low flyers in their proxy final salary scheme (see Figure 12). Results from the Pensim2 model suggest that 63 per cent of employees could be expected to receive higher pensions through a switch to an equivalent-cost CARE scheme revalued by average earnings.\(^{24}\) In addition, evidence on life expectancy suggests that high flyers can expect to live for longer and therefore receive pension payments over a longer period.

[FIGURE 12 ABOUT HERE]

The unfairness of final salary schemes is a key reason for the IPSPC’s recommendation that they should be replaced by new career average arrangements. A further important problem is the distribution of risks within final salary schemes. If employees experience rapid salary growth, this can have a large impact on their expected pension entitlements, since past service is revalued according to current salary developments. This risk can be very costly to the employer. Conversely, a period of low salary growth can be disproportionately beneficial to the government’s finances. The IPSPC recommended that this type of risk should be shared with scheme members, as in CARE scheme designs.

Indexation

There are of course many different CARE scheme designs. The choice of accrual rates and indexation will determine the future costs of public service pensions and their ability to provide adequate retirement incomes. Accrual rates are central to affordability, and the IPSPC therefore did not make any recommendations here, believing them to be a decision for the government.

But the IPSPC did make recommendations about the future indexation of public service pensions.\(^{25}\) Before retirement, it recommended that the accrued benefits of current employees should be revalued in line with national average earnings. This will mean that, for a typical scheme member, benefits will increase at approximately the same pace as their salary, with the result that the proportion of salary accrued at different ages will remain roughly equal (Figure 13). This should support fairness and encourage participation in pensions among the young.

[FIGURE 13 ABOUT HERE]

For pensioner members, the IPSPC recommended indexation in line with prices. This will ensure that pensions broadly maintain their purchasing power during retirement. Finally, for deferred scheme members, the IPSPC felt that there could be a trade-off between ensuring adequacy and supporting labour mobility (which could suggest indexation by average earnings as well) and encouraging staff retention (which could be supported by a lower level

\(^{24}\) These results are broadly consistent with those found by the Government Actuary's Department in its assessment of proposed reforms to the National Health Service Pension Scheme; see Government Actuary's Department (2006).

\(^{25}\) Piggott and Sane (2009) discuss pensions indexation in detail.
of indexation for deferred members). The choice should depend on the Government’s assessment of the role of public service pensions and the balance between different principles.

Managing future risks

The government has historically borne the costs of changes in life expectancy among public service pension scheme members. Life expectancy in the developed world has continued to increase rapidly in the last five decades, against the predictions of most experts (Figure 14). This has been driven largely by rising life expectancy among those aged 60 or over, resulting in large rises in the costs of paying out pensions. A member of the National Health Service Pension Scheme retiring now at the age of 60 could expect to spend 40 to 45 per cent of their adult life in retirement, compared with around 30 per cent for pensioners in the 1950s.

[FIGURE 14 ABOUT HERE]

The IPSPC’s view was that it is fair for members to bear the risk of rising longevity before retirement, but it is more difficult for those who have already retired to bear this risk (since they will be less able to adjust their plans). The IPSPC therefore recommended that the Normal Pension Age (NPA) in most public service pension schemes should in future be linked to the UK State Pension Age (the age from which people can begin to draw their State Pension). In recognition of the unique characteristics of the work involved, the IPSPC recommended that the NPA should be 60 for the uniformed services (armed forces, police and fire).

The State Pension Age is currently 65 for men and just over 60 for women. It is scheduled to be equalised for men and women at 65 by 2018, and then to increase gradually over the next thirty years, such that the State Pension Age for someone born in or after May 1978 is 68.26 By linking scheme NPAs to the State Pension Age, it should thus be possible to create a sustainable pension system that manages longevity risk. Scheme members would be able to begin to draw their pensions before this age, but the pension amounts would be actuarially reduced to take this into account. Were the link to be adopted, the expected proportion of adult life spent in retirement could be expected to remain at about a third over the coming decades (Figure 15)

[FIGURE 15 ABOUT HERE]

In addition to linking scheme NPAs to the State Pension Age, the IPSPC thought that there should be an additional safety valve to ensure that public service pensions remain affordable and sustainable. It recommended that the Government should set out a ‘fixed cost ceiling’: the proportion of pensionable pay contributed by employers to employees’ pensions over the long term. If this is exceeded, there should be a consultation process to bring costs back within the ceiling, and an automatic default change if agreement cannot be reached. The IPSPC left open to future consultation the extent to which costs relating to past service are

---

26 The Government is currently reviewing the timetable for increases.
allowed for in the cost ceiling.\textsuperscript{27} The cap and share arrangements currently in place in several schemes do allow for past service costs to be incorporated, but others have argued that those costs associated with the increased longevity of deferred and pensioner members should be borne by employers.\textsuperscript{28}

\textit{Governance and transparency}

There is currently a lack of readily available and relevant data about UK public service pension schemes, as well as inconsistent standards of governance across the schemes. It is therefore difficult for scheme members, taxpayers and researchers to be confident that schemes are being run effectively and efficiently.

Only one unfunded scheme, the Principal Civil Service Pension Scheme, has a formal pension board, responsible for managing the scheme in accordance with its governing legislation and rules and for the stewardship of the resources it consumes. The funded Local Government Pension Scheme (LGPS) has a range of local pension committees, but these do not have the legal status of trusts. At present, their fiduciary duty is to taxpayers rather than to members and other beneficiaries.

This position contrasts with the UK’s trust-based funded schemes in the private and public sectors, which are required to have a board of trustees, usually consisting of a fixed number of members (management, nominees of employees and pensioners, and independents).

The IPSPC thought that, while there are valid reasons for the differences between the private and public sectors, lessons can be learned from the trustee model. It recommended that every public service pension scheme (and individual LGPS Fund) should have a properly constituted, trained and competent Pension Board, with member nominees. The Board would be responsible for meeting good standards of governance, including effective and efficient administration.

In terms of transparency, the IPSPC recommended the regular issuance of benefit statements to members, and the publication of data that would allow simple comparisons to be made across government, between schemes and between individual LGPS Funds. It also recommended that the Office for Budget Responsibility, established in 2010, should publish a regular analysis of the long-term fiscal impact of the main public service pension schemes.

\textbf{Summary}

Public service pensions are a crucial part of the UK pensions landscape. But they face major challenges. Rising life expectancy has dramatically increased the costs of traditional final salary pension schemes with retirement ages of 60 or below, while the unfairness of these arrangements has become increasingly clear.

\textsuperscript{27} See IPSPC (2011), pp.100-102.
\textsuperscript{28} See, e.g., Railway Pensions Commission (2008).
The Independent Public Service Pensions Commission, headed by Lord Hutton, has recommended reforms aimed at enabling public service employees having access for the foreseeable future to good quality, sustainable and fair defined benefit pension schemes. The Government has now stated that these recommendations will form a basis of consultation with public service employees and their representatives.

By introducing new schemes in which accruals are based on career average earnings, the IPSPC aimed to enhance fairness, ending the inherent bias in final salary schemes against those public service employees whose pay stays low over their career. By linking the Normal Pension Age to the State Pension Age, the costs of rising longevity are intended to be more equitably shared between employees and taxpayers. By improving governance and transparency, the ambition is that scheme members and citizens will have confidence that public service pensions are well run and provide good value for money.

Bibliography

Audit Commission (2010), *Local government pensions in England: An information paper*

Barr, N. and Diamond, P. (2008), *Reforming Pensions*


Government Actuary’s Department (2006), *TAG2006 – 03 – CARE distribution of outcomes*

Independent Public Service Pensions Commission (2010), *Interim Report*


Ippolito, R. (2002), ‘Stayers as ‘Workers’ and ‘Savers’: Toward Reconciling the Pension-Quit Literature,’ *Journal of Human Resources*, vol.37, no.2, pp.275-308


National Audit Office (2010), *The impact of the 2007-08 changes to public service pensions*


Railway Pensions Commission (2008), *Final Report*
<table>
<thead>
<tr>
<th>Employees covered</th>
<th>Name</th>
<th>Normal Pension Age</th>
<th>Employee Contribution Rate</th>
<th>Employer Contribution Rate</th>
<th>Pension Basis</th>
<th>Accrual Rate</th>
<th>Lump Sum</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal civil service</td>
<td>Classic (pre October 2002)</td>
<td>60</td>
<td>1.5%</td>
<td>18.9%</td>
<td>Final Salary</td>
<td>1/80</td>
<td>3 x pension</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Premium</td>
<td>60</td>
<td>3.5%</td>
<td>Final Salary Career Average, revalued by inflation</td>
<td>1/60</td>
<td>By commutation</td>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuvos (from July 2007)</td>
<td>65</td>
<td>3.5%</td>
<td>Career Average, revalued by inflation</td>
<td>1/43</td>
<td>By commutation</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Armed Forces</td>
<td>Armed Forces Pension Scheme 1975</td>
<td>55</td>
<td>Nil</td>
<td>29.4%</td>
<td>Final Salary</td>
<td>1/69 (1/91 for years 22+)</td>
<td>3 x pension</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Armed Forces Pension Scheme 2005</td>
<td>55</td>
<td>Nil</td>
<td>Final Salary</td>
<td>1/60 (2/60 after 20 yrs)</td>
<td>By commutation</td>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td>Police (England and Wales)</td>
<td>Police Pension Scheme 1987</td>
<td>55</td>
<td>11%</td>
<td>24.2%</td>
<td>Final Salary</td>
<td>1/60</td>
<td>By commutation</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Police Pension Scheme 2006</td>
<td>55</td>
<td>9.5%</td>
<td>Final Salary</td>
<td>1/60</td>
<td>4 x pension</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>National Health Service (England and Wales)</td>
<td>National Health Service Pension Scheme 1995</td>
<td>60</td>
<td>5-8.5% dependent on pay range</td>
<td>14%</td>
<td>Final Salary</td>
<td>1/80</td>
<td>3 x pension</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>National Health Service Pension Scheme 2008</td>
<td>65</td>
<td>5-8.5% dependent on pay range</td>
<td>Final Salary</td>
<td>1/60</td>
<td>By commutation</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Local Government workers (England and Wales)</td>
<td>Local Government Pension Scheme 1997</td>
<td>65</td>
<td>5-6%</td>
<td>13.2% Final Salary</td>
<td>1/80</td>
<td>3 x pension</td>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Government Pension Scheme 1 April 2008</td>
<td>65</td>
<td>5.5 – 7.5%</td>
<td>Final Salary</td>
<td>1/60</td>
<td>By commutation</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Teachers (England and Wales)</td>
<td>Teachers Pension Scheme Before January 2007</td>
<td>60</td>
<td>6.4%</td>
<td>14.1%</td>
<td>Final Salary</td>
<td>1/80</td>
<td>3 x pension</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Teachers Pension Scheme 2007</td>
<td>65</td>
<td>6.4%</td>
<td>Final Salary</td>
<td>1/60</td>
<td>By commutation</td>
<td>Open</td>
<td></td>
</tr>
</tbody>
</table>
Payments and contributions in pay-as-you-go pension schemes

Public Sector

Public service employers

Employer contributions

Public service employees

£4.6 bn

£13.1 bn

Pension schemes

Payments

Public service pensioners

£20.8 bn

£3.1 bn

HM Treasury

Balancing figure
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government (England)</td>
<td>3.53</td>
<td>4.41</td>
<td>25</td>
<td>4,115</td>
<td>4,052</td>
<td>-2</td>
</tr>
<tr>
<td>NHS (England and Wales)</td>
<td>3.13</td>
<td>4.62</td>
<td>47</td>
<td>6,951</td>
<td>7,234</td>
<td>4</td>
</tr>
<tr>
<td>Civil Service (UK)</td>
<td>2.97</td>
<td>3.67</td>
<td>23</td>
<td>5,626</td>
<td>6,199</td>
<td>10</td>
</tr>
<tr>
<td>Teachers (England and Wales)</td>
<td>4.07</td>
<td>5.56</td>
<td>37</td>
<td>9,781</td>
<td>9,806</td>
<td>0</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>2.4</td>
<td>3.08</td>
<td>28</td>
<td>7,160</td>
<td>7,722</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>16.11</td>
<td>21.34</td>
<td>32</td>
<td>6,222</td>
<td>6,497</td>
<td>4</td>
</tr>
</tbody>
</table>


Note: Average pensions are calculated by dividing total pensions paid in the year by the number of pensions in payment at the end of the year. This typically overstates average pensions by about one per cent. Local government figures are for 2008-09, indexed by RPI inflation to 2009-10.
Cumulative % of pensioners or pension payments

Pension

- Male pensioners
- Female pensioners
- Pension payments
Recent evolution of average effective employee benefit rates for the main schemes

<table>
<thead>
<tr>
<th>Average employee benefit rates</th>
<th>Members of old schemes – % of pay</th>
<th>Members of new schemes – % of pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>with RPI indexation</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>with CPI indexation (from April 2011)</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

*Source: Pensions Policy Institute.*

Note: Based on the seven main public service pension schemes (NHS, teachers, LGPS, civil service, police, fire and armed forces).
<table>
<thead>
<tr>
<th>Public service workers</th>
<th>Taxpayers</th>
</tr>
</thead>
</table>
| ✓ A good pension in retirement:  
a level of pension that at least meets agreed adequate standards of pension. - taken together with full state pension this should deliver on average more than two thirds of pre-retirement salary for those below median income. | ✓ Fairer sharing of benefit of living longer:  
public service workers will over time be expected to work longer - most to state pension age - before they take their pension. This will rebalance the proportion of adult life spent in retirement. |
| ✓ A defined benefit pension:  
a pension based on average salary indexed by average earnings over your career. The design should benefit the majority of members who do not have the high salary growth rewarded in a final salary scheme. | ✓ Future-proofed:  
pension age in most public service schemes will be expected to keep in line with changes to life expectancy through a link to state pension age changes. |
| ✓ Accrued rights protected:  
the years you have already worked provide a pension at your current pension age linked to your final salary. This will protect existing staff from full impact of change in proportion to their age and career length. | ✓ Fixed cost:  
the Government should establish a fixed cost for the employers’ contribution to public service pension schemes. If cost grows beyond this level action will be taken to get back to this level. |
| ✓ Fair process of change:  
the details of change should be the subject of consultation with staff and unions. | ✓ Greater transparency of cost:  
figures for the current and future expected cost of public service pensions should be published more regularly, consistently and transparently. |
| ✓ Better management of schemes:  
improved standards of governance and administration with staff involvement. | ✓ Single legal framework:  
public service pensions should have a new legal framework with consistent approach to control and governance. |
## Scheme designs of equivalent expected average value to members

<table>
<thead>
<tr>
<th>Scheme Description</th>
<th>Accrual rate</th>
<th>Pre-retirement indexation (actives)</th>
<th>Pre-retirement indexation (deferreds)</th>
<th>Post-retirement indexation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy for the current final salary schemes</td>
<td>1 / 60ths</td>
<td>Final salary link</td>
<td>Prices</td>
<td>Prices</td>
</tr>
<tr>
<td>CARE scheme with higher accrual / lower indexation</td>
<td>1 / 40ths</td>
<td>Prices</td>
<td>Prices</td>
<td>Prices</td>
</tr>
<tr>
<td>CARE scheme with lower accrual / higher indexation</td>
<td>1 / 61ths</td>
<td>Earnings</td>
<td>Earnings</td>
<td>Prices</td>
</tr>
</tbody>
</table>

*Source: Pensions Policy Institute.*
Gross income band on retirement (benchmark replacement rate)

- Less than £9,500 (80%)
- £9,500-£17,499 (70%)
- £17,500-£24,999 (67%)
- £25,000 and above (60% or 50%)

Percentage achieving adequacy target

- Final salary
- CARE with earnings indexation
- CARE with inflation indexation
Effective employee benefit rate

- **Low Flyer**
- **Mid Flyer**
- **High Flyer**

- Proxy to current final salary schemes
- Career average scheme
The graph shows the proportion of salary at retirement accrued over age, comparing two scenarios:

- CARE with earnings indexation
- CARE with prices indexation

As age increases from 25 to 65, the proportion of salary at retirement accrued also increases linearly for both scenarios. The CARE with earnings indexation shows a slightly higher proportion compared to CARE with prices indexation.
The graph shows the percentage of adult life spent in retirement for different birth years, categorized into three variants: High life expectancy variant, Central life expectancy projections, and Low life expectancy variant. The X-axis represents the year of birth (age in 2011), while the Y-axis indicates the percentage of adult life spent in retirement. The graph illustrates a generally increasing trend in the percentage of life spent in retirement over the years.