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Occupational pension provision in the public sector

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Introduction

The government's recent proposals for reform have focused media attention on public sector pension schemes.

Longer lives are increasing the cost of all pension provision. Occupational schemes in the private sector have also had to contend with investment market shocks, lower returns and increased regulation. Private sector employers have been closing Defined Benefit schemes and moving towards Defined Contribution provision, which transfers more risk to the employee, often at a lower cost to the employer. But public sector pension provision has remained largely unchanged until now.

Assessing the 'right' level and structure of public sector pensions requires a difficult balance to be struck between the competing demands that all taxpayers – including public and private sector workers – would be expected to make:

- For public sector workers to be rewarded appropriately, with good pension arrangements.
- For the costs of public sector pensions to be well managed.
- To avoid the resentment that could be caused by a disparity in the pension arrangements of public and private sector workers.

This paper has been prepared to give factual background to the important political debate now taking place on reforming public sector schemes. No judgement on the merit or otherwise of the scheme benefits, or the reforms, is intended.

After a brief introduction to the UK public sector schemes, the first chapter of this paper examines how much they cost. The paper then goes on to assess the value of their benefits, before and after reform, compared to those in the private sector.

Occupational pension provision in the public sector
Summary of conclusions

This paper investigates the six main unfunded public sector pension schemes, the funded Local Government scheme and other quasi-public schemes. The main conclusions are summarised as follows:

1. The public sector schemes are a significant and growing cost:
   - The current liability of around £550bn indicates the large future cost of the unfunded public sector pension schemes.
   - Of more practical short-term relevance is the £18bn annual cost of public sector pension payments, which is now managed with better financial discipline than it used to be.
   - This cost is expected to grow over the next 30 years, even taking into account proposed reforms.

2. Occupational pension provision in the public sector is better than in the private sector, because:
   - Public sector employees are twice as likely to be in an occupational pension as private sector workers.
   - Public sector employees are more likely to be in a Defined Benefit scheme with better benefits than private sector DB schemes.
   - The higher public sector pension benefits are typically worth an additional 5% to 20% of salary compared to those in the private sector.
   - Members' benefits are more secure in public sector schemes than in private sector schemes.

3. There appears to be no conclusive evidence that there is generally lower pay in the public sector compared to the private sector. However:
   - The problem of low paid workers being 'under-pensioned' is less acute in the public sector than in the private sector, where there are more low paid workers who are less likely to receive any occupational pension.
   - While the lower pay rationale for better public sector pensions is not proven, total remuneration in the private sector is more valuable at the highest pay levels because of better non-pension additional benefits.

4. The proposed reforms will still leave public sector pensions better than private sector pensions:
   - After the full impact of the reforms, public sector pensions will typically be worth an extra 3% to 18% of salary, compared to private sector pensions. Benefit improvements make up for much of the reduction in benefit value from the change in Normal Retirement Age.
   - Although the reforms move public sector pensions closer to private sector practice in some respects, the reforms are more modest than the changes happening in the private sector.
   - The pace of reform is always likely to be slower in the public sector.

A brief description of UK public sector pension schemes

To set the scene, this section briefly describes the scope and main features of UK public sector pension schemes.

The first scheme for government employees was formalised by an Act of Parliament in 1810[1]. The scheme was part of a government reform process to improve the efficiency of the Civil Service. Other state employees did not receive a pension scheme until much later[2].

Following the public sector, the first modern-style private sector schemes began to emerge in the early nineteenth century, mainly in large employers such as state chartered companies[3], utilities and railways[4].

There are six main unfunded public sector pension schemes, the funded Local Government scheme and other quasi-public schemes.

Differences in the structure of public and private sector schemes

Public sector schemes are defined as pension schemes run and paid for by the government for the benefit of government employees. There are currently seven main schemes with **total active membership of around 5 million** people, of different structures (Table 1):

- Those centrally run and paid for directly by government departments.
- The locally run or 'branded' schemes where the regulations are set centrally but each scheme is separate and run by a local authority.

Table 1: The seven main public sector schemes

	Centrally run	**Locally run**
Unfunded	NHS Teachers Armed Forces Civil Service	Police Fire-fighters
Funded		Local Government

[1] Blake (2003). The Superannuation Act of 1834 later established a non-contributory pension scheme for Civil Servants.

[2] Teachers in 1898 and Police in 1890. The National Health Service (NHS) Scheme was created in 1948 in the NHS (Superannuation) Regulations. Organisation of local governments into a modern system dates to the Local Government Acts of 1888 and 1894. Prior to this, pensions were available but were discretionary and piecemeal. The modern funded scheme dates from 1922, with the Local Government and Other Officers' Superannuation Act. See Rhodes (1965) and Raphael (1964).

[3] For example, the East India company and the Bank of England

[4] The current system of funded pension schemes developed after the First World War, formalised under the Superannuation and Other Trust Fund (Validation) Act of 1927. Funds were set up as an irrevocable trust with a trust deed, employees being a beneficiary of the trust.

There are also a number of much smaller schemes such as those for MPs, the Judiciary, Research Councils and the UK Atomic Energy Authority, with total active membership of around 31,000 people.

There are 3 main differences in structure between public and private sector schemes:

- **Public sector schemes are - except for the Local Government scheme – unfunded.** This means that pension benefits are paid out of current income as and when they become due. All approved[5] private sector schemes and the Local Government scheme are funded (scheme members' pension rights should be covered by assets held under trust).
- **Public sector schemes are statutory**, formed and reformed through Acts of Parliament. The Armed Forces scheme can be amended only by primary legislation, which requires full Acts of Parliament. Other schemes can be amended by secondary legislation[6] which is a speedier and less onerous procedure. Private sector schemes can be amended by the trustees and could be closed down by the sponsoring company.
- **Nearly all public sector schemes are Defined Benefit**, as are the majority of large private sector schemes[7]. However, most of the private sector schemes are closed to new entrants, and the majority of new private sector schemes are Defined Contribution.
    - In a Defined Benefit (DB) scheme, the scheme's rules set out a formula for the level of benefits that scheme members will receive on leaving the scheme through death, retirement or ceasing employment. The level of benefits depends on the member's service and salary. The sponsoring employer, and usually employee, contributes to the scheme so that assets build up aimed at covering the cost of the benefits accruing.
    - In a Defined Contribution (DC) scheme, the scheme member and employer pay contributions which are invested. The member can use the accumulated funds to purchase an annuity when he or she retires.

Paying for centrally run schemes

Because private sector schemes are funded, sponsoring employers should have a strong discipline to examine the future cost of the scheme. The employer has an obligation to pay into the scheme sufficient to match the value of members' benefits. If the benefits increase in value, the increasing cost is more immediately apparent to the employer of a funded scheme than to the employer of an unfunded scheme, in which the benefits can build up for many years before the employer needs to consider how to pay them.

[5] 'Approved' means that the scheme can qualify for tax advantages
[6] Under the Superannuation Act (1972)
[7] There are some public sector Defined Contribution schemes, but these have a very small membership and have therefore been ignored for this paper

To impose financial discipline, public sector employers account for the costs of unfunded public sector schemes using 'Accruing Superannuation Liability Charges' (ASLCS). ASLCS are contributions paid by the employer as if the scheme were on a funded basis (although the contributions actually pay benefit to pensioners):

- The employer pays contributions to the sponsoring department of the scheme. These contributions are part of the employer's annual budget.
- The sponsoring government department pays out pensions to retired pension scheme members, netting off the employer and employee contributions received. These budgeting arrangements are outside the departments' expenditure limits.

To standardise ASLCS across schemes, the Superannuation Contributions Adjusted for Past Experience (SCAPE)[8] model has been introduced.

Funding of branded schemes

Local Police and Fire authorities are responsible for scheme administration, collecting contributions and paying pensions for those schemes. This means that current Police and Fire budgets can be affected by past actions and financial factors outside of the authorities' control. For example, an increase in pension cost could reduce the operating budget for the local Police or Fire-fighting force.

The Local Government pension scheme is sponsored centrally by the Office of the Deputy Prime Minister, which is responsible for the stewardship and regulatory framework, but separate funds are administered and managed at local authority level[9].

Funding of quasi-public schemes

Quasi-public sector schemes are those where the government owns all of or part of the sponsoring company or corporation, or other schemes for which the government has underwritten part or all of the benefits. Examples of the former are the Civil Aviation Authority Scheme and the BBC Scheme; the former British Coal Pension Scheme is an example of the latter.

Quasi-public sector schemes are otherwise identical to private sector schemes; they are usually the responsibility of the sponsoring company, and are set up under a trust.

There are around 345,000 active members in such schemes[10].

[8] The SCAPE model creates a notional or shadow fund by calculating the scheme liabilities actuarially. An actuarially calculated standard contribution rate to cover accruing liabilities is paid by the employer to the sponsoring department of the scheme. Periodic valuations are carried out to update contribution rates. The shadow fund is assumed to be invested in index-linked gilts with a guaranteed return of 3.5% pa real. A deficit (surplus) can arise if experience is not in line with previous assumptions. The employer pays the contribution rate plus (minus) the amortisation of any deficit (surplus) of the notional fund.

[9] Local Government Pension Division (2004)

[10] See Appendix 1

Chapter 1: How much do public sector schemes cost?

This chapter sizes the annual cost and future liability of public sector schemes, and discusses the importance of these measures. It concludes that the public sector schemes are a significant and growing cost:

- The current liability of around £550bn indicates the large future cost of the unfunded public sector pension schemes.
- Of more practical short-term relevance is the £18bn annual cost of public sector pension payments, which is now managed with better financial discipline than it used to be.
- This cost is expected to grow over the next 30 years, even taking into account proposed reforms.

Public sector liabilities are significant

The liability of a pension scheme is an estimate of the total value of the future cost of the scheme benefits that have already been 'earned' by the scheme members.

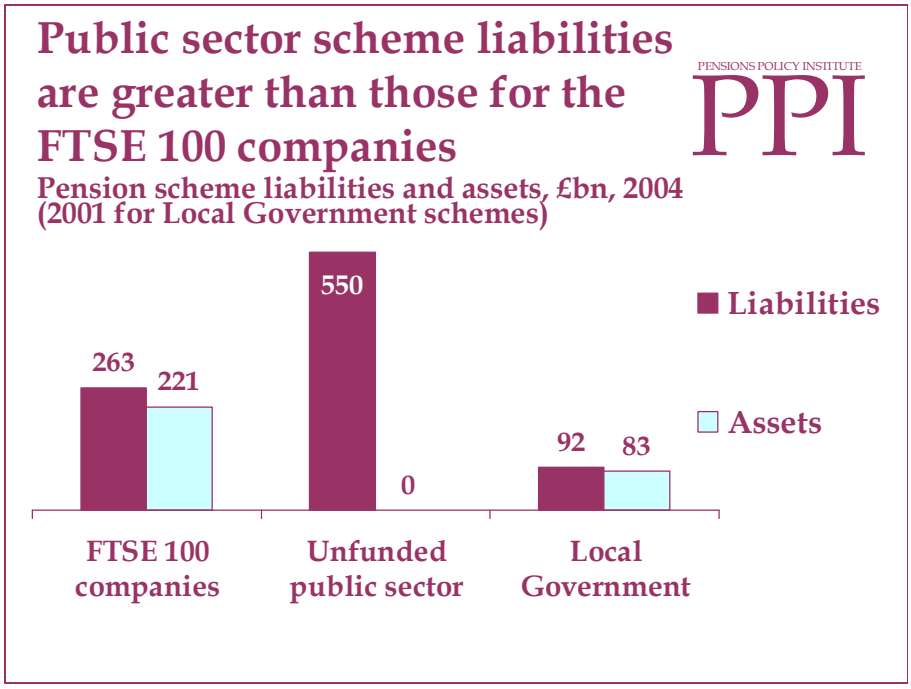
The liabilities of the unfunded public sector schemes often attract media attention. For example, the actual size of the liabilities can appear to be contested. Liabilities in any pension scheme are calculated by making assumptions about what will happen in future (for instance to the life expectancy of pensioners or salary inflation). Simply making different assumptions will lead to different estimates of the liability figure, for example[11]:

- The current estimate of the liability of the unfunded public sector schemes on the official basis used by the government is £550bn.
- Changing one parameter (the discount rate) to that used by the government for non-pension long-term liabilities changes the liability figure to £690bn.

Comparisons of the liabilities of different schemes are often made, such as 'the public sector pension liabilities are twice as high as those of the combined FTSE 100 companies' (Chart 1).

[11] Recent media attention implied that the government estimate of the liabilities is £425bn, whereas the actual value is £690bn (for example, BBC News (2005)). For a full reconciliation, see Appendix 2.

Chart 1[12]



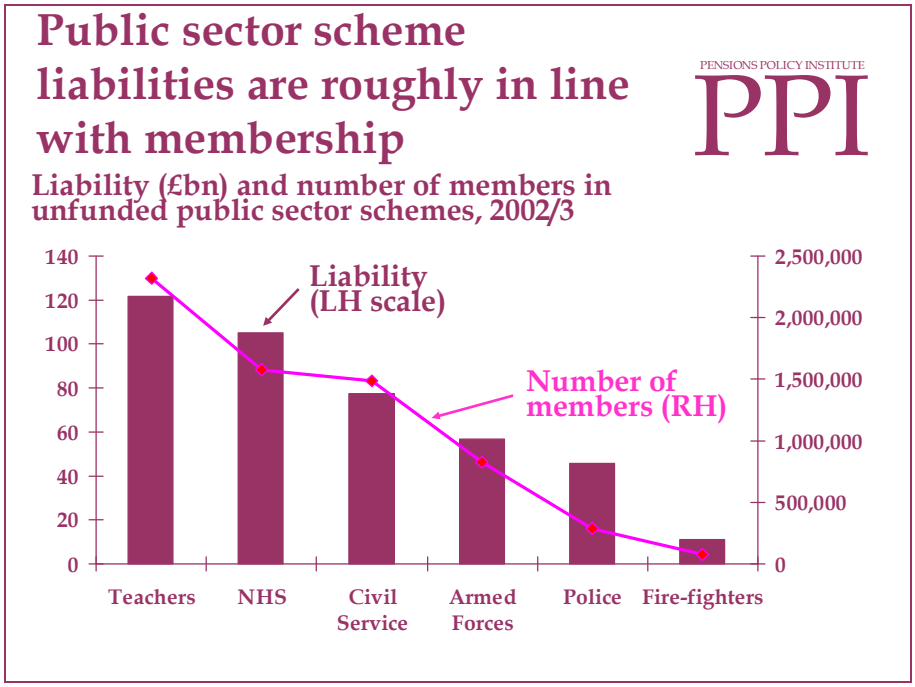
The size of the liability is of interest because:

- Public sector scheme liabilities are effectively large provisions, indicating the long-term impact that pension promises already made may have on long-term fiscal sustainability[13].
- The liability can, together with the future annual cost estimates, provide a feedback mechanism for government action, for example if a large increase is indicated.
- The liability figure can be used as a shorthand indicator of the size of the scheme, for example to compare the relative size of different schemes.

The size of the liability of the public sector schemes varies more or less in line with the number of members, with the Teachers, NHS and Civil Service schemes making up 70% (Chart 2). The liabilities from the Police, Armed Forces and Fire-fighters' Schemes make up 30% of the liability, but less than 20% of the membership. The relative size of the liabilities would depend on many factors including relative size of payroll, level of pension benefits, number of part-time workers and average length of service.

[12] Lane Clark and Peacock (2004b), HMT information. Local Government figures are for England and Wales only.
[13] HMT (2004) sections 3.11-3.14

Chart 2[14]



However, the size of the liability of the unfunded public sector pensions is not as practically relevant in the short-term as the annual cost of paying the pensions. The cash to cover the liability does not have to be found at any point in time (in contrast to a funded private sector scheme which has to review periodically whether the scheme's assets cover the scheme's liabilities).

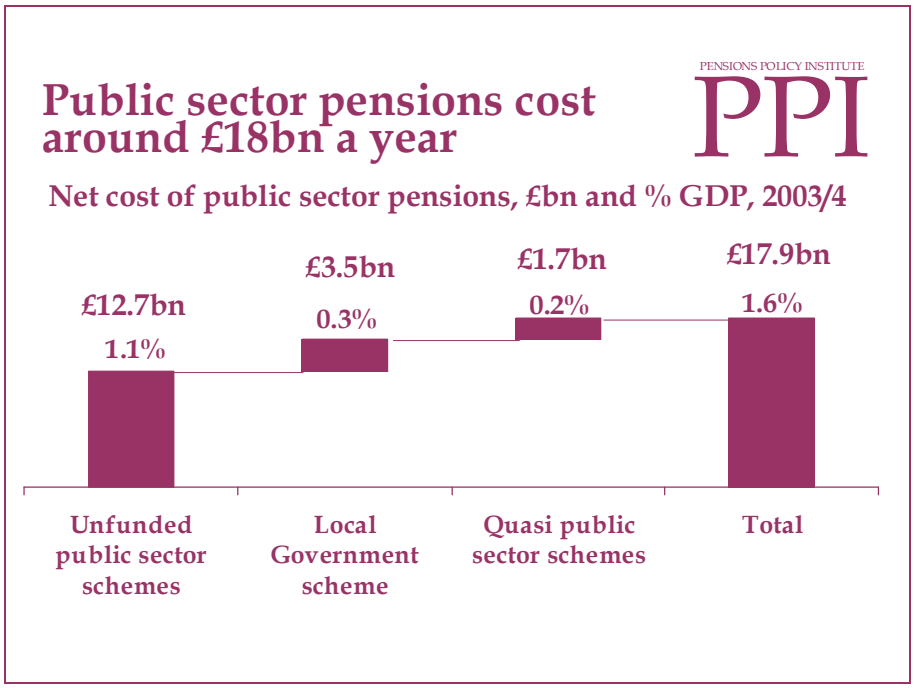
Arguably, what is more important for the unfunded public sector schemes is whether the annual cost of the scheme can continue to be met in future years: can the state continue to divert the required share of tax revenue to pay the pension benefits?

[14] Ministry of Defence (2004a), NHS Pension Agency (2004a), NHS Pension Agency (2004b), Teachers' Pension Scheme (2004) and HMT information

Public sector schemes cost around £18bn a year, and rising
The total cost to the state (the employer, paid for ultimately by the taxpayer) of public sector schemes in 2003/4 was around £18bn or 1.6% of GDP (Chart 3).

For context, this is around 40% of the total bill for the Basic State Pension (BSP) in the year[15]. The BSP is paid to around 11m people; public sector pensions to around 3.8m.

Chart 3[16]



Each of these elements is now examined in more detail:

Unfunded public sector schemes
In unfunded schemes, the cost to government is the amount by which the cost of pension benefits payable in the year exceeds the contributions received from contributing members.

The total benefits payable from the unfunded schemes amount to £16.5bn, much higher than the members' contributions received of £3.8bn[17].

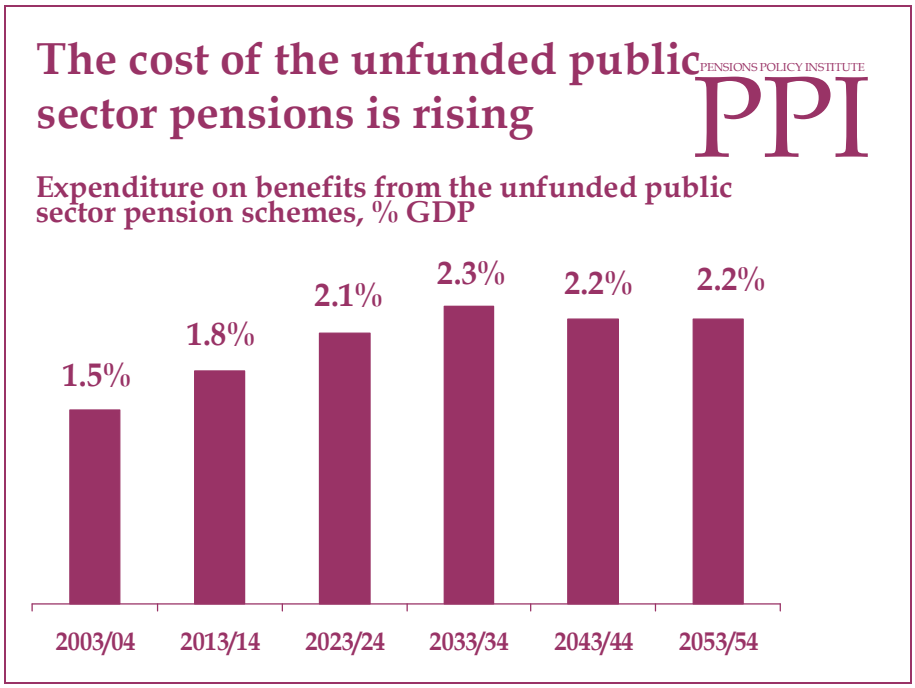
The cost of the benefits payable from the unfunded public sector schemes (£16.5bn or 1.5% of GDP in 2003/4) is expected to grow as a share of GDP over the next 30 years, until flattening off (Chart 4).

[15] DWP expenditure figures
[16] HMT (2004) and PPI analysis from annual reports and HMT information
[17] The cost of transfers into and from other schemes as employees leave or join public service are excluded here, as are exceptional items in the year

Factors contributing to this increasing cost include:

- Recent growth in the number of public sector workers: 10% between 1998 and 2003[18].
- Salary inflation in the public sector (see Chapter 3).
- Increasing life expectancy (see Chapter 4).
- The proposed reforms (see Chapter 4), which are assumed to go through. Raising the age at which full pension can be taken compensates in part for increasing life expectancy.

Chart 4[19]

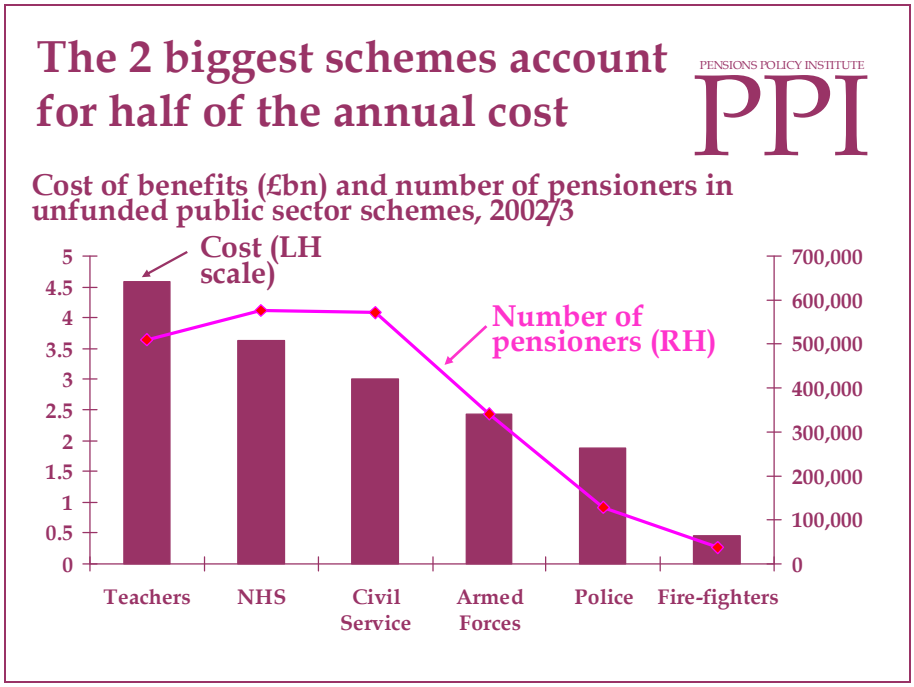


It is these future costs of the unfunded public sector schemes each year that are of practical relevance to long-term planning. This was recognised by 50-year future cost projections appearing in the government's long-term expenditure report[20] for the first time in 2004. With this accounting visibility, and the extension of the SCAPE model[21], the government is improving financial discipline on the management of the unfunded schemes.

The annual cost of the unfunded public sector pension benefits is distributed differently between the schemes (Chart 5). Half of the total cost of the unfunded pension schemes is accounted for by the two largest schemes: those for teachers and the NHS.

[18] Black et al (2004)
[19] HMT (2004)
[20] HMT (2004)
[21] Superannuation Contributions Adjusted for Past Experience, see p. 6. For some limitations of this model, see Chapter 4.

Chart 5[22]



Local Government scheme

The Local Government scheme is funded, so the cost to the employer is not the cost of benefits paid each year, but the cost of the employer contribution made that year. Currently, the total annual employers' cost is around £3.5bn (0.3% of GDP)[23]. This is paid from Local Government revenue (for example Council Tax). Members also pay contributions, and investment income is generated on the funds.

Quasi-public sector schemes

As these corporations or agencies are wholly owned by or are part of the government, some of the ultimate costs are borne by the tax payer, although not necessarily through taxation. For example, the cost of the BBC scheme is met via the TV Licence fee and other BBC revenue. The total employer cost of quasi-public sector schemes is around £1.7bn (0.2% of GDP)[24].

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This chapter has presented the facts on the cost of public sector schemes. The next chapter looks at the other side of the equation – the benefits to the employee.

[22] Ministry of Defence (2004a), NHS Pension Agency (2004a), NHS Pension Agency (2004b), Teachers' Pension Scheme (2004) and HMT information

[23] HMT information

[24] 2003/4 accounts of each corporation; see Appendix 1

Chapter 2: Is public sector provision better than private provision?

The benefits of occupational pension provision in the public sector are widely expected to be better than those available in the private sector, particularly after the media attention of some private sector employers cutting back pension provision.

This chapter examines the extent to which this is true and concludes that occupational pension provision in the public sector is better than in the private sector, because:

- Public sector employees are twice as likely to be in an occupational pension as private sector workers.
- Public sector employees are more likely to be in a Defined Benefit scheme with better benefits than private sector DB schemes.
- The higher public sector pension benefits are typically worth an additional 5% to 20% of salary compared to those in the private sector.
- Members' benefits are more secure in public sector schemes than in private sector schemes.

Public sector employees are twice as likely to be in an occupational pension

There are over four times as many jobs in the private sector (around 24.6m) as jobs in the public sector (5.5m)[25]. One estimate suggests that around 85% of public sector employees participate in occupational pension schemes compared to around 30% in the private sector[26]. This is likely to be a result of better access to a pension scheme in the public sector, and higher take-up of the scheme when it is available.

Further, active membership of occupational schemes is declining in the private sector while increasing in the public sector:

- Total – public and private sector - active occupational scheme membership peaked in 1967, since when it has been falling.
- Private sector membership has shadowed this decline, whereas public sector scheme membership has increased since 1991 (Chart 6).
- The total number of active scheme members remains higher in the private sector than in the public sector (Table 2)[27].

The greater participation of public sector workers in occupational pensions is true at all income levels (Chart 7).

[25] In 2003. Includes self-employees, HM forces and government-supported trainees. Black et al (2004).
[26] Pensions Commission (2004) pages 62 and 82
[27] The data for this chapter has been based primarily on the most recent Government Actuary's Department Survey of occupational pension schemes (GAD (2003)). This was based on data collected in 2000. More recent surveys are less complete and estimated (NAPF (2003a), Pensions Commission (2004), Cebulla et al (2004)). The major trend since 2000 is the high rate of closures of Defined Benefit pension schemes in the private sector. This means that the benefits gap between public and private sector pensions described in this chapter is, if anything, widening.

Chart 6[28]

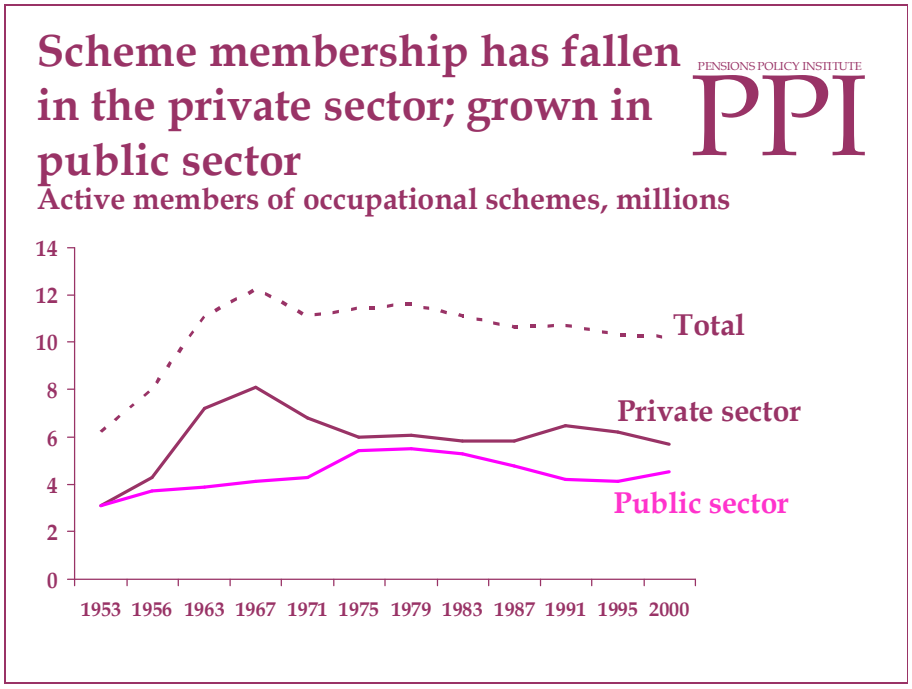
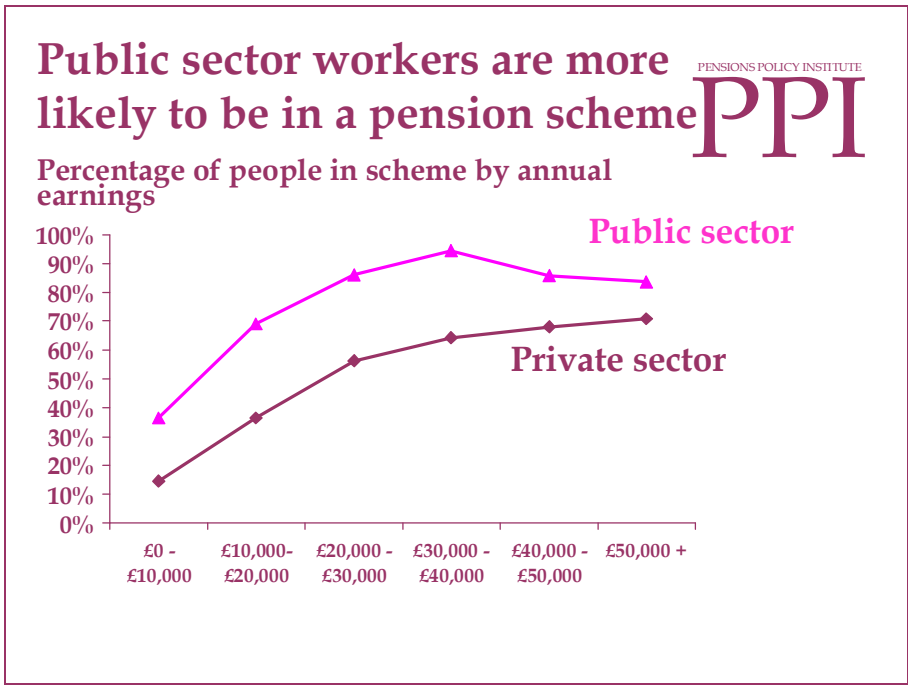


Chart 7[29]



[28] GAD (2003)
[29] PPI analysis from Family Resources Survey 2002/3

Public sector employees are more likely to be in better DB schemes

In the public sector nearly all scheme members belong to a Defined Benefit scheme and all new entrants can join a DB scheme. Although around three-quarters of occupational scheme members in the private sector belong to a Defined Benefit scheme, the active membership of open DB schemes is estimated to have fallen by 60% since 1995 and is estimated to fall by a further 10-20% in the future[30]. This is a result of private sector employers closing DB schemes, often to replace with Defined Contribution schemes.

Because of the decline in private sector Defined Benefit schemes, there are now more DB scheme members in the public sector than in the private sector. (Table 2).

Table 2: Number of active members by type of scheme (millions)

	1995[31]	**2000**[32]	**2004**[33]
Public sector (all DB)	**4.1**	**4.5**	**5.0**
Private sector:			
Closed Defined Benefit	0.2	0.5	c. 2.0
Open Defined Benefit	5.0	4.1	c. 2.0
Defined Contribution & hybrid DB/DC	1.0	1.1	c. 1.4
Private sector total	**6.2**	**5.7**	**c. 5.4**

Each of the features determining the level of pension benefit is usually better in public sector DB schemes than in private sector DB schemes:

- Table 3 summarises the main features for the main public sector schemes.
- Table 4 summarises the same features for the range of typical private sector DB schemes, categorised by their level of benefits. Most private sector schemes have a structure(s) similar to one or more of these typical schemes.

[30] Pensions Commission (2004) pages 84-85 and 114
[31] GAD (2003), Pensions Commission (2004)
[32] GAD (2003)
[33] PPI estimate

Table 3: Basic design of public sector schemes[34]

	Teachers	NHS	Civil Service[35]
Accrual rate	80ths	80ths	80ths (60ths)
Pensionable salary	Basic plus some allowances	Basic plus some allowances	Basic plus some allowances
Additional lump sum	3 times pension	3 times pension	3 times pension (commutation)
Normal Retirement Age	60	60[36]	60
Member contributions	6%	6%[37]	1.5% (3.5%)
Pension increases	RPI	RPI	RPI
Death in service	50% plus 1 times pensionable salary	50% plus 2 times pensionable salary	37.5% plus 3 times pensionable salary
Death in retirement	50% pension	50% pension	37.5% pension
Active membership	0.7m	1.3m	0.6m
Deferred pensioners	0.4m	0.4m	0.3m
Pensioners	0.5m	0.6m	0.6m

[34] Ministry of Defence (2004a), NHS Pension Agency (2004a), NHS Pension Agency (2004b), Teachers' Pension Scheme (2004) and HMT information. See Glossary for definition of terms.
[35] This refers to Classic Scheme. New entrants from 1/10/2002 could join the Premium Section (benefits in brackets, where different), or the Partnership Section, a stakeholder (Defined Contribution) scheme. Existing members were given the option of switching out of the Classic Scheme, 14 % chose to (Cabinet Office (2004a)). Very few new entrants choose the Partnership Section.
[36] 55 for some special classes
[37] 5% for manual workers

Table 3: Basic design of public sector schemes, continued[38]

	Armed Forces	Police	Fire	Local Government
Accrual rate	50ths/ 56ths[39]	60ths (30ths after 20 years)	60ths (30ths after 20 years)	80ths
Pensionable salary	'Representative pay'	Basic plus some allowances	Basic plus some allowances	Basic plus some allowances
Additional lump sum	3 times pension	None	None	3 times pension
Normal Retirement Age	55[40]	60	55 (60)[41]	65[42]
Member contributions	0%	11%	11%	6%
Pension increases	RPI	RPI	RPI	RPI
Death in service	50% plus 3 times pensionable salary	50% plus 2 times pensionable salary	50% ill health pension	50% plus 2 times pensionable salary
Death in retirement	50% pension	50% pension	50% pension	50% pension
Active membership	0.2m	0.2m	0.04m	1.9m
Deferred pensioners	0.3m	0.01m	n/a	0.5m
Pensioners	0.3m	0.1m	0.04m	1.1m

[38] Ministry of Defence (2004a), NHS Pension Agency (2004a), NHS Pension Agency (2004b), Teachers' Pension Scheme (2004) and HMT information
[39] Initial accrual rate for officers/other ranks. After 16 years accrual rates become less valuable.
[40] Members qualify for an immediate, unreduced pension once they have completed 16 years service since age 21 (officers) or 22 years service since age 18 (other ranks)
[41] 55 for station officers or lower rank, 60 otherwise
[42] "Rule of 85" being abolished from 1 April 2005 – members can retire when service plus age adds up to 85

Table 4: Basic design of private sector Defined Benefit schemes[43]

	Low Benefits	Medium benefits	High benefits
Accrual rate	80ths (11%)	60ths (63%)	40ths-60ths (22%)
Pensionable salary	Salary less deduction (55%)	Basic salary	Total salary
Lump sum	Commutation only	Commutation only	Additional
Normal Retirement Age	65 (63%)	Between 60 and 65 (7%)	60 (30%)
Member contributions	Less than 3% (21%)	3% to 6% (52%)	More than 6% (24%)
Pension increases	RPI to a maximum of 5% (59%)	RPI to a maximum of 5% (59%)	RPI to a maximum of 5% plus discretionary increases (41%)
Death in service benefits	2 times salary	3 times salary	4 times salary
Death in retirement benefits	Less than 50%	50% pension	2/3rds pension

[43] PPI summary from GAD (2003). Numbers in brackets are the approximate percentage of members with these benefits, where it can be estimated.

In summary, the public sector Defined Benefit schemes are better than private sector DB schemes because:

1. The pensions provided at retirement are of approximately the same value.
2. The lower Normal Retirement Age in the public sector gives extra years of pension payment.
3. Members contribute only slightly more on average in the public sector.
4. Ill-health early retirement is more common in the public sector.
5. Indexation in the public sector is fuller than in the private sector.
6. Transferees between public sector schemes effectively receive enhanced benefits.
7. The highest level of private sector pensions – for executive directors – is matched in the public sector by the schemes for MPs and the Judiciary.

These comparisons are now described in more detail.

1. The pensions provided at retirement are of approximately the same value

A typical public sector scheme pays a pension (accrual rate usually 1/80th) plus a lump sum (usually three times the annual pension). A typical private sector pension scheme pays a higher pension (accrual rate 1/60th) and no lump sum. These benefits are of approximately the same value, taking into account that pensionable salary for most private sector schemes is lower than actual salary[44].

2. The lower Normal Retirement Age in the public sector gives extra years of pension

The earliest age at which most public sector scheme members can retire with an unreduced pension is 60, compared to age 65 in the private sector. A pension at age 60 is worth around 20% more than the same pension payable from age 65[45].

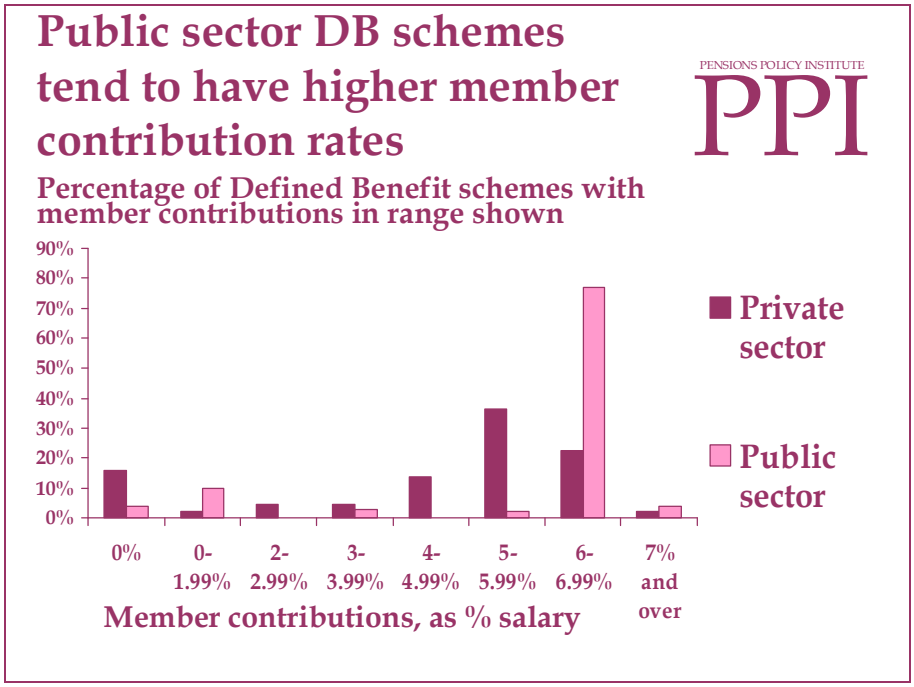
3. Members contribute only slightly more on average in the public sector

Member contributions vary between public sector schemes from zero in the Armed Forces, and 1.5% of salary in the Civil Service, to 6% of salary in the NHS, Teachers and Local Government schemes, and up to 11% of salary for the Police and Fire-fighters. The average employee contribution in public sector schemes is 4.95% of salary, compared to 4.86% in private sector Defined Benefit schemes[46] (Chart 8).

In private sector Defined Contribution schemes, the average is 3.7% of salary, although the spread of rates is quite large.

[44] PPI estimate using the average basis used in actuarial valuations in the private sector ((Punter Southall (2004))
[45] PPI estimate using the average basis used in actuarial valuations in the private sector ((Punter Southall (2004))
[46] NAPF (2003a)

Chart 8[47]



4. Public sector ill-health early retirement is more common in the public sector

The public sector generally has high ill-health benefits[48], but the main difference between the public and private sectors has been the higher incidence of ill-health retirement in the public sector (Table 5).

Table 5[49]: Incidence of ill-health retirement

	Ill health retirement as % of all retirements, average 1995-2000
Fire	68
Police	49
Local Government	39
NHS	23
Teachers	25
Civil Service	22
Armed Forces	6
Private sector	Less than 20

Efforts to reduce this high incidence have been made, so that for example in Local Government the rate is now more like that in the private sector.

[47] NAPF (2003a)
[48] HMT (2000)
[49] HMT (2000)

5. Indexation in the public sector is fuller than in the private sector

Public sector benefits are fully linked to inflation after members leave or retire, whereas in the private sector indexation is capped although some schemes pay additional bonuses. This means that the value of private sector benefits can be eroded in times of high inflation.

6. Transferees between public sector schemes receive enhanced benefits

When a member leaves a Defined Benefit scheme to work for another employer, the value of the future pension benefits can be reduced by up to 40% compared to staying in the scheme. This is because the link with salary inflation is broken as a 'deferred pensioner'. However, a member who leaves a public sector scheme to join another public sector scheme retains the salary linkage of his or her benefits, which is effectively a benefit enhancement of up to 40% of the value of an early leaver's pension[50].

7. The highest private sector pensions are matched in the public sector

Most executive directors in the private sector are members of Defined Benefit schemes with a retirement age of 60 and accrual rates better than 60ths benefits[51]. The cost of these schemes averages 40% of salary. Most new directors are offered only Defined Contribution schemes, although these still tend to be relatively generous with an average employer contribution rate of 20%.

MPs and the Judiciary receive at least as high pensions (accrual rates are 40ths)[52] as those for private sector directors.

[50] PPI estimates; see Appendix 3

[51] Lane Clark & Peacock (2004a): 81% were DB, 89% have retirement age of 60, all have accrual rates better than 60ths. 57% of companies will not be offering DB to new directors.

[52] See Appendix 4

Higher public sector pensions are worth an additional 5% to 20% of salary
To quantify how much better public sector scheme benefits are compared to those in the private sector, estimates of the value of the employer's contribution to pension provision in different schemes have been made.

This measure used is the **effective employer contribution rate**, which:

- Is calculated as the employer contribution that 'buys' the benefits of each scheme, taking all the scheme features (including member contributions) into account and using the same actuarial basis in each calculation.
- Is an estimate of the additional remuneration an individual in each type of scheme is receiving on average from the pension. If the effective employer contribution rate in Scheme A is 20% of salary and in Scheme B is 15% of salary, then the employees in Scheme A are in effect receiving 5% of salary more than those in Scheme B.

The effective employer contribution rate is calculated for each scheme[53], and comparisons are shown between 4 types of scheme (Charts 9 and 10):

- **Typical public sector scheme**: the Teachers and NHS schemes are used as the model. The Local Government scheme is similar, as is the Civil Service scheme, although with higher benefits.
- **Gold Standard public sector scheme**: the Police and Fire-fighters schemes are used as the model. The Armed Forces scheme gives higher benefits at younger ages, and lower at older ages.
- **Typical private sector DB scheme**: the model combines the most common benefit features (Table 4).
- **Typical private sector DC scheme**: modelled by the average private sector employer contribution rate into private sector DC schemes[54].

Taking a view across all pension provision in both sectors suggests that public sector pension provision typically provides pension benefits equivalent to an additional 5% to 20% of salary, compared to typical private sector pension benefits[55]:

- Standard public sector benefits are worth up to 6% of salary (12% for Civil Service) more than typical private sector Defined Benefit pensions.
- The benefits in certain 'Gold Standard' public sector schemes can be worth up to 30% additional salary, compared to typical Defined Benefit schemes in the private sector.
- The public sector pensions are worth a higher amount of additional salary compared to typical private sector Defined Contribution pensions, and worth even more than the case of having no employer pension at all.
- The range of 5%-20% additional salary from higher public sector pension benefits illustrates comparisons between typical private sector workers and public sector workers; there will be cases giving a greater or smaller amount than this range suggests.

[53] See Appendix 5 for details
[54] 7% of salary (GAD (2003))
[55] See Appendix 5 for details

Chart 9[56]

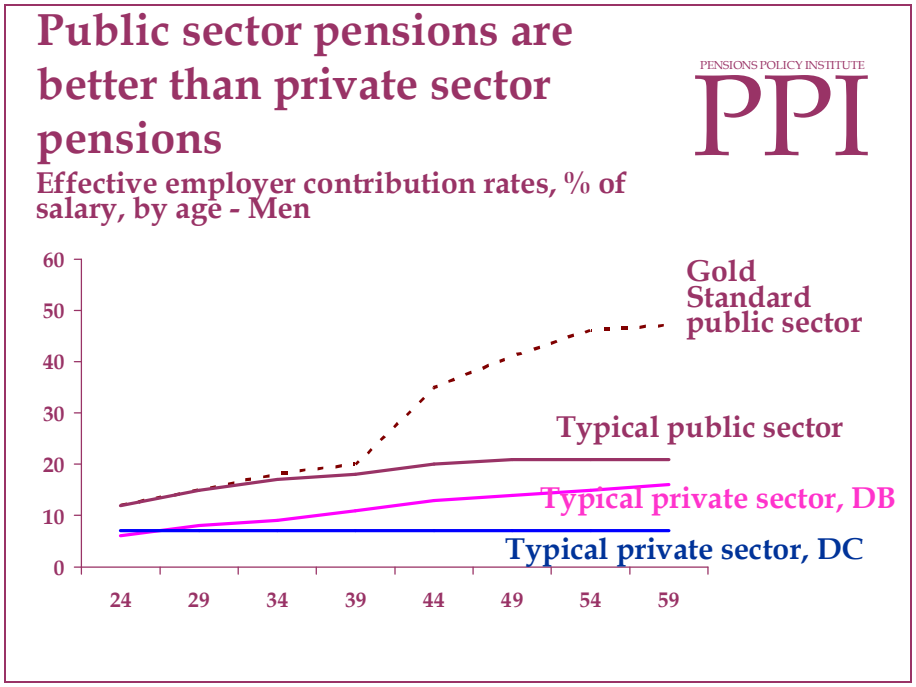
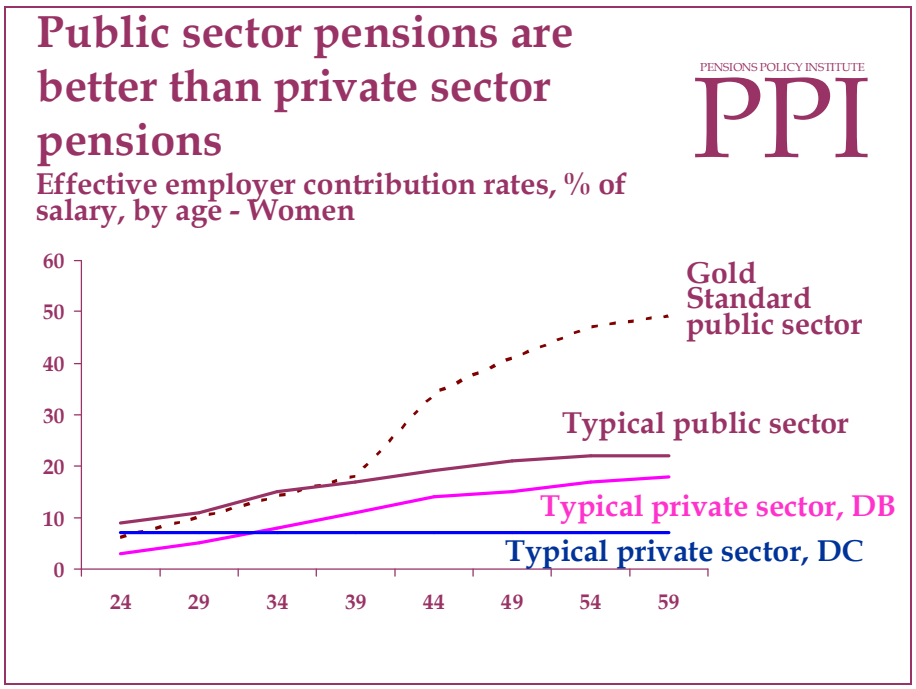


Chart 10[57]



[56] PPI estimate; see Appendix 5
[57] PPI estimate; see Appendix 5

Benefits are more secure for public sector scheme members

Public sector pension schemes are more secure for individual employees than private sector schemes. The risk that a scheme member will not receive the full value of his or her expected or promised benefits is higher in the private sector than in the public sector.

A scheme member's accrued benefits and future benefits can be at risk. The former is a more serious risk than the latter, as a scheme member can make his or her own arrangements before retirement on learning that future benefits will not be protected. The different kinds of risk operate differently (Tables 6 and 7):

- ***Financial risk:*** benefits will be lower (or higher) then expected due to economic factors, for example lower than expected investment returns or higher than expected inflation. Defined Benefits are inflation proofed (although this is generally capped in the private sector, so there is a risk of high inflation) and the employer bears the investment risk for funded schemes. Defined Contribution schemes are higher risk, as the scheme member is exposed to the investment risk and the risk of expensive annuity rates[58].

- ***Employer risk:*** the action of the employer leads to a change in benefits. For example, the employer could become insolvent while the scheme is in deficit. The Pension Protection Fund[59] (PPF) will, from April 2005, provide some (but not full) protection from loss of benefits from private sector DB schemes in this event[60]. Secondly, an employer could make a strategic decision to reduce benefits. Because of trustee protection, it is unlikely that an employer could reduce accrued benefits, but a sponsoring employer has the power to close the scheme, leading to a reduction in the value of accrued benefits[61]. Past Defined Contribution scheme benefits are effectively ring fenced, and therefore immune to this risk.

  It is highly unlikely that accrued public service benefits face any employer risk. While it is not unheard of for governments to become insolvent, it has yet to happen to the British government, and has not happened to any Western government since the Second World War. A government always has the option to change public sector pension benefits for future service, but this type of reform is difficult (see Chapter 4). Changing accrued benefits is therefore highly unlikely.

[58] Annuity rates can become more expensive because of low interest rates, non-competitiveness of annuity rates or improving life expectancy in the population

[59] Public sector schemes do not contribute to the new Pension Protection Fund (PPF) as this would effectively be a government subsidy. The schemes would never have cause to use the PPF, as the government guarantees to cover the costs of the schemes.

[60] The PPF will pay 90% of scheme benefits to people below scheme Normal Retirement Age, the benefit is not indexed and is capped

[61] The value of accrued benefits could be reduced because before closure they are salary linked, but after closure they may be inflation linked; inflation is usually lower than salary increases

- ***Legislative risk*** that regulation changes affect benefits. Private sector schemes have been subject to significant regulatory changes that have not affected public sector schemes. Many reforms have improved benefits for the scheme member, but at an additional cost to the employer. The future risk to public sector schemes is political: the larger the difference between public and private sector schemes, so the calls for public sector reform would be expected to grow.

Table 6: The risk to accrued benefits is higher in the private sector

Risk to scheme member	Public – DB	Private – DB	Defined Contribution
Financial	Negligible	High inflation	Annuity rates Investment return High inflation
Employer	Very low – political	Strategic (cost reduction) Bankruptcy & deficit	None
Legislation	Very low - political	High	Very low

Table 7: The risk to future benefits is higher in the private sector

Risk to scheme member	Public – DB	Private – DB	Defined Contribution
Financial	Negligible	High inflation	Annuity rates Investment return High inflation
Employer	Potential political calls for reform	Strategic (cost reduction) Bankruptcy & deficit	Change of contribution rate
Legislation	Potential political calls for reform	High	Lower than private DB

*****

This chapter has shown that public sector pension schemes are better than private sector schemes, in terms of value and security. One rationale for this might be that the public sector pension is making up for lower rates of pay in the public sector. The next chapter investigates this assumption.

Chapter 3: Do public sector pension schemes make up for lower pay?

It is often assumed that good public sector pension schemes make up for lower pay in the public sector[62]. This chapter finds no evidence for this assumption, but concludes that:

- The problem of low paid workers being 'under-pensioned' is less acute in the public sector than in the private sector, where there are more low paid workers who are less likely to receive any occupational pension.
- While the lower pay rationale for better public sector pensions is not proven, total remuneration in the private sector is more valuable at the highest pay levels because of better non-pension additional benefits.

Fewer low paid under-pensioned workers in public sector

The 'low pay' issue has to be set in the context of the different earnings profile of workers in the two sectors. Although the highest pay levels are found in the private sector, it is also in the private sector that the issue of low paid workers being 'under-pensioned' is more acute:

- The spread of earnings, up to around £30,000 pa, is very similar in the public and private sectors, as is the median wage (Chart 11).

- The public sector has a higher proportion of low paid workers, and the private sector is weighted towards higher earners:
  - Over half of the members of public sector schemes earn below £20,000, whereas over half of the members of private sector schemes earn over this amount (Table 8).
  - This is consistent with the higher proportion of public sector workers who work part-time (32%) than private sector workers who do (21%)[63].
  - Of the highest paid in both sectors, those in the private sector have higher earnings. The highest 10% of private sector workers earn over £42,000 a year; the highest 10% of public sector workers earn over £36,000 a year (Chart 11).

- There are more lower paid workers in the private sector, and they are less likely to have any pension at all:
  - There are 10.5m workers earning below £20,000 a year in the private sector. 4.2m of these earn less than £10,000. In the public sector, there are 4.2m and 1.9m respectively[64].
  - At or below the £10,000 pay level, 15% of private sector workers have an occupational pension, whereas 37% of public sector workers do (Chart 7). At or below the £20,000 level, the proportions are 28% and 54% respectively.

[62] For example the General Secretary of the FDA (a Civil Service union): '*The Government has acknowledged that their pay is held down to balance the acknowledged value of the pension arrangements*' (FDA (2004))
[63] ONS (2004)
[64] PPI estimates from Family Resources Survey 2002/3

Chart 11[65]

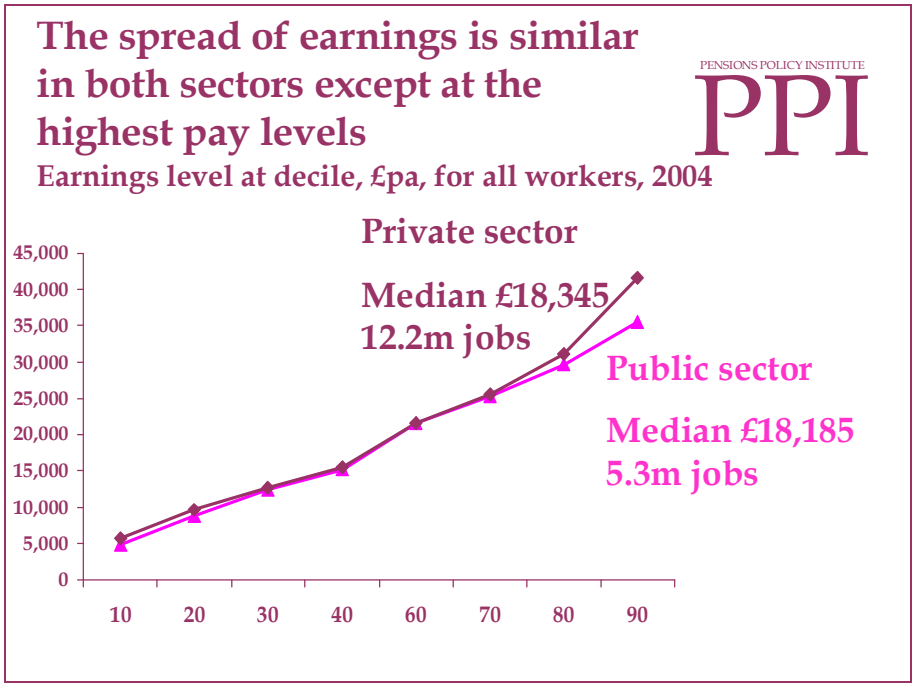


Table 8: Estimate of number and percentage of active pension scheme members in each sector in each annual earnings band[66]

	£0 - £10,000	£10,000 - £20,000	£20,000 - £30,000	£30,000 - £40,000	£40,000 - £50,000	Over £50,000	Total
Public sector:							
Number	0.8m	1.8m	1.4m	0.7m	0.2m	0.1m	**5.0m**
% of total	16%	36%	28%	13%	4%	3%	**100%**
Private sector:							
Number	0.6m	1.9m	1.5m	0.7m	0.3m	0.4m	**5.4m**
% of total	10%	35%	28%	13%	6%	8%	**100%**

[65] ONS (2004). The chart shows the wage of the percentile earner, e.g., the lowest paid 10% of public sector workers earn less than £5,000 a year.
[66] PPI estimates from Family Resources Survey 2002/3, HMT information and Pensions Commission (2004)

Higher remuneration in private sector at highest pay levels

To examine whether pensions make up for low pay in the public sector, a like-for-like comparison of total remuneration for similar jobs in the two sectors is required.

Such an analysis is obviously difficult, and there would be expected to be differences by type of jobs or region. But there seems to be no conclusive evidence of a general pay differential in favour of the private sector:

- In the 1980s, pay levels were generally higher in the public than private sector[67].
- By the 1990s the difference had all but disappeared except for some evidence of higher wages for women in the public sector[68].
- Since 2000, wage growth has been higher in the public sector (22.2% to December 2004) compared to that in the private sector (17.6%)[69].

It does seem to be the case that private sector workers at high earnings levels can do better on a total remuneration basis (Table 9). This counts the value of all benefits including, for example, car and bonuses, which tend to be more valuable in the private sector. The excess remuneration in the private sector increases with pay level as the non-pension additional benefits tend to be available only at higher pay levels. The public sector has fewer employees at these higher pay levels, so the significant (10%+) shortfall in total remuneration appears only for the highest earning 10% of public sector employees (Chart 11).

Table 9: Comparing total remuneration for like-for-like jobs in the public and private sectors[70]

Example jobs (approximate annual pay package)	Typical excess remuneration value in the private sector, compared to the public sector
Clerical (£20,000)	0-10%
Junior management (£35 - 40,000)	8-10%
Senior management (£50 – 80,000)	20-40%
Executive (over £100,000)	Over 100%

Again, such a comparison is difficult, as benefits tend to be structured differently by different employers even within each sector. The analysis cannot allow for such factors as job security and satisfaction, training, flexibility, and public service ethos.

In summary, while the lower pay rationale for better public sector pensions is not proven, it does seem that the overall package in the private sector is more valuable at higher pay levels because of better non-pension additional benefits.

[67] Disney & Gosling (1998)
[68] Disney & Gosling (2003)
[69] ONS Monthly Wages and Salaries Survey
[70] Information provided to the PPI by Hay Group

Chapter 4: How is public sector pension provision changing?

Having seen that public sector pensions are currently better than private sector pensions, this chapter investigates how the proposed reforms of public sector pensions will change the benefit gap between the two sectors.

It concludes that the proposed reforms will still leave public sector pensions better than private sector pensions:

- After the full impact of the reforms, public sector pensions will typically be worth an extra 3% to 18% of salary, compared to private sector pensions. Benefit improvements make up for much of the reduction in benefit value from the change in Normal Retirement Age.
- Although the reforms move public sector pensions closer to private sector practice in some respects, the reforms are more modest than the changes happening in the private sector.
- The pace of reform is always likely to be slower in the public sector.

Public sector schemes will still be better after the reforms

Reform proposals have been recently announced for all major public sector pension schemes. The reforms concentrate on changing the schemes' benefit structures (Table 10) and can be summarised as follows:

- The standard unfunded schemes are all moving from a Normal Retirement Age of 60 to 65. This is not the age at which workers have to retire, even though it is sometimes referred to as the 'retirement age'. It is the first age at which workers can retire on a full pension.
- The Civil Service and NHS schemes are considering moving from a final salary to a career average basis.
- The two-tiered accrual rates of Gold Standard schemes are to be abolished.
- Some of the schemes are switching to or away from paying lump sums in addition to pension.
- The ill health benefits are to be reformed.

The full impact of the reforms will only affect new entrants to the schemes. Current members will be affected, but only for benefits earned after a future date (the date differs by scheme). So in practice most workers will not see a sudden drop in the value of their pension benefits, and the comparison of the value of their pension compared to the private sector alternative will for many be more like the case before reform than that after the reform.

Taking a view across all pension provision, after all the proposed reforms public sector pensions will typically be worth an extra 3% to 18% of salary, compared to private sector pensions[71]. A current comparison suggests a typical pension premium in the public sector more like 5% to 20% of salary (see Chapter 2).

[71] See Appendix 5 for details

Even though the proposed reforms will reduce the value of public sector pension benefits overall, they will still be better than private sector pensions. The difference between typical public and private sector pensions does not reduce significantly as a result of the reforms. This is because the improvements to benefit structure counteract much of the reduction in benefit value from the change in Normal Retirement Age.

For example, benefits in the Civil Service scheme after the proposed reforms will be lower than before the reforms, but still better than private sector schemes (Chart 12). Similarly, the benefits of the Gold Standard public sector schemes (Armed Forces, Police, Fire-fighters) will be reduced considerably, but will still be better than those typically available in the private sector (Chart 13).

The reforms have a rationale, in that they are a response to trends or seek to make the schemes fairer. They tend to bring the public sector schemes more in line with each other and with private sector practice:

1. The increase in the age at which full pension can be taken is logical given increasing life expectancy. It means that pension benefits will be less valuable for new entrants, although current members will be less affected.
2. The move to a 'career earnings' formula advantages employees with low career salary growth over a career, but disadvantages the high-fliers.
3. Abolishing two-tiered pensions makes affected schemes more equitable between age groups.
4. Changes to lump sum benefits and accrual rates give more options and mainly increase the value of benefits.
5. Reform of ill-health retirement benefits attempts to reduce the high incidence of ill-health retirement.

Each of these factors is examined in more detail in subsequent pages.

Table 10: Proposed reforms of public sector schemes[72]

	Teachers	NHS[73]	Civil Service
Accrual rate	80ths → 60ths	80ths → 60ths or 49ths/56ths[74] (career average option)	60ths → 50ths[75]
Pensionable salary	No change	Final salary → (career average? Including overtime)[76]	Final salary → career average
Additional lump sum	3 times pension → commutation only	3 times pension → commutation only	No change
Normal Retirement Age	60 → 65	60 → 65	60 → 65
Early leavers retirement age	60 → 65	60 → 65	60 → 65
Member contributions	6%	6%/5% → 6%[77]	No change
Death in service	No change	No change	No change
Death in retirement	No change	No change	No change
Proposed timetable	2006 (2013 for future service of existing staff)	2006 (2013 for future service of existing staff)	2006 (2013 for future service of existing staff)

[72] Reforms are detailed in Cabinet Office (2004b), Home Office (2003), NHS Employers (2005), ODPM (2004), Teachers' Pension Review Group (2004), Ministry of Defence (2004b)
[73] Except for the increase in Normal Retirement Age, the proposed reforms for the NHS scheme are the result of a review conducted jointly by the NHS Confederation and the NHS Unions. The move to career-average is being considered as one of a number of possible options.
[74] If the NHS scheme remains final salary, the accrual will be 60ths. If career average, the accrual will be 49ths (for RPI increases) or 56ths (for national average earnings (NAE) increases).
[75] 50ths is used as an illustration for Civil Service scheme reform in Cabinet Office (2004b)
[76] The NHS proposals offer a choice of final salary and career average. The career average has a further choice between revaluation with RPI or NAE.
[77] Possibility of lower rate for lower paid staff

Table 10: Proposed reforms of public sector schemes[78], continued

	Armed Forces	Police	Fire	Local Government
Accrual rate	50. 3/56. 1ths → 70ths	60/30ths → 70ths	60/30ths → 60ths or 80ths (single accrual)	80ths → 62. 5ths
Salary definition	Represent-ative pay → actual pay	Minor changes	Fluctuating → permanent emoluments[79]	Basic plus allowances → basic
Additional lump sum	3 times pension	None → 4 times pension	None → 3/4 times pension (if 80ths)	3 times pension → commutation only
Normal Retirement Age	No change from 55	No change from 60	55 (60) → 60 or 65	No change from 65[80] (abolish rule of 85)
Early leavers retirement age	60 → 65	60 → 65	60 → 65	65
Member contributions	0%	11% → 9-9. 5%	11% → 6. 5 – 8%	6% → 7%
Death in service	Minor change	Minor change	Minor change	No change
Death in retirement	50% pension → 62.5%	No change	Minor change	No change
Proposed timetable[81]	2005 (option to transfer in 2006)	2005 (option to transfer)	2006 (option to transfer)	2008 (automatic transfer with equivalent value)

[78] Reforms are detailed in Cabinet Office (2004b), Home Office (2003), NHS Employers (2005), ODPM (2004), Teachers' Pension Review Group (2004), Ministry of Defence (2004b)
[79] With the possible reform of career average
[80] "Rule of 85" being abolished from 1 April 2005 – members can retire when service plus age adds up to 85
[81] Proposed change for existing members in brackets

Chart 12[82]

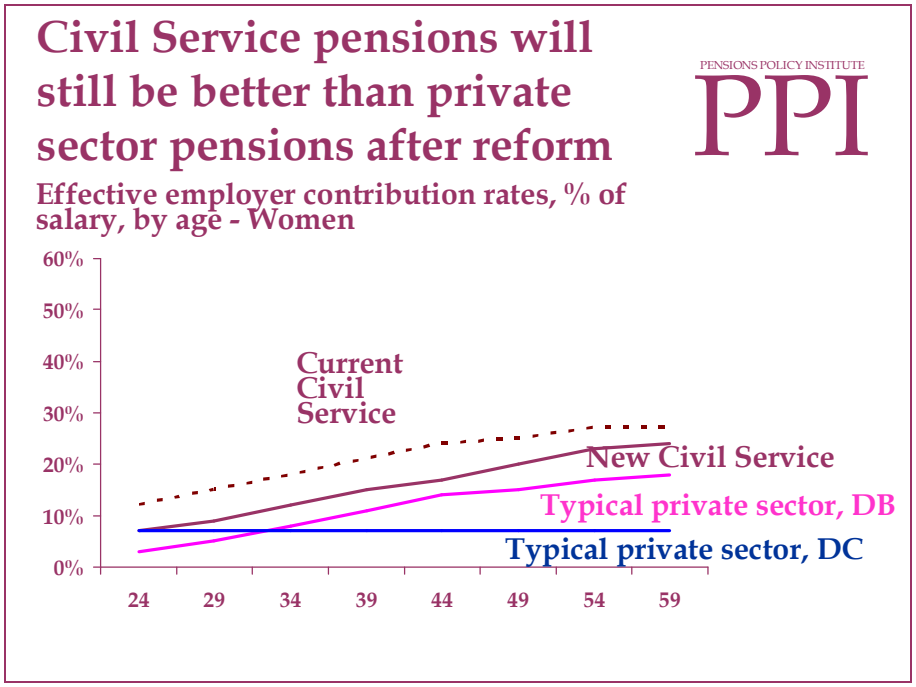
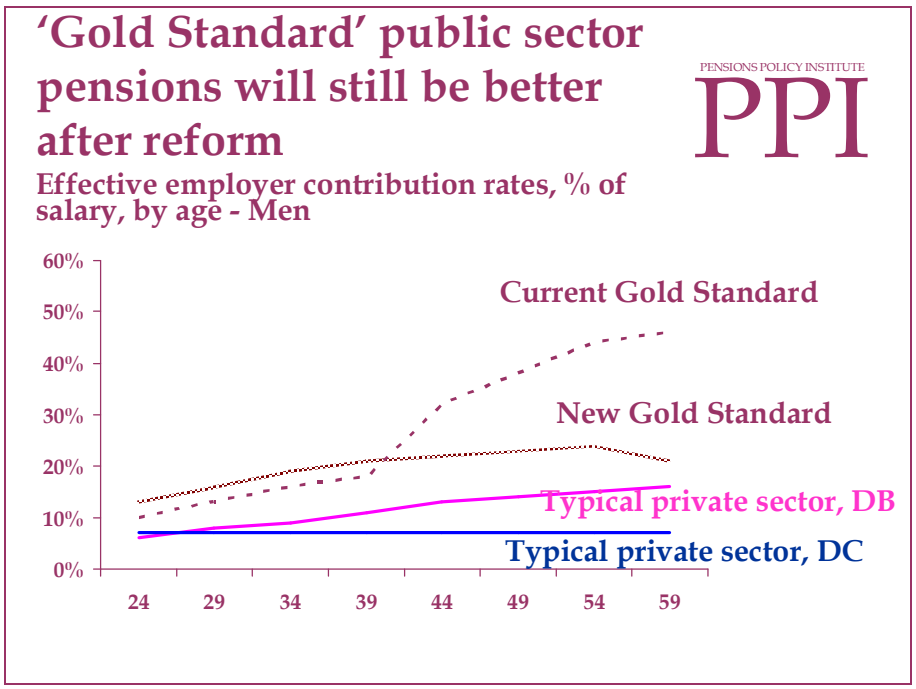


Chart 13[83]



[82] PPI estimates; see Appendix 5
[83] PPI estimates; see Appendix 5

1. The increase in Normal Retirement Age means pension benefits will be less valuable for new entrants

The proposals are to increase the main Normal Retirement Age (NRA) of the Civil Service, Teachers and NHS schemes from 60 to 65. The Police and Fire-fighters' deferred pensions will also be payable from age 65.

NRA is the age at which full pension is able to be paid, not the age at which people have to retire. Workers affected by the reforms will be able to stop working at any age between 55 and 75, but with a reduced (increased) pension if before (after) age 65. A new entrant retiring at age 60 under the new arrangement will have a 20% lower pension compared to the current NRA continuing, but current scheme members will be affected much less, depending on their service history (Table 11).

Table 11: Effect of increase in Normal Retirement Age[84]

Actual retirement at age	New entrant	Existing member – illustration		
		Leaves before 1 April 2013	Current service 20 years, leaves in 10 years	Current service 5 years, leaves in 20 years
<60	20% lower pension	Unaffected	1. 3% lower pension	9. 6% lower pension
60 – 65	0-20% lower pension	Unaffected	0 - 1. 3% lower pension	0 – 9. 6% lower pension
> 65	Higher pension[85]	Unaffected	Higher pension	Higher pension

Increasing the Normal Retirement Age is consistent with the extent to which life expectancy has improved:

- The reform means that pensions will, on average, be paid to retired public sector workers for a similar period as they were in the past. For example: a 65 year old man retiring in 2005 would, on average, expect to live to receive his pension for a further 19 years. In 1980, a 60 year old would have expected to receive his pension for 18 years[86].
- As the pension age has not changed while life expectancy has increased, current retirees are receiving anomalously lengthy pensions compared to previous generations of retirees. For example, a 60 year old woman who retires on a full pension after 25 years service (because of the 'Rule of 85') is more likely to live for more than 25 years than less; so the pension is likely to be paid for longer than the period of service[87].

[84] PPI estimates from Cabinet Office (2004b)
[85] Under the proposals, pensions will be increased for retirement after age 65
[86] PPI estimates from GAD cohort-based projections
[87] PPI estimates from GAD cohort-based projections

The increase in Normal Retirement Age also seems consistent with the actual average age of retirement. Current experience suggests that people in the largest public sector schemes generally retire between ages 60 and 65, with the average retirement age being around 62.1 for men and 61.5 for women[88].

In addition, the proposed reform means that the public sector schemes are moving into line with the private sector. 63% of private sector final salary schemes have a Normal Retirement Age of 65[89].

2. The move to career earnings advantages those with low salary growth

Currently pensions on leaving the public sector are calculated as a multiple of final salary and service. Under the proposed reforms of the Civil Service and NHS schemes[90], the pension will be a multiple of the sum of career earnings increased by inflation.

A career earnings scheme is still a Defined Benefit scheme with most of the characteristics of a final salary scheme: the pension is linked to earnings and guaranteed by the employer. The difference is that in a final salary scheme the pension earned in a year by a member increases with that member's salary growth up to retirement, while in a career average scheme the increases are in line with inflation, which is usually lower.

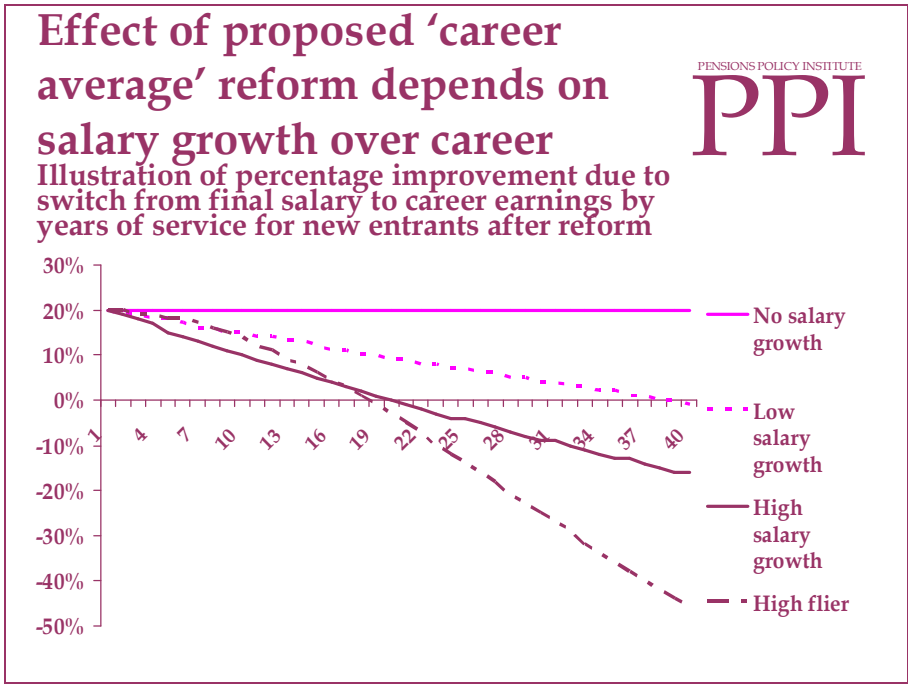
The proposed reform is intended not to change the total cost of the scheme, but will change the way the benefits are distributed among members. However, if the reform changes behaviour, for example people leave earlier (as reduced pension benefits on leaving will no longer be a consideration), more people could benefit from the reform than expected. This would increase the long term cost to the government.

The effect of the change upon individuals will depend upon their years of service before leaving and on the salary growth during employment (Chart 14):

- New entrants will have to remain in the scheme for at least 20 years before they would be worse off than under the current scheme.
- A new entrant 'high flier' would be 50% worse off if he or she stayed on until Normal Retirement Age, whereas a new entrant who gets salary increases only at the rate of inflation over his or her career will be 20% better off whenever he or she leaves the scheme.
- Existing members who leave before 1 April 2013 will be unaffected.
- Only the portion of the pension earned after 1 April 2013 will be affected for existing members. The impact is complex, depending upon service length and earnings growth. However, any reduction in pension value is likely to be small[91].

[88] GAD (2004)
[89] PPI analysis from GAD (2003)
[90] The NHS and Fire-fighters' schemes are considering career average alongside other options
[91] For example, a member currently 40 years old with 10 years service and 'high salary growth' who retires at 60 would receive a pension 3% lower under the new proposals

Chart 14[92]



The switch to career average is probably better for public sector workers than a move to current private sector practice would be. Only 6% of private Defined Benefit schemes are based on career earnings[93] but many private sector employers that close DB schemes have instead offered DC schemes.

3. Abolishing two-tiered pensions makes affected schemes more equitable

This change affects the 'Gold Standard' schemes, which have higher accrual rates after 20[94] years of service. The two-tiered accrual rate has some negative consequences, such as encouraging members to remain in employment when they would otherwise have retired, or conversely encouraging people to retire when they could remain in their job.

It is also inequitable between scheme members because older long standing members accrue pensions worth over three times that of younger members[95]. The reform will make the schemes more equitable between age groups.

This reform applies only to new members. Existing members will be unaffected (or could be better off; a member not wishing to stay to take advantage of the double accrual rate could exercise the option of transfer to the new scheme).

[92] PPI estimates. Career average scheme assuming an accrual rate of 2% of earnings (not yet confirmed). Salary growth is percentage per annum above inflation: no salary growth 0%, low salary growth 1%, high salary growth 2%. High flier's salary grows exponentially to 4 times salary after 40 years.
[93] NAPF (2003a)
[94] The accrual rate in the Armed Forces scheme reduces after 16 years
[95] PPI analysis - see Charts 9 and 10

4. Changes to lump sum benefits and accrual rates give more options and mainly increase the value of benefits

Many public sector schemes pay a pension and additional lump sum on retirement. In contrast, private sector schemes nearly always pay a pension on retirement, with the member having the option of giving up ("commuting") some of this pension in return for a lump sum.

The Police and Fire-fighters' schemes propose to start paying additional lump sums (with lower pensions). The Teachers, NHS and Local Government schemes all propose to abolish the additional lump sum, instead paying a higher pension with a member option to commute part of the pension. This reform should increase the overall value of benefits, enough to counteract around two-thirds of the reduction in benefit due to the change to Normal Retirement Age.

5. Reform of ill-health benefits attempts to reduce high incidence rates of ill-health retirement

Public sector schemes currently pay enhanced pensions on ill-health retirement. The new proposals for all schemes are to provide two tiers of pension[96]:

- An immediate un-enhanced pension to members who can no longer perform their job, but who could do some other kind of employment.
- An immediate enhanced pension to those members unable to do any form of employment.

The ill-health retirement rate in the public sector has been high compared to the private sector[97]. Ill-health retirements are not directly funded by the employer in the unfunded schemes, so there can be an incentive for the employee and employer to agree to this benefit.

[96] Adopting recommendations from HMT (2000)
[97] See Chapter 2

Reform in public sector is more modest than in private sector

While private sector pension provision has reduced and moved from Defined Benefit to Defined Contribution, the proposed changes to public sector schemes are more modest: they maintain salary linkage and still give higher benefits than private sector Defined Benefit schemes.

Even these reforms, which have a relatively small effect on benefit values, have been strongly opposed[98]. Apart from the strong opposition, 3 reasons can be put forward for why public sector pension reform has been more modest than that in the private sector, and the pace of reform is always likely to be slower:

1. The underlying cost of private sector provision has increased more than the cost of public sector schemes.
2. The feedback of cost to employer in the public sector is limited compared to the more direct feedback in the private sector.
3. The governance of public sector schemes makes reform more difficult than in private sector schemes.

1. The underlying cost of private sector provision has increased more

The costs of public sector schemes are higher than the costs of private sector schemes (Charts 9 and 10), but the increases in cost over the last 20 years have been higher for private sector DB pensions because:

- **Inflation indexing**: a combination of regulation and low inflation has resulted in pensioners and early leavers effectively having fully inflation linked benefits, whereas in the past they were fixed and eroded by high inflation. Public sector schemes have always had fully index linked benefits, so have not suffered an increase in cost.
- **Regulation**: many regulation changes have affected both private and public sector pensions alike. However, the introduction of the Pension Protection Fund in 2005 will be paid for by a levy on private sector schemes only.
- **Improving life expectancy**: all pensions have to be paid for longer as pensioners live longer. This increasing cost falls equally on all schemes, although some funded schemes may have been alert to the increasing costs sooner.

2. The feedback of cost to the employer is more direct in the private sector

In the private sector, a change in cost of a scheme directly affects the sponsoring employer who will have to pay higher contributions (affecting the company's profit), and any pension scheme deficit[99] has to be disclosed in the company's accounts. Private sector employers therefore have incentives to control scheme costs. The Local Government scheme is also funded, and is in a similar position.

[98] For example, Civil Service unions threatened industrial action within 1 day of the government's proposals for reform of the Civil Service pension schemes (Timmins (2004))

[99] The value of the scheme's liabilities less the value of the scheme's assets

In the public sector, scheme costs are fed back to the employer by ASLCS[100], which link the employer cost in any year with the accrual of benefits in that year. The calculation of ASLCS will be further standardised across public sector schemes when the SCAPE model[101] extends from the NHS, Armed Forces and Teachers schemes to the Civil Service scheme from 2006. But the feedback of costs is still limited because:

- The public sector employer (e.g., an NHS Trust) is not directly affected, beyond the contributions to be paid, by changes in the scheme liability figure. The employer cannot directly control the cost of the scheme by changing the benefit structure, but will have some influence over reforms through involvement in scheme reviews.
- The SCAPE contributions are based on out of date valuations. In future these will be carried out every 4 years, but the current gap between valuations is 6 years. During the last period conditions have changed considerably (for example, real interest rates have reduced and life expectancy estimates have increased).
- Not all schemes are covered by SCAPE: local Police and Fire authorities have separate pension budgets paid out of employer and employee contributions. Any shortfall will be covered centrally.

3. The governance of public sector schemes makes reform more difficult

Reform of public sector pension schemes is always likely to face more opposition than in private sector schemes:

- There are many different stakeholders to any public sector pension reform, including the Treasury, the sponsoring department, employers and members. Unions are more influential in the public sector, compared to the private sector. Reforms will be influenced by the views of all these parties, who necessarily have different agendas.
- The government has the ultimate power to reform public sector schemes. In private sector schemes, power of reform lies with the trustees, who are independent of the employer and include member representatives.
- Public sector scheme reforms have to be passed in Parliament. The pension benefits of Members of Parliament have recently been enhanced[102]. This means that when the reform to reduce the benefits of public sector schemes is debated in Parliament, the personal position of MPs is very different from that of the members of the schemes affected.

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In summary, reform is always likely to be more modest in public sector pensions than private sector pensions, as is the case with the current proposals compared to the trends in private pension provision.

[100] Accruing Superannuation Liability Charges, see p. 6
[101] Superannuation Contributions Adjusted for Past Experience, see p. 6
[102] From an accrual rate of 50ths to 40ths in 2002. See also Appendix 4.

Appendix 1: Quasi-public sector schemes

Table A1: Largest quasi-government schemes[103]

Pension scheme	Assets (2004; £bn)	Number of: Active members	Deferred pensioners	Pensioners	Employer contributions (2004; £m)
Former British Coal Pension Scheme	22.9	5,218	170,080	304,979	0
Universities Superannuation Scheme	19.4	95,700	49,500	35,100	463
Royal Mail Pension Plan	15.3	195,411	81,304	166,418	648
BBC Pension Scheme	5.7	18,578	14,267	19,294	47
Bank of England Pension Scheme	1.2	2,115	4,677	7,554	7
Civil Aviation Authority Pension Scheme	1.8	6,718	1,946	6,052	13
LRT Pension Fund	2.7	19,762	19,074	40,583	58
Total	**69**	**343,502**	**340,848**	**579,980**	**1,236**

The British Coal Pension Scheme[104] is an unusual case. The government has underwritten the scheme liabilities in return for a 50% share of the surplus. The other 50% is to be used by the scheme trustees as benefit improvements. In March 2004 the government transferred £570m to the schemes, having previously received surplus payments.

[103] NAPF (2003b) and Corporations' 2003/04 accounts (e.g., UK Civil Aviation Authority (2004) and BBC (2004))
[104] The former Mineworkers' Pension Scheme and the British Coal Staff Superannuation Scheme www.dti.gov.uk/energy/coal/pensions

Appendix 2: Liabilities of public sector schemes

The two figures for the liabilities of the unfunded public sector schemes that have been compared in the media of £425bn and £690bn[105] are not as irreconcilable as they would appear:

- The government's estimate of £425bn was as at April 2003. Updating this to April 2004 gives £460bn.
- Life expectancy has improved since the last valuation; this would increase the liabilities to £510bn.
- The estimates use a different discount rate (the parameter used in converting future costs to a present value). A lower discount rate will result in a higher figure for the liabilities.
    - The government's estimate is calculated by the Government Actuary's Department (GAD) using a discount rate decided by the Financial Reporting Advisory Board (FRAB). The discount rate used for the last valuation was 3.5%, in line with gilt yields at the time[106].
    - Real yields have fallen since this date and GAD intends to use a rate of 2.8% for the next valuation in 2005/06, in line with that used in private sector accounts in 2005/06[107]. On this basis the liabilities would be around £550bn.
    - The estimate from outside government of £690bn quoted in the media[108] uses the same, latest information as above, except for a discount rate of 1.76%. This is in line with government index-linked gilts, which the government intends to use for non-pension long-term liabilities.

So, although the latest published government calculation of the liability figure is £425bn, it is known that the latest update of the figure on the government's basis would be around **£550bn**. The higher figure, of £690bn, differs only because a different choice on discount rate was made. Opinion may vary as to what the appropriate discount rate might be, but the official calculation takes the discount rate as decided by FRAB, an independent body which gives accounting guidance to government bodies.

[105] For example BBC News (2005)
[106] Daykin (2003)
[107] This is based on corporate bond yields FRAB (2004)
[108] Watson Wyatt (2005)

Appendix 3: The Public Sector Transfer Club

The value of a pension is normally reduced when a member leaves a scheme by leaving the employment of the sponsoring employer. Before leaving the scheme, a member's pension earned to date will usually increase between the current date and retirement in line with his or her salary growth. After leaving the scheme, the value of the 'deferred pension' will increase approximately in line with price inflation[109]. As salary inflation is usually higher than price inflation, the value of a 'deferred pensioner' is lower than if he or she had stayed in the scheme as an 'active member'.

In both sectors, the value of the deferred benefits can be taken as a transfer to another pension scheme. But if an individual transfers between two schemes which are members of the Public Sector Transfer Club then the individual will receive equivalent benefits in the new scheme: the value of his or her pension will not be reduced because of leaving the first scheme.

To illustrate, a 25 year old man's accrued benefits are worth 40% more if he stays within the public sector throughout his career than if he were to leave his current employment in line with the average rates of leaving seen in the private sector[110]. The benefit would be worth less than this for older workers.

[109] On leaving a private sector scheme, the pension in excess of the Guaranteed Minimum Pension will be increased at 5% or the increase in the Retail Prices Index, if lower up to retirement date. In the public sector, the increase will be the uncapped Retail Prices Index on the whole pension. The difference in value between the two is small, as inflation is currently well below the threshold (although this does give rise to an added risk in the private sector).

[110] PPI estimates

Appendix 4: The pension schemes for MPs and the Judiciary

Table A4[111]: Basic design of the pension schemes for MPs and the Judiciary

	MPs	Judiciary
Accrual rate	40ths[112]	40ths
Pensionable salary	Salary[113]	Not known
Additional lump sum	None	2.25 pension
Normal Retirement Age	65[114]	65
Member contributions	9%	3-4%
Pension increases	RPI	RPI
Death in service	5/8ths plus 4 times pay	50% plus 2 times pay
Death in retirement	5/8ths pension	50% pension

[111] Review Body on Senior Salaries (2004); Judicial Pension Scheme (2004)
[112] Members have the option to receive a 50ths pension and pay 6% contributions
[113] It is proposed to increase this to total remuneration
[114] After 60 a member can retire if age plus service add up to 80

Appendix 5: Calculation of effective employer contribution rate

The purpose of this analysis is to compare the value to a scheme member of the different forms of pension provision. The value is an estimate of the percentage of salary an employer could have given instead of the pension. This **effective employer contribution rate** has been calculated as the ratio of cost of accruing a year's benefits to salary (on a standard actuarial basis as described below) less the member contribution rate (as this is paid by the member it is not a benefit in excess of his or her salary).

The effective rate is estimated rather than using the actual employer contribution rate as the latter is affected by the actuarial basis used in valuations and any past deficit (or surplus) built up, neither of which are relevant to the value to the member.

The Defined Benefit schemes have been modelled using the same actuarial basis so that the value of the schemes to employees in the two sectors is comparable. This does not necessarily reflect the actual cost to employers because the cost of an unfunded scheme may be different to the cost of a funded scheme, and the public and private sector employers may have different borrowing costs, time preferences and face different tax regimes.

Public and private sector employees may have different salary growth paths and early leaver rates, which will affect the value of salary linked pension benefits. As the purpose of the analysis is to compare pension benefits only, these differences have been excluded. The calculations do reflect the different retirement patterns in the two sectors, as this will affect the pension value.

Actuarial basis

The basis used is in line with the current average basis used in published accounts[115] of FTSE 100 companies (as described in accounting standard FRS17). Withdrawal rates in the public sector are assumed to be lower than in the private sector to allow for transfers to Transfer Club schemes.

Some additional assumptions were used for 'Gold Standard' schemes, reflecting the different nature of these schemes:

- Ill-health retirements are assumed to be double, to reflect the high incidence of retirement in these schemes.
- Accrual rates are assumed to be 60ths to age 39, then 45ths decreasing by 0.75 per year.
- There is assumed to be 50% retirement at age 55.

[115] From Punter Southall (2004)

Before and after reform comparison of effective employer contribution rate
The effective employer contribution rate is calculated for each public sector scheme and the typical private sector DB and DC schemes (for Charts 9, 10, 12 and 13).

Table A5 shows estimates of the additional remuneration typical individuals in each type of public sector scheme receive on average from the pension, compared to the typical private sector DB alternative[116]. It is shown as a range, because the value of the benefits varies for different ages and length of service, and has been calculated separately for men and women who have different earnings profiles.

Table A5: Effective additional salary received by a typical worker because of the pension in each public sector scheme, compared to a typical worker in a typical private sector Defined Benefit scheme

	Teachers NHS	Civil Service	Armed Forces	Police Fire
Before reform	3% to 6%	8% to 12%	Up to 8% at older ages; 30% at younger ages	Up to 30% at older ages; 9% at younger ages
After reform[117]	3% to 8%	2% to 7%	4-22%	4-11%
	Local Government[118]	**MPs**	**Judiciary**	
Before reform	1%-5%	14%-20%	25%-31%	
After reform[119]	1%-3%	n/a	n/a	

[116] The model combines the most common benefit features in Table 4
[117] Assumes reform is to a 60ths final salary scheme for the Teachers, NHS and Fire schemes, the latter with an employee contribution rate of 7.25%
[118] The 'before reform' calculation for the Local Government scheme assumes the Rule of 85 is already abolished, as planned for April 2005
[119] Assumes reform is to a 60ths final salary scheme for the Teachers, NHS and Fire schemes, the latter with an employee contribution rate of 7.25%

To come to a view on the additional salary received by a typical public sector worker compared to the typical private sector worker, requires taking into account the following:

- The different pension benefits in the different public sector schemes.
- Different private sector pension situations, particularly that private sector DC pensions are generally less valuable than private sector DB schemes, and that around 70% of private sector workers have no occupational pension at all.
- Different age, gender and earnings characteristics in both sectors.

By taking a representative range of typical public and private sector pension situations, the PPI estimates that currently a typical pension premium in the public sector is of the order of 5% to 20% of salary (see Chapter 2). After the proposed reforms, public sector pensions will typically be worth an additional 3% to 18% of salary, compared to pension of the typical private sector employee (see Chapter 4).

Glossary

Accrual rate
The proportion of earnings that a DB pension scheme pays for each year of membership. A higher accrual rate means lower benefits. For example a 60ths accrual rate means that the scheme will provide 1/60th of earnings for each year of membership, which is higher than a pension based on an 80ths accrual rate.

Actuarial valuation
A report of the financial position of a DB pension scheme carried out by an actuary. The report typically sets out the scheme's assets and liabilities at the date of the valuation; the rate at which the sponsoring employer must contribute to meet the liabilities accruing as they become due; and the additional rate at which the employer must contribute to eradicate the deficit (the excess of liabilities over assets) within a stated time period.

Active member
An active member of a pension scheme is one who is an employee of the sponsoring employer.

Additional lump sum
An amount paid to a member on retirement in addition to the pension. This is usually related in some way to the level of the pension (for example three times pension). It is common in public sector schemes, but rare in private sector schemes. The lump sum is tax free.

Commutation factor
A number used to convert a pension annuity into a lump sum. The factor usually depends on the sex of the member and the age at which the conversion takes place. The factors are scheme specific and are either set out in the pension scheme's rules or are updated periodically by the scheme's trustees or administrators.

Commuted lump sum
A member of a DB pension scheme that does not pay additional lump sums on retirement (i.e. most private sector schemes and some public sector schemes) has the option to take some of his or her pension in the form of a tax free lump sum on retirement. The member agrees to receive a reduced pension annuity in return for this lump sum. The amount the pension is reduced by is calculated by dividing the lump sum taken by a commutation factor. The maximum allowable amount of tax free lump sum is determined in relation to the member's salary and service by rules set out by the Inland Revenue.

Death in retirement
A pension scheme benefit which is usually paid to the spouse (or sometimes other nominated dependant) of a scheme member if that member dies after retirement. The benefit typically takes the form of a pension paid to the dependant of a proportion of the pension the member was receiving when he or she died.

Death in service
A pension scheme benefit which is usually paid to the spouse (or sometimes other nominated dependant) of a scheme member if that member dies whilst an active member. The benefit typically takes the form of a lump sum, calculated as a multiple of salary, plus a pension paid to the dependant of a proportion of the pension the member would have received if he or she had lived until retirement age.

Deferred pensioner
A member of a pension scheme who has left the sponsoring employer but still remains in the pension scheme and has not yet retired.

Defined Benefit (DB) pension scheme
A DB pension scheme will provide a pension that is expressed as a proportion of earnings – for example 1/60th – for each year of membership. Earnings can be based on an individual's salary at, or close to, retirement, or can be based on average across the length of time spent working.

Defined Contribution (DC) pension scheme
A DC pension scheme is based on contributions that are invested on behalf of the employee. At retirement the pension will depend on the accumulated fund and the annuity rates available at that time. The employer makes no guarantees regarding the level of benefits that the accumulated fund will provide – as investment returns or annuity rates worsen the resultant pension reduces; conversely if they improve the pension will be higher.

Funded pension scheme
The scheme should hold enough assets to pay all of its members' pension rights as and when they come due. The Local Government scheme, all quasi-public sector and private sector schemes which are exempt from tax are funded.

Member contributions
The amounts paid by active scheme members into their pension schemes. The rate is defined in the scheme rules and is expressed as a percentage of the pensionable salary.

Normal Retirement Age (or Normal Pension Age)
The retirement age of a pension scheme is the earliest age at which a scheme member has the automatic right to retire without a reduction to his or her pension.

Pensionable salary
The definition of salary which is used to calculate a member's pension benefits and contributions. This can be basic pay or include some elements of bonuses, overtime and other payments. The more extra payments are included, the higher the pension will be.

Scheme liabilities
The scheme liabilities at a given date are an estimate of the total value of future payments that the scheme will have to make to all scheme members in respect of pension rights which have been earned before that date.

Unfunded (or pay-as-you-go) pension scheme
The scheme holds no or few assets, and pays benefits out of its current income. Most public sector schemes are unfunded, except for the Local Government scheme, which is funded.

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